PSA PASSIVE SYSTEM ALLIANCE

COIL DEVICES

PDC

信昌電子陶瓷

Prosperity Dielectrics Co., Ltd.

ABOUT PDC

Introduction

Prosperity Dielectrics Co., Ltd. (PDC) was founded in 1990 as the 1st local manufacturer and exporter in Taiwan for ceramic dielectric powders and multiple-layer ceramic chip capacitors (MLCCs). PDC joined to Walsin Technology Corporation (WTC) as an allied company in September 2005, and incorporated Frontier to create solid synergy in 2008. Our product lines expand to SMD magnetic chips, power chokes, coils, diode and transformers.

Milestone 歷史沿革	1990	PDC former parent company, Taiwan Cement, merged with Mei Da Mei and founded PDC in Nantou. 台泥集團購買美大美電子公司，信昌電子陶瓷正式成立。
	1995	PDC merged with Taiwan Precision Material Corporation. 信昌電子陶瓷併購台灣精密材料公司。
	2002	Public Listed in OTC. 信昌電子陶瓷正式上櫃。
	2005	PDC was strategically allied with Wasin Tech. 與華新科技 (股) 公司策略聯盟。
	2007	To be strategically allied with Frontier, and setting up new production lines, Diode andMagnetic components. 與弘電電子工業 (股) 公司策略聯盟，生產二極體與磁性材料元件。
	2008	Positioned as Specialty and Material BG in PSA Group. 集團推動 PSA 被動系統聯盟企業識別，信昌電子陶瓷定位為特殊品及材料事業群。
Core Technology 關鍵技術	1988	Manufacturing and developing ceramic dielectric materials. 生產製造圓板電容粉末、開發。
	1990	Manufacturing Multilayer Ceramic Capacitors. 生產製造積層陶瓷晶片電容。
	1995	Manufacturing Ceramic Chip Resistors and Ceramic Chip Coil 生產陶瓷晶片電阻、陶瓷晶片電感。
	2001	As the 1st manufacturer and provider in Taiwan for ceramic dielectric powders and multilayer ceramic chip capacitors (MLCC). 臺灣第一家自行供給晶片電容器介電瓷粉之被動元件廠商。
	2001	With self-made conducting dielectric powder, controlling the complete key technology from material to manufacture. 自製半導性介電瓷粉，掌握由材料至製程的完整關鍵性技術。
	2007	Manufacturing Diode and magnetic components. 生產二極體與磁性材料元件。
Brand Value 品牌價值	2001	The first supplier in Asia to get SEMKO product safety certificate. 亞洲第一家獲得 SEMKO 安全規格認證之供應商。
	2003	ISO 9001 certificated. 獲 ISO 9001 驗證通過。
	2004	Industrial Sustainable Excellence Award. 榮獲經濟部工業局工業精銳獎。
	2004	TS16949、ISO 14000 and OHSAS 18000 certificated. 獲 TS16949、ISO 14000 及 OHSAS 18000 驗證。
	2008	IECQ QC080000 HSF certificated. 獲 IECQ QC080000 HSF 驗證。
	2007	Common Wealth Magazine Top 1000 Manufacturers in Taiwan Ranked in No. 705. 天下雜誌 1000 大製造業排名第 705 名。
	2008	Common Wealth Magazine Top 1000 Manufacturers in Taiwan Ranked in No. 682. 天下雜誌 1000 大製造業排名第 682 名。
	2009	Common Wealth Magazine Top 1000 Manufacturers in Taiwan Ranked in No. 677. 天下雜誌 1000 大製造業排名第 677 名。
	2012	Recognition of Winning the Silver Invention Award for Copper or Its Alloy Cofirable Dielectric Ceramics. 榮獲國家發明創作獎 - 發明獎銀牌「可與銅及其合金進行共燒製作的介電陶瓷組成物」
	2015	MLCC product have obtained the IECQ certificate & the certificate of AS9100 management system for the aerospace industry. 通過 IECQ 第三方認證及 AS9100 航太工業管理系統驗證。
Market Performance 市場表現		PDC ceramic dielectric powder ranks in No.2 in global capacity and No.3 in global market share. 介電陶瓷粉末產品產能全球第二、市占率全球第三。 The only local manufacturer in Taiwan with the capability in specialty products includes multiple-layer ceramic capacitors, chip resistors, and coils. 國內唯一可全數提供特殊電容、電感、電阻之被動元件供應商。 The only local manufacturer in Taiwan entered the supply chain of Japan market. 國內唯一打入日本供應鏈之廠商。

信昌電子陶瓷成立於 1990 年，為國內少數能自行供給瓷粉原料並同時銷售積層陶瓷電容的被動元件廠商，更是唯一有能力由上游初發原料，向下垂直整合至被動晶片元件的廠商。2005 年信昌電陶與華新集團進行策略聯盟、2008 年正式合併弘電電子，將銷售範圍從介電瓷粉、半導性陶瓷電容器瓷片、積層陶瓷電容、晶片電阻延伸到二極體與線圈，成為國內唯一可全數提供特殊電容、電感、電阻之被動元件供應商。

Support You Forward

With niche technology of critical materials, PDC can meet the market requirements. The integration of researching and developing from materials to the customer-required components can shorten the time of mass production. To progressively make plans for each product to be with high added value functions, such as Mid and high voltage, high precision, large size capacitors, and high power, high precision, low resistance resistors or other high added value products. In the future, combine with core material technology and advance high frequency and high capacitance further.

由於掌握關鍵性材料的技術利基，信昌電陶可配合市場需求，由材料研發著手，向下整合開發客戶所需要的電子元件，縮短量產時效，並積極規劃各項產品朝高附加價值的零件功能領域邁進，如：中高壓、高精度、大尺寸之晶片電容器及高功率、高精度與低阻值之晶片電阻器等高附加價值產品。未來更將結合材料核心技術，進軍高頻及高容領域。

At present, PDC has developed ceramic dielectric powder used by NME and BME manufacturing process. Self-applied mass production and external sale are simultaneously carried out to improve the proportion to the supply of internal high-level MLCC materials. By the strategy of vertical production capability from ceramic dielectric powder material to MLCC finished goods, bring the high performance of vertical integration.

目前信昌電陶貴金屬製程及卑金屬製程（BME）使用的晶片電容器介電瓷粉已陸續開發完成，量產自用與對外銷售並行展開，提升國內高階積層電容瓷粉原料自主供應比率。藉由原料往下游整合至晶片電容器成品的延伸策略，發揮上下垂直整合的高度營運績效。

For the past few years, to extend the production capability of magnetic components and semiconductor series, PDC gradually set up the manufacturing equipments for semiconductor in Kun Shan Plant and the manufacturing equipments for coil and transformer in Dong Guan and Hunan Plant. The improvement of the production capability is able to increase the sales performance.

近年來，為了擴展磁性元件及半導體系列產品的產能，信昌電陶陸續在中國昆山廠增置半導體相關製造設備，在東莞廠、湖南廠、重慶廠增置電感、變壓器相關製造設備，藉由產能提升，大幅拉升業績。

Vertical integration & Complete key technology:

- Material (Ceramic Dielectric Powder)
- Semi-finished good (Semiconducting Ceramic Chip Capacitor)
- Finished goods (Chip Capacitor, Chip resistor, Coil, Diode)

上下游垂直整合，掌握完整關鍵性技術：

- 原料 (介電瓷粉)
- 半成品 (半導性陶瓷電容瓷片)
- 成品 (晶片電容、晶片電阻、線圈、二極體)

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SMD Signal

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SMD Power

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SMD Power

Product	Product Classification	Series	Photo	Main Dimensions (mm)			Inductance	Rated Current	Page
				L	W	H			
Inductor	**Shielded Power Inductor**	**CSS0316P**		4.00	4.00	1.80	1.5uH~33uH	1.55A~0.32A	106
		CSS0418P		5.00	5.00	2.00	1.0uH~39uH	1.72A~0.3A	107
		CSS0428P		5.00	5.00	3.00	1.2uH~180uH	2.56A~0.22A	108
		CSS0518P		6.00	6.00	2.00	4.1uH~100uH	1.95A~0.36A	109
		CSS0528P		6.00	6.00	3.00	2.5uH~100uH	2.6A~0.42A	110
		CSS0628P		7.00	7.00	3.00	3.0uH~100uH	3.0A~0.54A	111
		CSS0638P		7.00	7.00	4.00	3.3uH~100uH	3.5A~0.65A	112
		CSS124P		12.30	12.30	4.80	3.9uH~330uH	6.5A~0.5A	113
		CSS125P		12.30	12.30	6.00	1.3uH~1000uH	8.0A~0.4A	114
		CSS127P		12.30	12.30	8.00	1.2uH~1000uH	9.8A~0.55A	115
		CSS0630G		6.30	6.20	3.00	1.0uH~150uH	3.59A~0.31A	116
		CSS1038G		10.30	10.40	4.00	1.5uH~330uH	6.5A~0.52A	117
		CSS1050G		10.30	10.50	5.10	0.8uH~1000uH	9.5A~0.42A	118
	Unshielded Power Inductor	**CSN032D**		3.60	3.60	2.40	1.0uH~470uH	2.08A~0.090A	119
		CSN043D		4.80	4.30	3.50	1.0uH~330uH	2.56A~0.10A	120
		CSN054D		6.10	5.50	4.85	1.0uH~270uH	4.0A~0.3A	121
		CSN073D		8.10	7.30	4.00	10uH~330uH	1.44A~0.28A	122
		CSN075D		8.10	7.30	5.50	6.8uH~3000uH	3.0A~0.12A	123
		CSN104D		10.30	9.30	4.50	10uH~1000uH	2.38A~0.16A	124
		CSN105D		10.40	9.40	5.80	10uH~820uH	2.6A~0.24A	125
		CSN073F		7.60	7.60	3.50	1.0uH~100uH	2.88A~0.38A	126
		CSN075F		7.60	7.60	5.10	1.0uH~470uH	2.88A~0.195A	127
		CSN082F		12.95	9.40	3.00	10uH~1000uH	2.0A~0.05A	128
		CSN084F		12.95	9.40	5.21	1.0uH~1000uH	6.8A~0.3A	129

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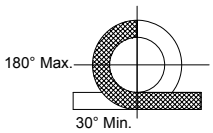
291A/291B Series

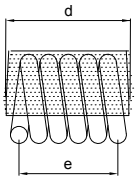
■ SMD Air Wound Coil

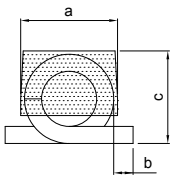
MECHANICAL DIMENSIONS

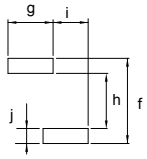
291A

291B









Recommended Patterns

unit: mm

Series	a	b	c	d	e
291A	3.05 (Max.)	0.58±0.38	3.18 (Max.)	3.68 (Max.)	2.92±0.25
291B	3.05 (Max.)	0.58±0.38	3.18 (Max.)	6.86 (Max.)	5.84±0.25

LAND PATTERN

unit: mm

Series	f	g	h	i	j
291A	4.19	3.30	1.65	2.79	1.27
291B	7.24	3.30	4.70	2.79	1.27

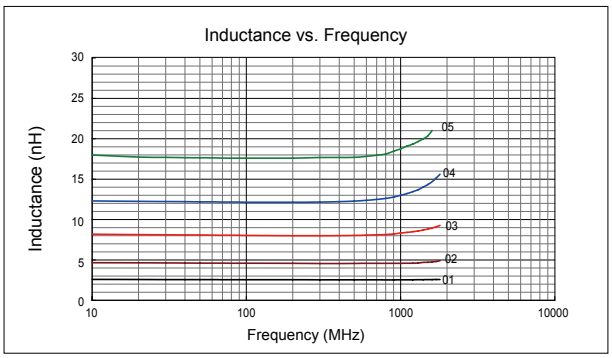
ELECTRICAL SPECIFICATION

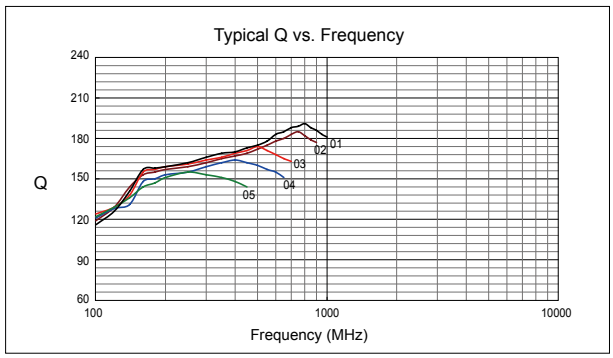
Part Number	Turns	Tolerance	Inductance (nH)	Q (Min.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
291A-01 ☐ -LRH	1	K	2.5	145	150	1.1	12.5	4.0
291A-02 ☐ -LRH	2	G, J	5.0	140	150	1.8	6.5	4.0
291A-03 ☐ -LRH	3	G, J	8.0	140	150	2.6	5.0	4.0
291A-04 ☐ -LRH	4	G, J	12.5	137	150	3.4	3.3	4.0
291A-05 ☐ -LRH	5	G, J	18.5	132	150	3.9	2.5	4.0
291B-06 ☐ -LRH	6	G, J	17.5	112	150	4.5	2.2	4.0
291B-07 ☐ -LRH	7	G, J	22.0	112	150	5.2	2.1	4.0
291B-08 ☐ -LRH	8	G, J	28.0	112	150	6.0	1.8	4.0
291B-09 ☐ -LRH	9	G, J	35.5	112	150	6.8	1.5	4.0
291B-10 ☐ -LRH	10	G, J	43.0	112	150	7.9	1.2	4.0

- Tolerance: G=±2%；J=± %；K=±10%
- Test Equipment:
  L/Q: HP-4291B With HP16193A test fixture or equivalent.
  SRF: HP8753E or equivalent.
  RDC: Chroma 16502 or equivalent.
- Operating temperature range: -40℃ to +125℃
- For Temperature Rise; 15℃
- Storage Temp.: -40℃ to +85℃
- MSL: Level 1

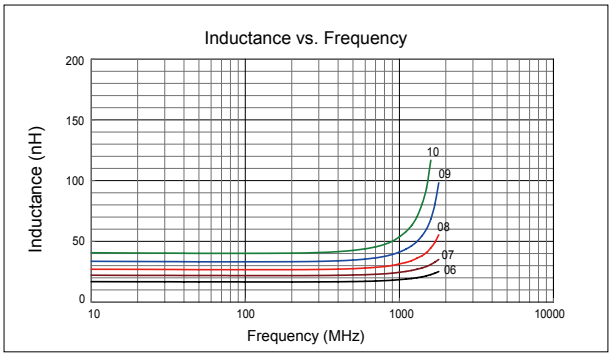
CHARACTERISTIC CURVE

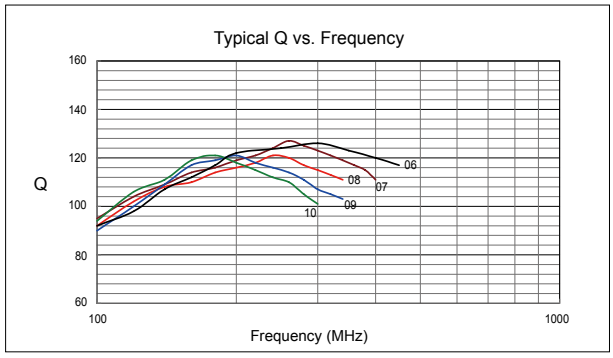
291A Series





291B Series



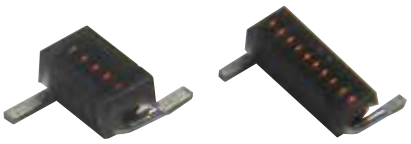


SMD

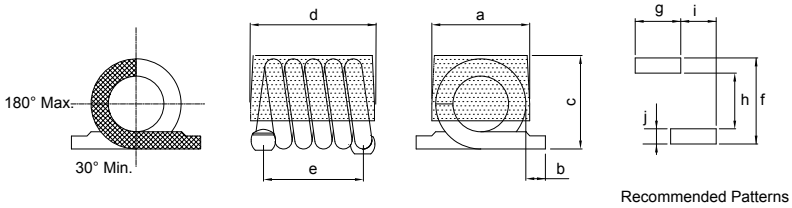
Leaded

■ SMD Air Wound Coil

MECHANICAL DIMENSIONS



292AR　　292BR



Recommended Patterns

unit: mm

Series	a	b	c	d	e
292AR	1.42±0.13	0.89±0.25	1.37±0.15	2.21±0.25	1.83±0.25
292BR	1.42±0.13	0.89±0.25	1.37±0.15	4.04±0.30	3.66±0.25

LAND PATTERN

unit: mm

Series	f	g	h	i	j
292AR	2.62	2.46	1.04	1.02	0.79
292BR	4.45	2.46	2.87	1.02	0.79

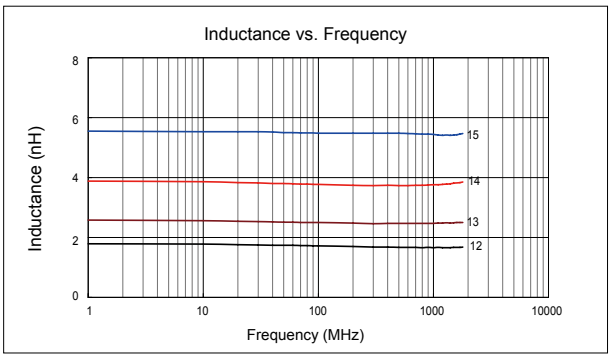
ELECTRICAL SPECIFICATION

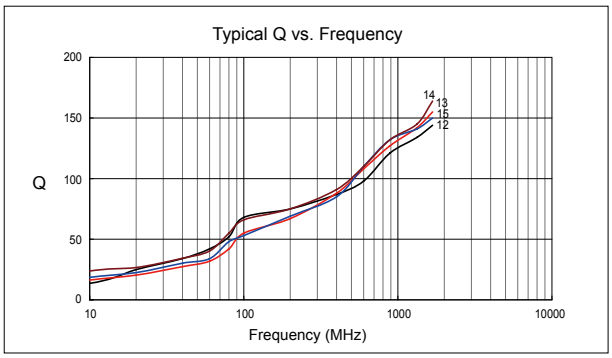
Part Number	Turns	Tolerance	Inductance (nH)	Q (Min.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
292AR-12A ☐ -LRH	2	K,J	1.65	100	800	4.0	10.0	1.6
292AR-13A ☐ -LRH	3	G,J	2.55	100	800	5.0	8.2	1.6
292AR-14A ☐ -LRH	4	G,J	3.85	100	800	6.0	7.5	1.6
292AR-15A ☐ -LRH	5	G,J	5.45	100	800	8.0	7.0	1.6
292BR-16A ☐ -LRH	6	G,J	5.60	100	800	9.0	6.5	1.6
292BR-17A ☐ -LRH	7	G,J	7.15	100	800	10.0	6.0	1.6
292BR-18A ☐ -LRH	8	G,J	8.80	100	800	12.0	6.0	1.6
292BR-19A ☐ -LRH	9	G,J	9.85	100	800	13.0	5.2	1.6
292BR-20A ☐ -LRH	10	G,J	12.55	100	800	14.0	4.6	1.6

- Tolerance: G=±2% ; J=±5% ; K=±10%
- Test Equipment:
  L/Q: HP-4291B With HP16193A test fixture or equivalent.
  SRF: HP8753E /HP8720D or equivalent.
  RDC: Chroma 16502 or equivalent.
- Operating temperature range: -40℃ to +125℃
- For Temperature Rise; 15℃
- Storage Temp.: -40℃ to +85℃
- MSL: Level 1

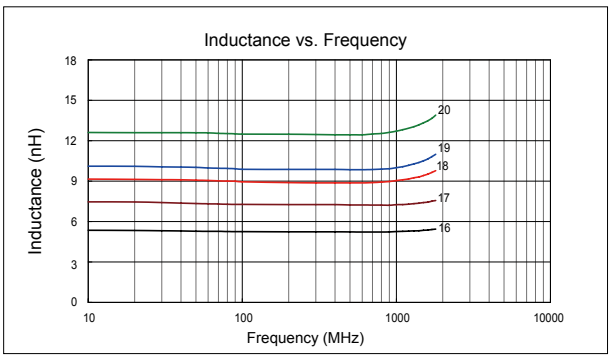
CHARACTERISTIC CURVE

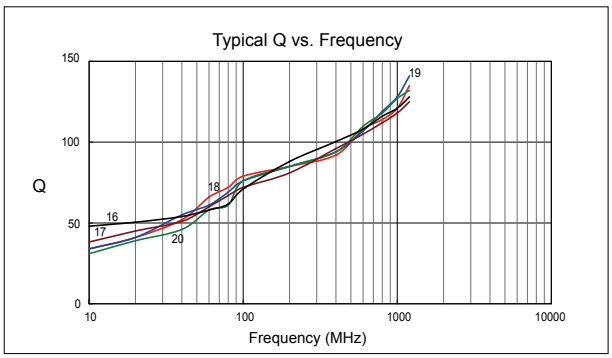
292AR Series





292BR Series

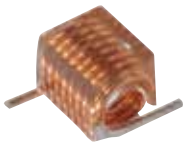




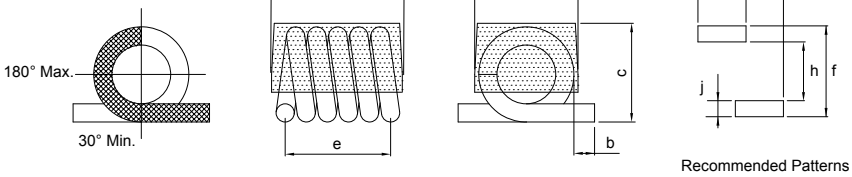
293A Series

■ SMD Air Wound Coil

MECHANICAL DIMENSIONS



293A



Recommended Patterns

unit: mm

Series	a	b	c	d	e
293A	3.81 (Max.)	1.53 ±0.39	4.2 (Max.)	4.83 (Max.)	4.32 ±0.39

LAND PATTERN

unit: mm

Series	f	g	h	i	j
293A	5.80	5.16	2.85	2.62	1.48

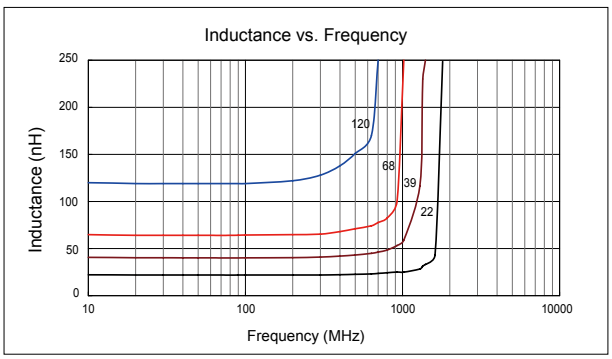
ELECTRICAL SPECIFICATION

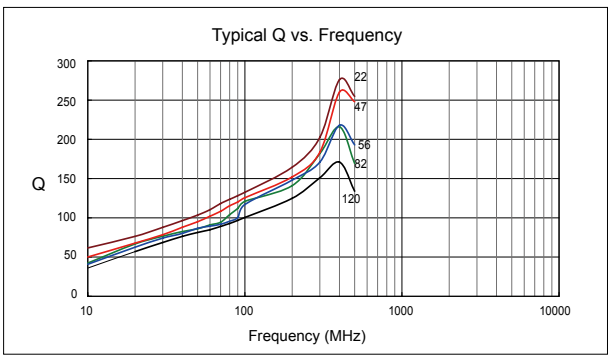
Part Number	Turns	Inductance (nH)	Q (Min.)	Q (Typ.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
293A-22 ☐ -LRH	4	22	100	135	150	4.2	3.2	3.0
293A-27 ☐ -LRH	5	27	100	135	150	4.0	2.7	3.5
293A-33 ☐ -LRH	5	33	100	130	150	4.8	2.5	3.0
293A-39 ☐ -LRH	6	39	100	135	150	4.4	2.1	3.0
293A-47 ☐ -LRH	6	47	100	135	150	5.6	2.1	3.0
293A-56 ☐ -LRH	7	56	100	125	150	6.2	1.5	3.0
293A-68 ☐ -LRH	7	68	100	120	150	8.2	1.5	2.5
293A-82 ☐ -LRH	8	82	100	120	150	9.4	1.3	2.5
293A-100 ☐ -LRH	9	100	100	115	150	12.3	1.2	1.7
293A-120 ☐ -LRH	9	120	100	125	150	17.3	1.1	1.5

- Tolerance: G=±2% ; J=±5% ; K=±10%
- Test Equipment:
  L/Q: HP-4291B With HP16193A test fixture or equivalent.
  SRF: HP8753E or equivalent.
  RDC: Chroma 16502 or equivalent.
- Operating temperature range: -40℃ to +125℃
- For Temperature Rise; 15℃
- Storage Temp.: -40℃ to +85℃
- MSL: Level 1

CHARACTERISTIC CURVE

293A Series





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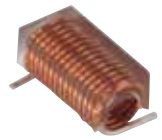
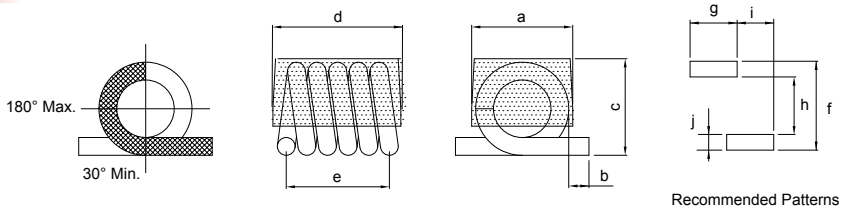
■ SMD Air Wound Coil

MECHANICAL DIMENSIONS



294A



Recommended Patterns

unit: mm

Series	a	b	c	d	e
294A	6.35 (Max.)	1.02 ±0.39	5.9 (Max.)	10.55 (Max.)	7.98 ±0.51

LAND PATTERN

unit: mm

Series	f	g	h	i	j
294A	10.00	4.70	5.95	2.42	2.04

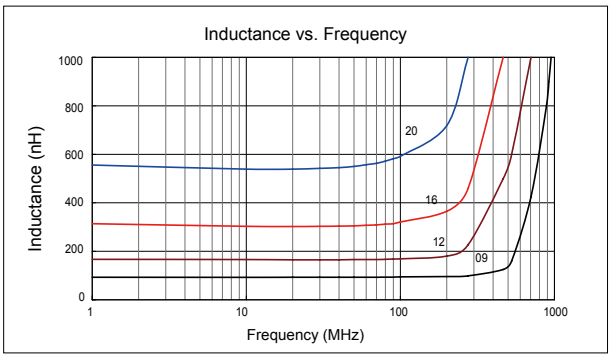
ELECTRICAL SPECIFICATION

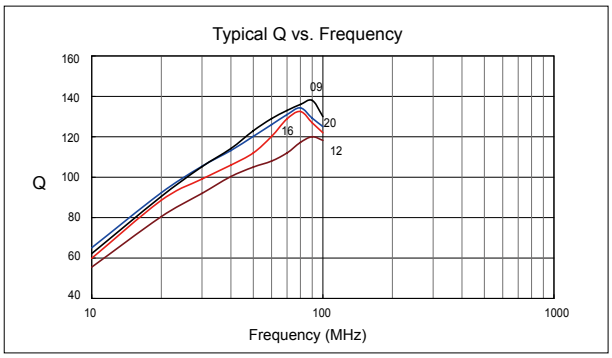
Part Number	Turns	Inductance (nH)	Q (Min.)	Q (Typ.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (MHz) Min.	Rated Current (A) Max.
294A-09 ☐ -LRH	9	90	95	114	50	15	1140	3.5
294A-10 ☐ -LRH	10	111	87	104	50	15	1020	3.5
294A-11 ☐ -LRH	11	130	87	104	50	20	900	3.0
294A-12 ☐ -LRH	12	169	95	114	50	25	875	3.0
294A-13 ☐ -LRH	13	206	95	114	50	30	800	3.0
294A-14 ☐ -LRH	14	222	92	110	50	35	730	3.0
294A-15 ☐ -LRH	15	246	95	114	50	35	685	3.0
294A-16 ☐ -LRH	16	307	95	114	50	35	660	3.0
294A-17 ☐ -LRH	17	380	95	114	50	50	590	2.5
294A-18 ☐ -LRH	18	422	95	114	50	60	540	2.5
294A-19 ☐ -LRH	19	491	95	114	50	65	535	2.0
294A-20 ☐ -LRH	20	538	87	104	50	90	490	2.0

- Tolerance: G=±2% ; J=±5% ; K= ±10%
- Test Equipment:
  L/Q: HP-4291B With HP16193A test fixture or equivalent.
  SRF: HP8753E /HP8720D or equivalent.
  RDC: Chroma 16502 or equivalent.
- Operating temperature range: -40℃ to +125℃
- For Temperature Rise; 15℃
- Storage Temp.: -40℃ to +85℃
- MSL: Level 1

CHARACTERISTIC CURVE

294A Series



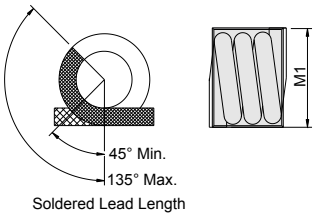


29BXL01J Series

■ SMD Air Wound Coil

MECHANICAL DIMENSIONS

29BXL01J-LRH



unit: mm

Part Number	M1	M2	M3	M4	M5	M6
29BAL01J-LRH	5.71 MAX.	4.70 MAX.	5.33 MAX.	4.572	5.84	1.524
29BBL01J-LRH	5.46 MAX.	4.45 MAX.	4.95 MAX.	4.572	5.84	1.524
29BCL01J-LRH	5.46 MAX.	4.96 MAX.	4.95 MAX.	5.207	5.84	1.524
29BDL01J-LRH	5.59 MAX.	5.84 MAX.	4.95 MAX.	5.969	5.84	1.524

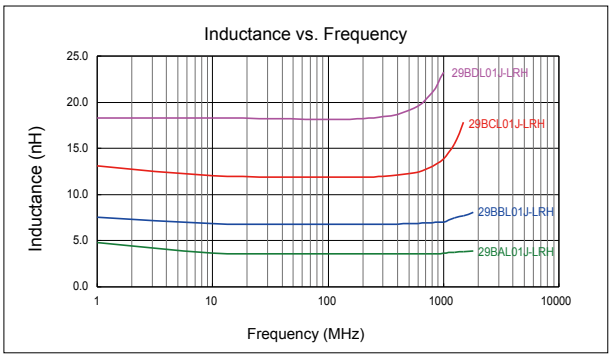
ELECTRICAL SPECIFICATION

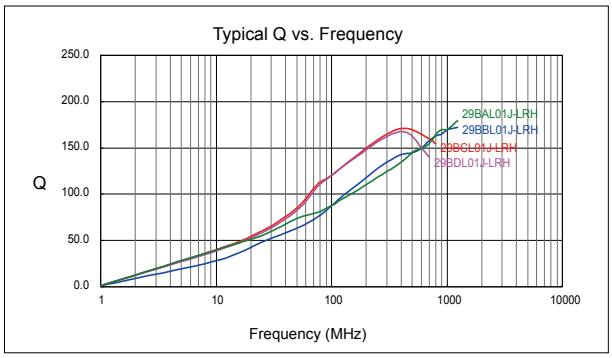
Part Number	Inductance (nH)	Tolerance	Q (Typ.)	Test Freq (MHz) 0.1Vrms	DCR (mΩ) Max.	SRF (GHz) Min.	Irms (A)
29BAL01J-LRH	3.7	J	100	150	2.0	17.5	7.0
29BBL01J-LRH	6.6	J	100	150	2.0	4.0	7.0
29BCL01J-LRH	12.0	J	140	150	2.0	2.4	7.0
29BDL01J-LRH	17.5	J	140	150	2.0	2.2	7.0

Note:
- Inductance measured using the AGILENT/HP16193 FIXTURE IN AGILENT/ 4291B.
- DCR measured using the ZENTECH 502A.
- SRF measured using the AGILENT 5071C.
- Tolerance: J=5%

CHARACTERISTIC CURVE

29BXL01J-LRH Series





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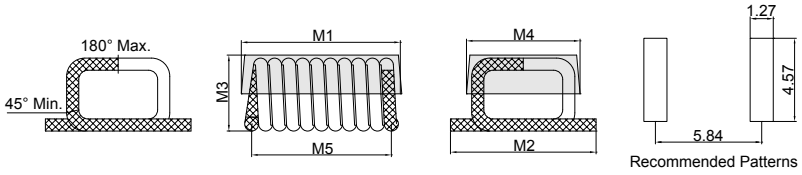
■ SMD Air Wound Coil

MECHANICAL DIMENSIONS

29CBRXXX-LRH



unit: mm

Part Number	M1	M2	M3	M4	M5
29CBRXXX-LRH	6.86 max.	4.19 max.	2.01 max.	3.43 max.	5.84±0.38

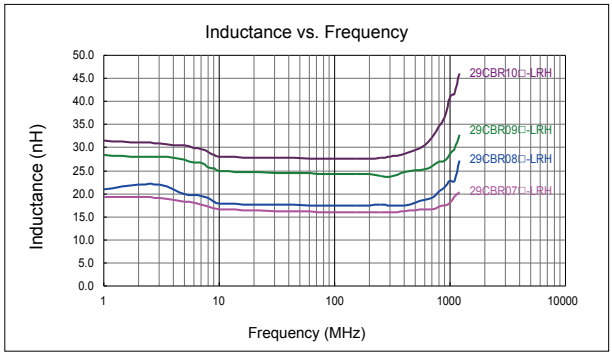
ELECTRICAL SPECIFICATION

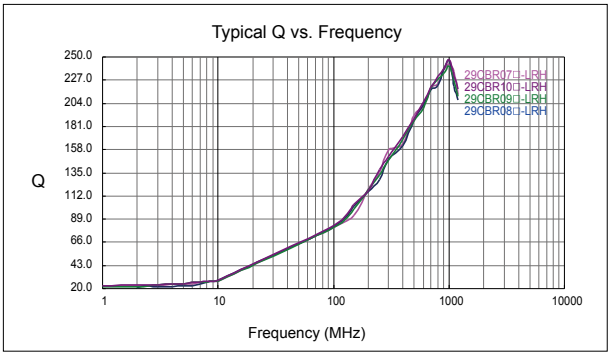
Part Number	Inductance (nH)	Tolerance	Q (Typ.)	Test Freq (MHz) 0.1V	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
29CBR07 ☐ -LRH	16.0	G, J	110	250	5.2	3.0	4.0
29CBR08 ☐ -LRH	18.0	G, J	110	250	6.0	2.9	4.0
29CBR09 ☐ -LRH	23.0	G, J	110	250	6.8	2.6	4.0
29CBR10 ☐ -LRH	27.0	G, J	110	250	7.9	2.3	4.0

Note:
- Tolerance: G=2%；J=5%
- Inductance & Q measured on the HP4291A. With HP16193A test fixture.
- SRF measured using the HP8753E
- Ambient temperature range: -40℃ to +125℃ with Irms current, +125℃ to +140℃ with derated current.
- Electrical specifications at 25℃

CHARACTERISTIC CURVE

29CBRXXX-LRH Series



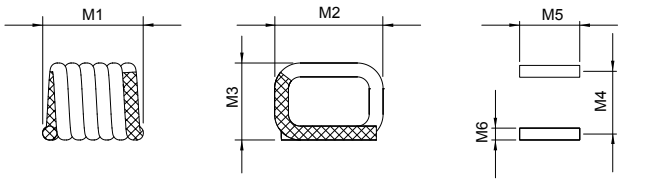


LSQ0806A Series

■ SMD Square Air Wound Coil

MECHANICAL DIMENSIONS

LSQ0806A



Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4	M5	M6
LSQ0806A-5N5 ☐	1.346±0.102	1.829±0.254	1.397±0.102	0.962	2.6	0.51
LSQ0806A-6N0 ☐	1.295±0.102	1.829±0.254	1.397±0.102	1.02	2.6	0.51
LSQ0806A-8N9 ☐	1.626±0.152	1.829±0.254	1.397±0.102	1.32	2.6	0.51
LSQ0806A-12N ☐	1.930±0.152	1.829±0.254	1.397±0.102	1.63	2.6	0.51
LSQ0806A-16N ☐	2.286±0.152	1.829±0.254	1.397±0.102	1.96	2.6	0.51
LSQ0806A-19N ☐	2.591±0.152	1.829±0.254	1.397±0.102	2.29	2.6	0.51

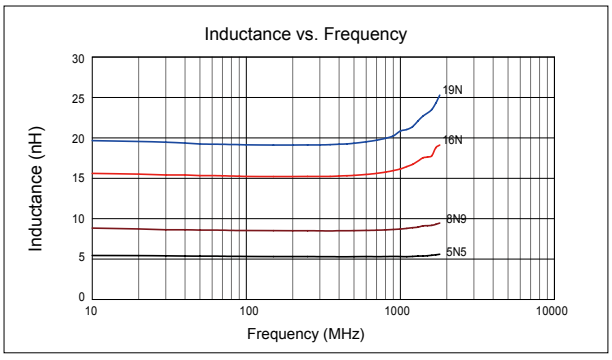
ELECTRICAL SPECIFICATION

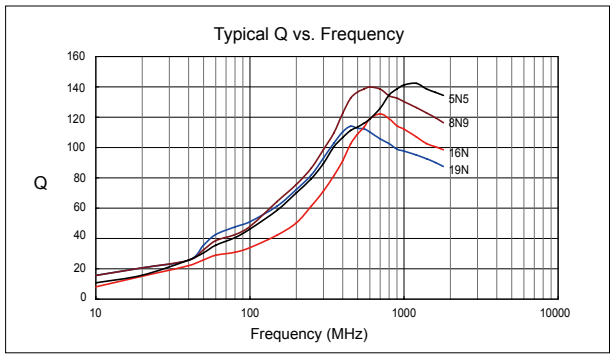
Part Number	Turns	Tolerance	Inductance (nH)	Q (Min.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
LSQ0806A-5N5 ☐	3	G, J	5.5	60	400	3.4	4.9	2.9
LSQ0806A-6N0 ☐	3	G, J	6	64	400	6	5.2	2.9
LSQ0806A-8N9 ☐	4	G, J	8.9	90	400	7	4.3	2.9
LSQ0806A-12N ☐	5	G, J	12.3	90	400	8	4.8	2.9
LSQ0806A-16N ☐	6	G, J	15.7	90	400	9	4.4	2.9
LSQ0806A-19N ☐	7	G, J	19.4	90	400	10	4	2.9

- Tolerance: G=±2% ; J=±5%
- Test Equipment:
  L/Q: HP-4291B With HP16193A test fixture or equivalent.
  SRF: HP8753E or equivalent.
  RDC: Chroma 16502 or equivalent.
- Operating temperature range: -40℃ to +125℃
- For Temperature Rise; 15℃
- Storage Temp.: -40℃ to +85℃
- MSL: Level 1

CHARACTERISTIC CURVE

LSQ0806A Series





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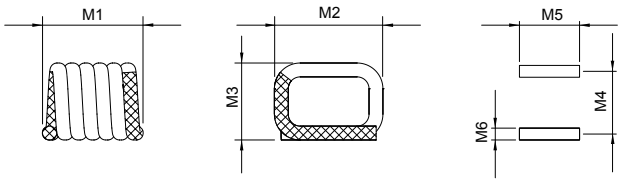
■ SMD Square Air Wound Coil

MECHANICAL DIMENSIONS

LSQ0807A



Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4	M5	M6
LSQ0807A-6N9 ☐	1.295±0.102	1.829±0.254	1.524±0.254	1.02	2.6	0.51
LSQ0807A-10N ☐	1.626±0.152	1.829±0.254	1.524±0.254	1.32	2.6	0.51
LSQ0807A-11N ☐	1.549±0.152	1.829±0.254	1.524±0.254	1.24	2.6	0.51
LSQ0807A-14N ☐	1.930±0.152	1.829±0.254	1.524±0.254	1.63	2.6	0.51
LSQ0807A-17N ☐	2.286±0.152	1.829±0.254	1.524±0.254	1.96	2.6	0.51
LSQ0807A-22N ☐	2.591±0.152	1.829±0.254	1.524±0.254	2.29	2.6	0.51

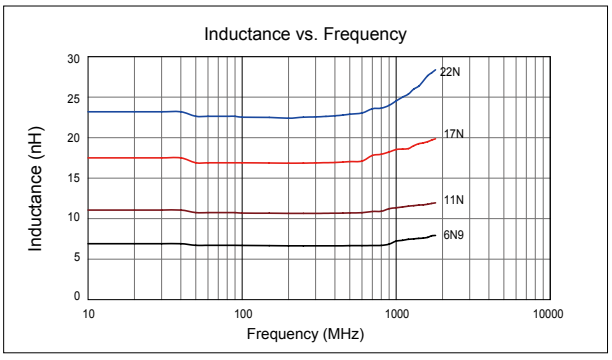
ELECTRICAL SPECIFICATION

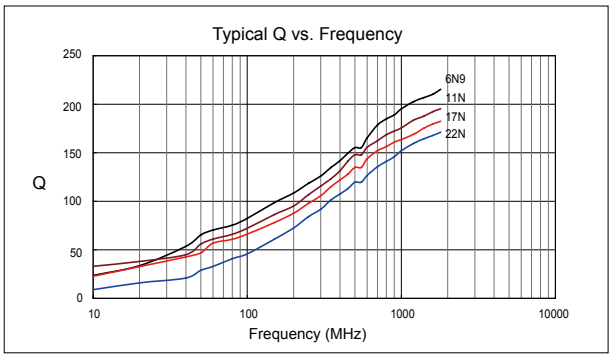
Part Number	Turns	Tolerance	Inductance (nH)	Q (Min.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
LSQ0807A-6N9 ☐	3	G, J	6.9	100	400	6.0	4.6	2.7
LSQ0807A-10N ☐	4	G, J	10.2	100	400	7.0	4.0	2.7
LSQ0807A-11N ☐	4	G, J	11.2	90	400	6.3	3.6	2.7
LSQ0807A-14N ☐	5	G, J	13.7	100	400	8.0	4.3	2.7
LSQ0807A-17N ☐	6	G, J	17.0	100	400	9.0	4.0	2.7
LSQ0807A-22N ☐	7	G, J	22.0	100	400	10.0	3.5	2.7

- Tolerance: G=±2%；J=±5%
- Test Equipment:
  L/Q: HP-4291B With HP16193A test fixture or equivalent.
  SRF: HP8753E or equivalent.
  RDC: Chroma 16502 or equivalent.
- Operating temperature range: -40℃ to +125℃
- For Temperature Rise; 15℃
- Storage Temp.: -40℃ to +85℃
- MSL: Level 1

CHARACTERISTIC CURVE

LSQ0807A Series



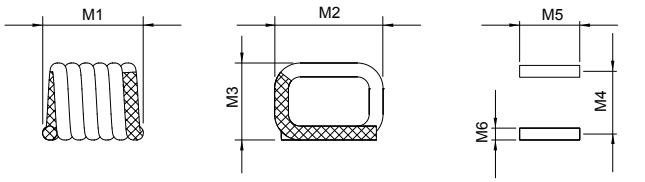


LSQ0908A Series

■ SMD Square Air Wound Coil

MECHANICAL DIMENSIONS

LSQ0908A



Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4	M5	M6
LSQ0908A-8N1 ☐	1.473±0.152	2.134±0.152	1.829±0.152	1.12	2.8	0.64
LSQ0908A-12N ☐	1.854±0.152	2.134±0.152	1.829±0.152	1.45	2.8	0.64
LSQ0908A-15N ☐	1.549±0.152	2.134±0.152	1.829±0.152	1.24	2.8	0.64
LSQ0908A-17N ☐	2.210±0.152	2.134±0.152	1.829±0.152	1.83	2.8	0.64
LSQ0908A-22N ☐	2.565±0.152	2.134±0.152	1.829±0.152	2.18	2.8	0.64
LSQ0908A-23N ☐	2.235±0.152	2.134±0.152	1.829±0.152	1.90	2.8	0.64
LSQ0908A-25N ☐	2.972±0.152	2.134±0.152	1.829±0.152	2.57	2.8	0.64
LSQ0908A-27N ☐	2.972±0.152	2.134±0.152	1.829±0.152	2.57	2.8	0.64
LSQ0908A-33N ☐	3.266±0.152	2.134±0.152	1.829±0.152	3.12	2.8	0.64

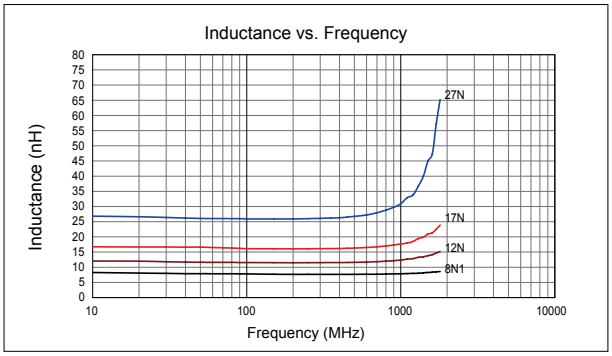
ELECTRICAL SPECIFICATION

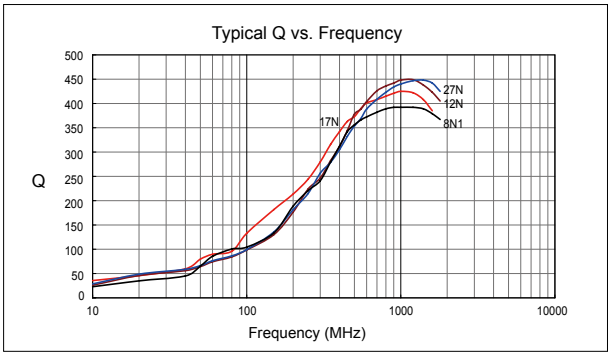
Part Number	Turns	Tolerance	Inductance (nH)	Q (Min.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
LSQ0908A-8N1 ☐	3	G, J	8.1	130	400	6.0	5.2	4.4
LSQ0908A-12N ☐	4	G, J	12.1	130	400	7.0	4.3	4.4
LSQ0908A-15N ☐	4	G, J	14.7	90	400	7.2	3.0	4.4
LSQ0908A-17N ☐	5	G, J	16.6	130	400	8.0	3.4	4.4
LSQ0908A-22N ☐	6	G, J	21.5	130	400	9.0	3.7	4.4
LSQ0908A-23N ☐	6	G, J	23.0	130	400	10.0	2.6	4.4
LSQ0908A-25N ☐	7	G, J	25.0	130	400	10.0	2.5	4.4
LSQ0908A-27N ☐	7	G, J	27.3	130	400	10.0	3.2	4.4
LSQ0908A-33N ☐	8	G,J	33	100	400	12.0	3.2	4.4

- Tolerance: G=±2% ; J=±5%
- Test Equipment:
  L/Q: HP-4291B With HP16193A test fixture or equivalent.
  SRF: HP8753E or equivalent.
  RDC: Chroma 16502 or equivalent.
- Operating temperature range: -40℃ to +125℃
- For Temperature Rise; 15℃
- Storage Temp.: -40℃ to +85℃
- MSL: Level 1

CHARACTERISTIC CURVE

LSQ0908A Series





SMD

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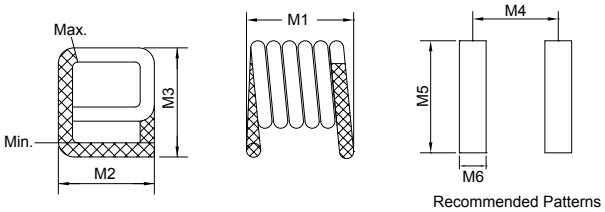
■ SMD Square Air Wound Coil

MECHANICAL DIMENSIONS

LSQ1111A



Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4	M5	M6
LSQ1111A-27N ☐	2.67±0.254	2.67±0.127	2.79±0.127	2.29	3.05	1.02
LSQ1111A-30N ☐	2.67±0.254	2.67±0.127	2.79±0.127	2.29	3.05	1.02
LSQ1111A-33N ☐	2.92±0.254	2.67±0.127	2.79±0.127	2.54	3.05	1.02
LSQ1111A-36N ☐	2.92±0.254	2.67±0.127	2.79±0.127	2.54	3.05	1.02
LSQ1111A-39N ☐	2.92±0.254	2.67±0.127	2.79±0.127	2.54	3.05	1.02
LSQ1111A-43N ☐	3.30±0.254	2.67±0.127	2.79±0.127	2.79	3.05	1.02
LSQ1111A-47N ☐	3.30±0.254	2.67±0.127	2.79±0.127	2.79	3.05	1.02

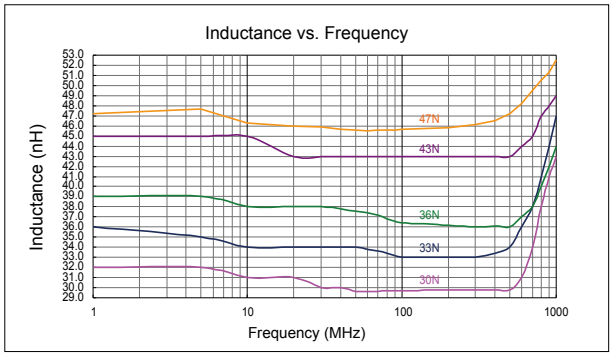
ELECTRICAL SPECIFICATION

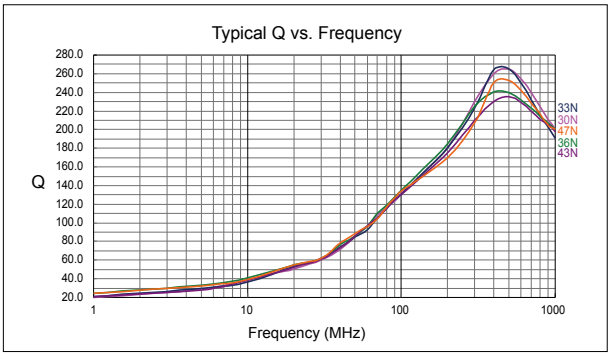
Part Number	Inductance (nH)	Tolerance	Q (Typ.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
LSQ1111A-27N ☐	27	G, J	200	400	8.1	2.6	5.5
LSQ1111A-30N ☐	30	G, J	200	400	8.3	2.4	5.5
LSQ1111A-33N ☐	33	G, J	200	400	9.5	2.3	4.8
LSQ1111A-36N ☐	36	G, J	200	400	9.8	2.3	4.8
LSQ1111A-39N ☐	39	G, J	200	400	10.0	2.2	4.8
LSQ1111A-43N ☐	43	G, J	200	400	10.8	2.2	4.4
LSQ1111A-47N ☐	47	G, J	200	400	11.3	2.2	4.4

Note :
- Inductance & Q measured on the HP4291B. With HP16193A test fixture.
- Ambient temperature: -40℃ to +125℃ with Irms current, +125℃ to +145℃ with derated current.
- Storage temperature Component:-40℃ to +145℃ , Packaging : -40℃ to +80℃
- SRF measured using an Agilent/HP 8753 network analyzer.
- Current that causes a 20℃ temperature rise from 25℃ ambient.
- Tolerance: G=2% ; J=5%

CHARACTERISTIC CURVE

LSQ1111A Series



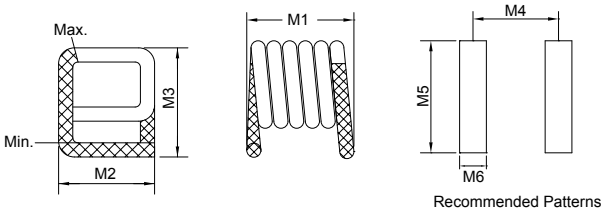


LSQ1515A Series

■ SMD Square Air Wound Coil

MECHANICAL DIMENSIONS

LSQ1515A



unit: mm

Part Number	M1	M2	M3	M4	M5	M6
LSQ1515A-47N ☐	4.06±0.254	3.56±0.178	3.73±0.178	3.56	4.45	1.78
LSQ1515A-68N ☐	5.33±0.254	3.56±0.178	3.73±0.178	4.83	4.45	1.78
LSQ1515A-82N ☐	5.84±0.254	3.56±0.178	3.73±0.178	5.33	4.45	1.78

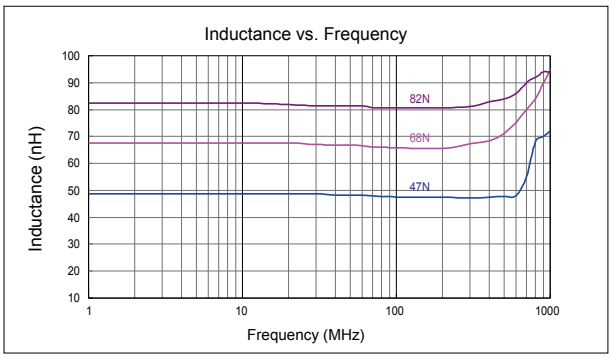
ELECTRICAL SPECIFICATION

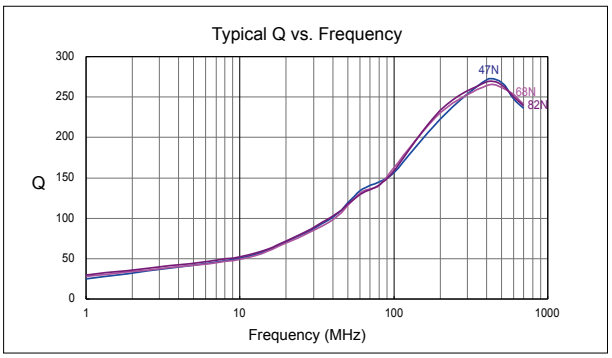
Part Number	Inductance (nH)	Tolerance	Q (Typ.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
LSQ1515A-47N ☐	47	G, J	230	400	6.35	1.87	4.9
LSQ1515A-68N ☐	68	G, J	230	400	8.60	2.13	5.5
LSQ1515A-82N ☐	82	G, J	230	400	9.40	1.79	5.6

Note :
- Inductance & Q measured on the HP4291B. With HP16193A test fixture.
- Ambient temperature: -40℃ to +125℃ with Irms current, +125℃ to +145℃ with derated current.
- Storage temperature Component:-40℃ to +145℃ , Packaging : -40℃ to +80℃
- SRF measured using an Agilent/HP 8753 network analyzer.
- Current that causes a 20℃ temperature rise from 25℃ ambient.
- Tolerance: G=2% ; J=5%

CHARACTERISTIC CURVE

LSQ1515A Series





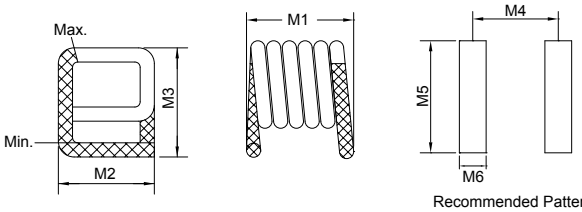
SMD

Leaded

■ SMD Square Air Wound Coil

MECHANICAL DIMENSIONS

LSQ2222A



unit: mm

Part Number	M1	M2	M3	M4	M5	M6
LSQ2222A-90N ☐	5.21±0.381	5.46±0.254	5.69±0.254	4.70	6.35	2.16
LSQ2222A-R11 ☐	6.35±0.381	5.59±0.254	5.69±0.254	5.84	6.73	2.16
LSQ2222A-R13 ☐	6.73±0.381	5.59±0.254	5.69±0.254	6.22	6.73	2.16
LSQ2222A-R16 ☐	7.37±0.381	5.59±0.254	5.69±0.254	6.60	6.73	2.16
LSQ2222A-R18 ☐	8.13±0.381	5.59±0.254	5.69±0.254	7.37	6.73	2.16
LSQ2222A-R22 ☐	9.91±0.381	5.59±0.254	5.69±0.254	9.14	6.73	2.16
LSQ2222A-R27 ☐	11.68±0.381	5.59±0.254	5.69±0.254	10.67	6.73	2.16
LSQ2222A-R30 ☐	11.94±0.381	5.72±0.254	5.69±0.254	11.18	6.73	2.16

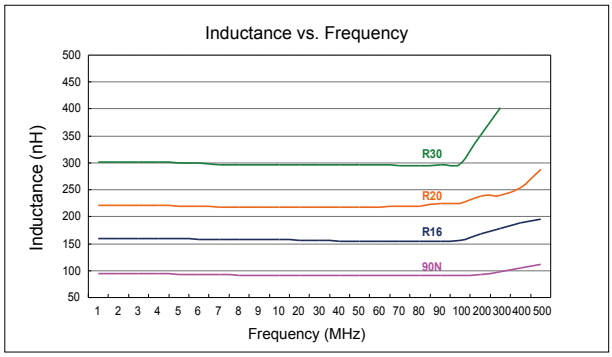
ELECTRICAL SPECIFICATION

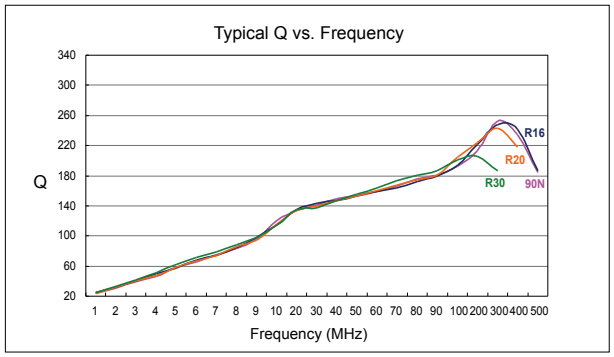
Part Number	Inductance (nH)	Tolerance	Q (Typ.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
LSQ2222A-90N ☐	90	G,J	140	50	5.50	1.15	5.0
LSQ2222A-R11 ☐	110	G,J	140	50	6.50	1.00	5.7
LSQ2222A-R13 ☐	130	G,J	140	50	7.50	1.00	5.4
LSQ2222A-R16 ☐	160	G,J	140	50	8.25	1.00	5.7
LSQ2222A-R18 ☐	180	G,J	140	50	9.50	1.10	5.0
LSQ2222A-R22 ☐	220	G,J	140	50	11.0	1.00	5.0
LSQ2222A-R27 ☐	270	G,J	140	50	12.5	0.80	4.3
LSQ2222A-R30 ☐	300	G,J	150	50	13.8	0.72	3.7

Note :
- Inductance & Q measured on the HP4291B. With HP16193A test fixture.
- Ambient temperature: -40℃ to +125℃ with Irms current, +125℃ to +145℃ with derated current.
- Storage temperature Component:-40℃ to +145℃ , Packaging : -40℃ to +80℃
- SRF measured using an Agilent/HP 8753 network analyzer.
- Current that causes a 20℃ temperature rise from 25℃ ambient.
- Tolerance:G=2% ; J=5%

CHARACTERISTIC CURVE

LSQ2222A Series



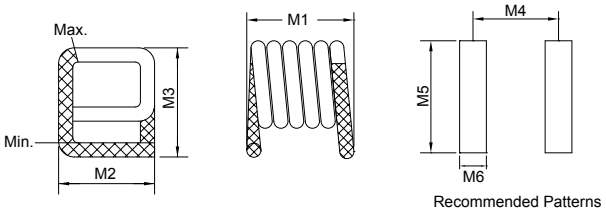


LSQ2929A Series

■ SMD Square Air Wound Coil

MECHANICAL DIMENSIONS

LSQ2929A



Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4	M5	M6
LSQ2929A-R33 ☐	10.29±0.381	7.49±0.254	7.24±0.254	9.53	8.26	2.29
LSQ2929A-R36 ☐	11.30±0.381	7.49±0.254	7.24±0.254	10.541	8.26	2.29
LSQ2929A-R39 ☐	12.32±0.381	7.49±0.254	7.24±0.254	11.56	8.26	2.29
LSQ2929A-R43 ☐	13.21±0.381	7.49±0.254	7.24±0.254	12.45	8.26	2.29
LSQ2929A-R50 ☐	14.00±0.381	7.49±0.254	7.24±0.254	13.21	8.26	2.29

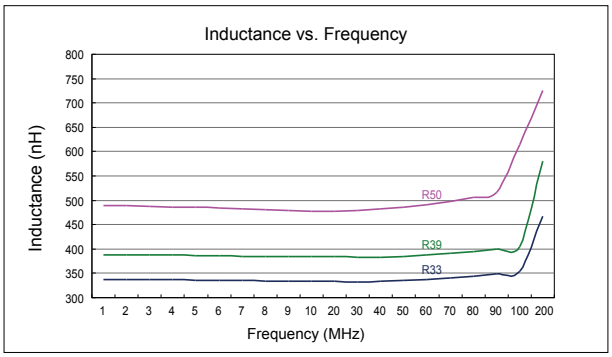
ELECTRICAL SPECIFICATION

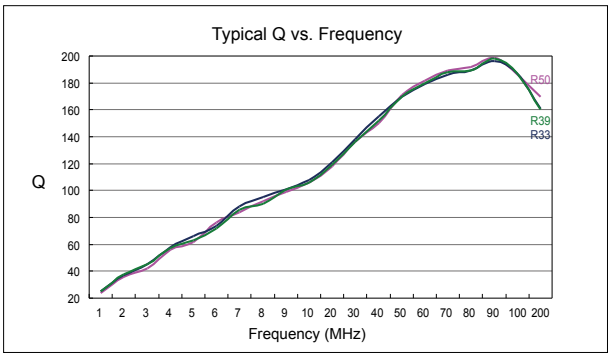
Part Number	Inductance (nH)	Tolerance	Q (Typ.)	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
LSQ2929A-R33 ☐	330	G, J	180	50	12.5	0.660	4.7
LSQ2929A-R36 ☐	360	G, J	180	50	13.5	0.620	4.5
LSQ2929A-R39 ☐	390	G, J	180	50	14.5	0.590	4.4
LSQ2929A-R43 ☐	430	G, J	180	50	15.5	0.550	4.2
LSQ2929A-R50 ☐	500	G, J	180	50	16.5	0.500	4.3

Note :
- Inductance & Q measured on the HP4291B. With HP16193A test fixture.
- Ambient temperature: -40℃ to +125℃ with Irms current, +125℃ to +145℃ with derated current.
- Storage temperature Component:-40℃ to +145℃ , Packaging : -40℃ to +80℃
- SRF measured using an Agilent/HP 8753 network analyzer.
- Current that causes a 20℃ temperature rise from 25℃ ambient.
- Tolerance: G=2% ； J=5%

CHARACTERISTIC CURVE

LSQ2929A Series

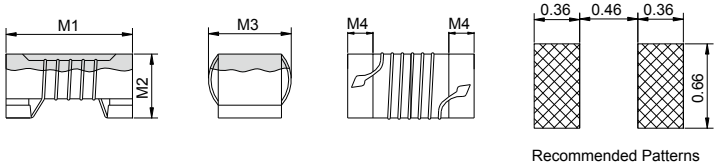




■ SMD Wire Wound Ceramic Chip Inductors

MECHANICAL DIMENSIONS

0402CF



Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4
0402CF	1.0±0.1	0.5±0.1	0.5±0.1 24~120nH 0.6±0.1 1.5~23nH	0.2±0.1

ELECTRICAL SPECIFICATION

Part Number	Inductance (nH)	Inductance Tolerance	Inductance Test Frequency (MHz)	Rated Current (mA)	Max. of DC Resistance Ω	Q (min.)	Q Test Frequency (MHz)	Self-Resonance Frequency (min.) (GHz)
0402CF-1N5 ☐ -LRH	1.5	Z, U, W	100	1000	0.03	10	250	18.0
0402CF-1N6 ☐ -LRH	1.6	U, W	100	750	0.07	10	250	17.0
0402CF-1N7 ☐ -LRH	1.7	U, W	100	640	0.10	10	250	17.0
0402CF-1N8 ☐ -LRH	1.8	U, W	100	460	0.16	10	250	16.0
0402CF-2N4 ☐ -LRH	2.4	Z, U, W	100	850	0.05	20	250	15.0
0402CF-2N5 ☐ -LRH	2.5	Z, U, W	100	850	0.05	20	250	15.0
0402CF-2N6 ☐ -LRH	2.6	Z, U, W	100	850	0.05	20	250	15.0
0402CF-2N7 ☐ -LRH	2.7	Z, U, W	100	850	0.05	20	250	15.0
0402CF-2N8 ☐ -LRH	2.8	Z, U, W	100	850	0.05	20	250	15.0
0402CF-2N9 ☐ -LRH	2.9	Z, U, W	100	750	0.07	20	250	15.0
0402CF-3N0 ☐ -LRH	3.0	Z, U, W	100	750	0.07	20	250	15.0
0402CF-3N1 ☐ -LRH	3.1	Z, U, W	100	570	0.13	20	250	14.0
0402CF-3N2 ☐ -LRH	3.2	Z, U, W	100	500	0.17	15	250	14.0
0402CF-3N9 ☐ -LRH	3.9	Z, U, W	100	750	0.07	25	250	10.0
0402CF-4N1 ☐ -LRH	4.1	Z, U, W	100	750	0.07	25	250	10.0
0402CF-4N3 ☐ -LRH	4.3	Z, U, W	100	750	0.07	25	250	10.0
0402CF-4N4 ☐ -LRH	4.4	Z, U, W	100	750	0.07	25	250	8.0
0402CF-4N5 ☐ -LRH	4.5	Z, U, W	100	750	0.07	25	250	8.0
0402CF-4N6 ☐ -LRH	4.6	Z, U, W	100	750	0.07	25	250	8.0
0402CF-4N7 ☐ -LRH	4.7	Z, U, W	100	750	0.07	25	250	8.0
0402CF-4N8 ☐ -LRH	4.8	Z, U, W	100	750	0.07	25	250	8.0
0402CF-4N9 ☐ -LRH	4.9	Z, U, W	100	600	0.12	25	250	8.0
0402CF-5N0 ☐ -LRH	5.0	Z, U, W	100	600	0.12	25	250	8.0
0402CF-5N1 ☐ -LRH	5.1	Z, U, W	100	600	0.12	25	250	8.0
0402CF-5N8 ☐ -LRH	5.8	Z, U, W	100	700	0.12	25	250	8.0
0402CF-6N2 ☐ -LRH	6.2	Z, U, W	100	700	0.09	25	250	8.0
0402CF-6N3 ☐ -LRH	6.3	Z, U, W	100	700	0.09	25	250	6.0
0402CF-6N4 ☐ -LRH	6.4	Z, U, W	100	700	0.09	25	250	6.0
0402CF-6N5 ☐ -LRH	6.5	Z, U, W	100	700	0.09	25	250	6.0
0402CF-6N6 ☐ -LRH	6.6	Z, U, W	100	700	0.09	25	250	6.0
0402CF-6N7 ☐ -LRH	6.7	Z, U, W	100	700	0.09	25	250	6.0
0402CF-6N8 ☐ -LRH	6.8	G, H, J	100	700	0.09	25	250	6.0
0402CF-6N9 ☐ -LRH	6.9	G, H, J	100	570	0.13	25	250	6.0
0402CF-7N0 ☐ -LRH	7.0	G, H, J	100	570	0.13	25	250	6.0
0402CF-7N1 ☐ -LRH	7.1	G, H, J	100	570	0.13	25	250	6.0
0402CF-7N2 ☐ -LRH	7.2	G, H, J	100	570	0.13	25	250	6.0
0402CF-7N3 ☐ -LRH	7.3	G, H, J	100	570	0.13	25	250	6.0
0402CF-7N5 ☐ -LRH	7.5	G, H, J	100	570	0.13	25	250	6.0
0402CF-8N2 ☐ -LRH	8.2	G, H, J	100	540	0.14	25	250	5.5
0402CF-8N6 ☐ -LRH	8.6	G, H, J	100	540	0.14	25	250	5.5
0402CF-8N7 ☐ -LRH	8.7	G, H, J	100	540	0.14	25	250	5.5
0402CF-8N8 ☐ -LRH	8.8	G, H, J	100	540	0.14	25	250	5.5
0402CF-8N9 ☐ -LRH	8.9	G, H, J	100	540	0.14	25	250	5.5
0402CF-9N0 ☐ -LRH	9.0	G, H, J	100	540	0.14	25	250	5.5
0402CF-9N1 ☐ -LRH	9.1	G, H, J	100	540	0.14	25	250	5.5
0402CF-9N2 ☐ -LRH	9.2	G, H, J	100	540	0.14	25	250	5.5
0402CF-9N3 ☐ -LRH	9.3	G, H, J	100	540	0.14	25	250	5.5

0402CF Series

■ SMD Wire Wound Ceramic Chip Inductors

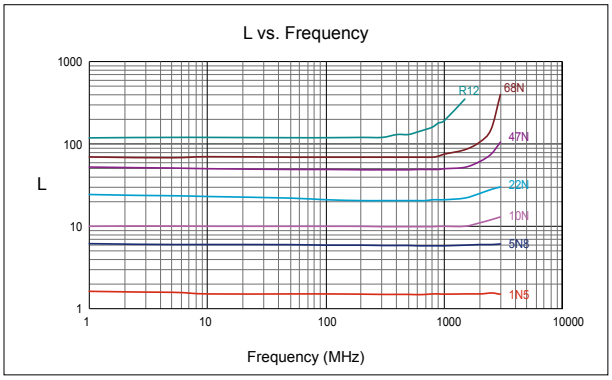
ELECTRICAL SPECIFICATION

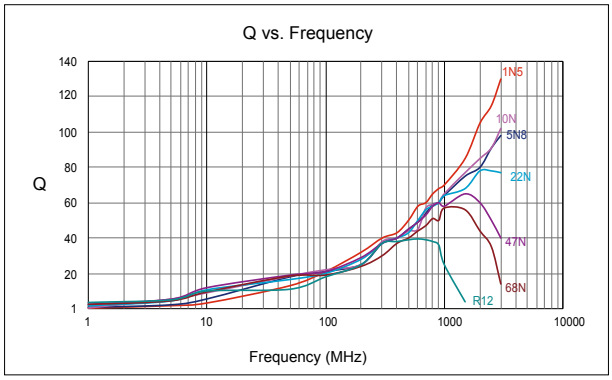
Part Number	Inductance (nH)	Inductance Tolerance	Inductance Test Frequency (MHz)	Rated Current (mA)	Max. of DC Resistance Ω	Q (min.)	Q Test Frequency (MHz)	Self-Resonance Frequency (min.) (GHz)
0402CF-9N4 ☐ -LRH	9.4	G, H, J	100	540	0.14	25	250	5.5
0402CF-9N5 ☐ -LRH	9.5	G, H, J	100	540	0.14	25	250	5.5
0402CF-9N6 ☐ -LRH	9.6	G, H, J	100	540	0.14	25	250	5.5
0402CF-9N7 ☐ -LRH	9.7	G, H, J	100	540	0.14	25	250	5.5
0402CF-9N8 ☐ -LRH	9.8	G, H, J	100	540	0.14	25	250	5.5
0402CF-9N9 ☐ -LRH	9.9	G, H, J	100	540	0.14	25	250	5.5
0402CF-10N ☐ -LRH	10	G, H, J	100	500	0.17	25	250	5.5
0402CF-11N ☐ -LRH	11	G, H, J	100	500	0.14	30	250	5.5
0402CF-12N ☐ -LRH	12	G, H, J	100	500	0.14	30	250	5.5
0402CF-13N ☐ -LRH	13	G, H, J	100	430	0.21	25	250	5.0
0402CF-15N ☐ -LRH	15	G, H, J	100	460	0.16	30	250	5.0
0402CF-16N ☐ -LRH	16	G, H, J	100	370	0.24	25	250	4.5
0402CF-18N ☐ -LRH	18	G, H, J	100	370	0.27	25	250	4.5
0402CF-19N ☐ -LRH	19	G, H, J	100	370	0.27	25	250	4.5
0402CF-20N ☐ -LRH	20	G, H, J	100	370	0.27	25	250	4.0
0402CF-22N ☐ -LRH	22	G, H, J	100	310	0.30	25	250	4.0
0402CF-23N ☐ -LRH	23	G, H, J	100	310	0.30	25	250	3.8
0402CF-24N ☐ -LRH	24	G, H, J	100	280	0.52	25	250	3.5
0402CF-27N ☐ -LRH	27	G, H, J	100	280	0.52	25	250	3.5
0402CF-30N ☐ -LRH	30	G, H, J	100	270	0.58	25	250	3.3
0402CF-33N ☐ -LRH	33	G, H, J	100	260	0.63	25	250	3.2
0402CF-36N ☐ -LRH	36	G, H, J	100	260	0.63	25	250	3.1
0402CF-39N ☐ -LRH	39	G, H, J	100	250	0.70	25	250	3.0
0402CF-40N ☐ -LRH	40	G, H, J	100	250	0.70	25	250	3.0
0402CF-43N ☐ -LRH	43	G, H, J	100	250	0.70	25	250	3.0
0402CF-47N ☐ -LRH	47	G, H, J	100	210	1.08	25	200	2.9
0402CF-51N ☐ -LRH	51	G, H, J	100	210	1.08	25	200	2.85
0402CF-56N ☐ -LRH	56	G, H, J	100	200	1.17	25	200	2.8
0402CF-62N ☐ -LRH	62	G, H, J	100	145	1.82	20	200	2.6
0402CF-68N ☐ -LRH	68	G, J	100	140	1.96	20	200	2.5
0402CF-72N ☐ -LRH	72	G, J	100	135	2.10	20	150	2.5
0402CF-75N ☐ -LRH	75	G, J	100	135	2.10	20	150	2.4
0402CF-82N ☐ -LRH	82	G, J	100	130	2.24	20	150	2.3
0402CF-91N ☐ -LRH	91	G, J	100	125	2.38	20	150	2.1
0402CF-R10 ☐ -LRH	100	J	100	120	2.52	20	150	1.5
0402CF-R12 ☐ -LRH	120	J	100	110	2.66	20	150	1.0

- ☐ Tolerance: J=±5%；H=±3%；G=±2%；W=±0.5nH；U=±0.2nH；Z=±0.1nH
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the 4287A with 16197A
- SRF measured using the HP 8753E/HP4291B with 16193A/ENA5071C or its equivalent.
- DCR measured using the AGILENT zentech 502BC or its equivalent.
- Unspecified values available on request.

CHARACTERISTIC CURVE

0402CF Series

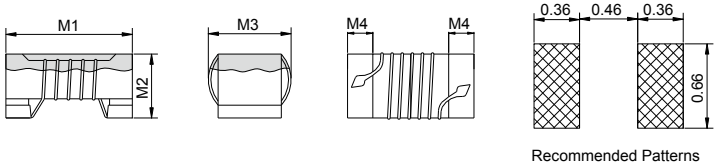




■ SMD Wire Wound Ceramic Chip Inductors

MECHANICAL DIMENSIONS

0402CQ



Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4
0402CQ	1.0±0.1	0.5±0.1	0.6±0.1	0.2±0.1

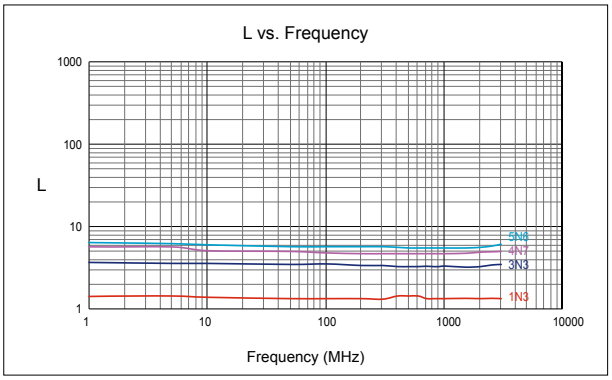
ELECTRICAL SPECIFICATION

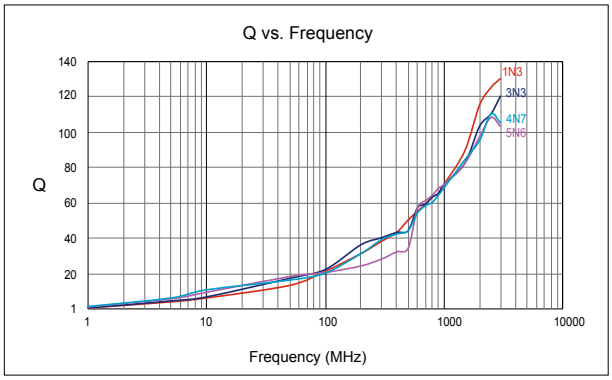
Part Number	Inductance (nH)	Inductance Tolerance	Inductance Test Frequency (MHz)	Rated Current (mA)	Max. of DC Resistance Ω	Q (min.)	Q Test Frequency (MHz)	Self-Resonance Frequency (min.) (GHz)
0402CQ-1N3 ☐ -LRH	1.3	U, W	100	1200	0.017	20	250	16
0402CQ-1N4 ☐ -LRH	1.4	U, W	100	1100	0.019	25	250	15
0402CQ-2N2 ☐ -LRH	2.2	U, W	100	1000	0.027	25	250	14
0402CQ-2N3 ☐ -LRH	2.3	U, W	100	1000	0.027	25	250	14
0402CQ-2N4 ☐ -LRH	2.4	W	100	1000	0.027	25	250	14
0402CQ-3N3 ☐ -LRH	3.3	W	100	900	0.040	30	250	12
0402CQ-3N4 ☐ -LRH	3.4	U, W	100	900	0.040	30	250	12
0402CQ-3N5 ☐ -LRH	3.5	U, W	100	900	.0.040	30	250	9.5
0402CQ-3N6 ☐ -LRH	3.6	U, W	100	900	0.040	30	250	9.5
0402CQ-3N8 ☐ -LRH	3.8	U, W	100	900	0.040	30	250	7
0402CQ-3N9 ☐ -LRH	3.9	W	100	900	0.040	30	250	7
0402CQ-4N0 ☐ -LRH	4.0	U, W	100	800	0.051	30	250	6.5
0402CQ-4N2 ☐ -LRH	4.2	U, W	100	800	0.051	30	250	6.5
0402CQ-4N7 ☐ -LRH	4.7	W	100	800	0.051	30	250	8
0402CQ-5N1 ☐ -LRH	5.1	U, W	100	800	0.051	30	250	8
0402CQ-5N2 ☐ -LRH	5.2	U, W	100	800	0.051	30	250	8
0402CQ-5N3 ☐ -LRH	5.3	U, W	100	800	0.051	30	250	8
0402CQ-5N4 ☐ -LRH	5.4	U, W	100	800	0.051	30	250	8
0402CQ-5N5 ☐ -LRH	5.5	U, W	100	800	0.051	30	250	8
0402CQ-5N6 ☐ -LRH	5.6	U, W	100	800	0.051	30	250	8
0402CQ-5N7 ☐ -LRH	5.7	U, W	100	800	0.051	30	250	8
0402CQ-5N9 ☐ -LRH	5.9	U, W	100	760	0.056	30	250	7.7
0402CQ-6N0 ☐ -LRH	6.0	U, W	100	760	0.056	30	250	7.7
0402CQ-6N1 ☐ -LRH	6.1	U, W	100	760	0.056	30	250	7.7
0402CQ-7N4 ☐ -LRH	7.4	U, W	100	750	0.058	30	250	6.8
0402CQ-7N6 ☐ -LRH	7.6	U, W	100	750	0.058	30	250	6.8
0402CQ-7N7 ☐ -LRH	7.7	U, W	100	750	0.058	30	250	6.8
0402CQ-7N8 ☐ -LRH	7.8	U, W	100	750	0.058	30	250	6.8
0402CQ-7N9 ☐ -LRH	7.9	U, W	100	640	0.079	30	250	7.5
0402CQ-8N0 ☐ -LRH	8.0	U, W	100	640	0.079	30	250	7.5
0402CQ-8N1 ☐ -LRH	8.1	U, W	100	640	0.079	30	250	7.5
0402CQ-8N3 ☐ -LRH	8.3	U, W	100	640	0.079	30	250	7.5
0402CQ-8N4 ☐ -LRH	8.4	U, W	100	640	0.079	30	250	7.5

- ☐ Tolerance: W=±0.5nH ; U=±0.2nH
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the 4287A with 16197A
- SRF measured using the HP 8753E/HP4291B with 16193A/ENA5071C or its equivalent.
- DCR measured using the AGILENT zentech 502BC or its equivalent.
- Unspecified values available on request.

CHARACTERISTIC CURVE

0402CQ Series



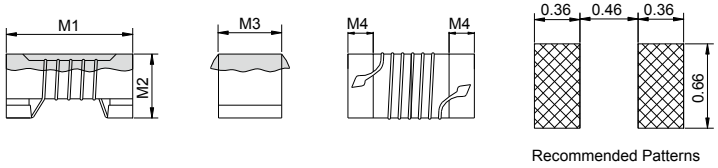


0402CH Series

■ SMD Wire Wound Ceramic Chip Inductors

MECHANICAL DIMENSIONS

0402CH



Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4
0402CH	1.0±0.1	0.5±0.1	0.6±0.1	0.2±0.1

ELECTRICAL SPECIFICATION

Part Number	Inductance (nH)	Inductance Tolerance	Inductance Test Frequency (MHz)	Rated Current (mA)	Max. of DC Resistance Ω	Q (min.)	Q Test Frequency (MHz)	Self-Resonance Frequency (min.) (GHz)
0402CH-1N3 ☐ -LRH	1.3	U, W	100	3150	0.012	20	250	18.0
0402CH-1N5 ☐ -LRH	1.5	U, W	100	2100	0.028	20	250	18.0
0402CH-1N6 ☐ -LRH	1.6	U, W	100	1450	0.045	20	250	18.0
0402CH-1N7 ☐ -LRH	1.7	U, W	100	1150	0.065	20	250	18.0
0402CH-2N2 ☐ -LRH	2.2	Z, U, W, G	100	2530	0.022	30	250	15.5
0402CH-2N3 ☐ -LRH	2.3	Z, U, W, G	100	2530	0.022	30	250	15.5
0402CH-2N4 ☐ -LRH	2.4	Z, U, W, G	100	2530	0.022	30	250	15.5
0402CH-2N5 ☐ -LRH	2.5	Z, U, W, G	100	2100	0.030	30	250	15.5
0402CH-2N6 ☐ -LRH	2.6	Z, U, W, G	100	1950	0.035	30	250	14.5
0402CH-2N7 ☐ -LRH	2.7	Z, U, W, G	100	1500	0.047	28	250	14.0
0402CH-2N8 ☐ -LRH	2.8	Z, U, W, G	100	1500	0.047	27	250	13.5
0402CH-2N9 ☐ -LRH	2.9	Z, U, W, G	100	1500	0.047	25	250	12.5
0402CH-3N0 ☐ -LRH	3.0	Z, U, W, G	100	1350	0.063	20	250	12.5
0402CH-3N3 ☐ -LRH	3.3	Z, U, W, G	100	2000	0.030	30	250	14.0
0402CH-3N4 ☐ -LRH	3.4	Z, U, W, G	100	1950	0.030	30	250	10.0
0402CH-3N5 ☐ -LRH	3.5	Z, U, W, G	100	1950	0.030	30	250	10.0
0402CH-3N6 ☐ -LRH	3.6	Z, U, W, G	100	1950	0.030	30	250	10.0
0402CH-3N7 ☐ -LRH	3.7	Z, U, W, G	100	1950	0.030	35	250	10.0
0402CH-3N8 ☐ -LRH	3.8	Z, U, W, G	100	1950	0.030	35	250	10.0
0402CH-3N9 ☐ -LRH	3.9	Z, U, W, G	100	1950	0.030	35	250	10.0
0402CH-4N0 ☐ -LRH	4.0	Z, U, W, G	100	1950	0.030	30	250	10.0
0402CH-4N1 ☐ -LRH	4.1	Z, U, W, G	100	1800	0.044	30	250	9.6
0402CH-4N2 ☐ -LRH	4.2	Z, U, W, G	100	1800	0.044	30	250	9.6
0402CH-4N3 ☐ -LRH	4.3	Z, U, W, G	100	1800	0.044	32	250	9.6
0402CH-4N4 ☐ -LRH	4.4	Z, U, W, G	100	1600	0.052	34	250	9.6
0402CH-4N5 ☐ -LRH	4.5	Z, U, W, G	100	1450	0.060	34	250	9.6
0402CH-4N6 ☐ -LRH	4.6	Z, U, W, G	100	1450	0.060	32	250	9.6
0402CH-4N7 ☐ -LRH	4.7	Z, U, W, G	100	1200	0.071	31	250	8.0
0402CH-4N8 ☐ -LRH	4.8	Z, U, W, G	100	1200	0.071	30	250	8.0
0402CH-4N9 ☐ -LRH	4.9	Z, U, W, G	100	1200	0.071	27	250	8.0
0402CH-5N0 ☐ -LRH	5.0	Z, U, W, G	100	1770	0.040	32	250	10.0
0402CH-5N1 ☐ -LRH	5.1	Z, U, W, G	100	1770	0.040	35	250	8.0
0402CH-5N2 ☐ -LRH	5.2	Z, U, W, G	100	1770	0.040	35	250	8.0
0402CH-5N3 ☐ -LRH	5.3	Z, U, W, G	100	1770	0.040	35	250	8.0
0402CH-5N4 ☐ -LRH	5.4	Z, U, W, G	100	1770	0.040	35	250	8.0
0402CH-5N5 ☐ -LRH	5.5	Z, U, W, G	100	1770	0.040	35	250	8.0
0402CH-5N6 ☐ -LRH	5.6	Z, U, W, G	100	1770	0.040	35	250	8.0
0402CH-5N7 ☐ -LRH	5.7	Z, U, W, G	100	1770	0.040	30	250	8.0
0402CH-5N8 ☐ -LRH	5.8	Z, U, W, G	100	1770	0.040	30	250	8.0
0402CH-5N9 ☐ -LRH	5.9	Z, U, W, G	100	1770	0.040	30	250	8.0
0402CH-6N0 ☐ -LRH	6.0	Z, U, W, G	100	1600	0.056	32	250	8.0
0402CH-6N1 ☐ -LRH	6.1	Z, U, W, G	100	1600	0.056	32	250	8.0
0402CH-6N2 ☐ -LRH	6.2	Z, U, W, G	100	1600	0.056	33	250	8.0
0402CH-6N3 ☐ -LRH	6.3	G, J	100	1600	0.057	32	250	7.8
0402CH-6N4 ☐ -LRH	6.4	G, J	100	1380	0.065	33	250	7.0
0402CH-6N5 ☐ -LRH	6.5	G, J	100	1380	0.065	32	250	7.0
0402CH-6N6 ☐ -LRH	6.6	G, J	100	1280	0.078	30	250	7.0

■ SMD Wire Wound Ceramic Chip Inductors

ELECTRICAL SPECIFICATION

Part Number	Inductance (nH)	Inductance Tolerance	Inductance Test Frequency (MHz)	Rated Current (mA)	Max. of DC Resistance Ω	Q (min.)	Q Test Frequency (MHz)	Self-Resonance Frequency (min.) (GHz)
0402CH-6N6 ☐ -LRH	6.7	G, J	100	1280	0.078	30	250	7.0
0402CH-6N8 ☐ -LRH	6.8	G, J	100	1450	0.068	30	250	7.0
0402CH-6N9 ☐ -LRH	6.9	G, J	100	1420	0.069	32	250	8.5
0402CH-7N0 ☐ -LRH	7.0	G, J	100	1420	0.069	33	250	8.0
0402CH-7N1 ☐ -LRH	7.1	G, J	100	1420	0.069	32	250	7.0
0402CH-7N2 ☐ -LRH	7.2	G, J	100	1700	0.050	32	250	7.0
0402CH-7N3 ☐ -LRH	7.3	G, J	100	1700	0.050	32	250	7.0
0402CH-7N4 ☐ -LRH	7.4	G, J	100	1700	0.050	30	250	7.0
0402CH-7N5 ☐ -LRH	7.5	G, J	100	1700	0.050	35	250	7.0
0402CH-7N6 ☐ -LRH	7.6	G, J	100	1700	0.050	30	250	7.0
0402CH-7N7 ☐ -LRH	7.7	G, J	100	1700	0.050	30	250	7.0
0402CH-7N8 ☐ -LRH	7.8	G, J	100	1700	0.050	30	250	7.0
0402CH-7N9 ☐ -LRH	7.9	G, J	100	1700	0.050	30	250	7.0
0402CH-8N0 ☐ -LRH	8.0	G, J	100	1700	0.050	30	250	7.0
0402CH-8N1 ☐ -LRH	8.1	G, J	100	1500	0.069	32	250	6.5
0402CH-8N2 ☐ -LRH	8.2	G, J	100	1500	0.069	32	250	6.5
0402CH-8N3 ☐ -LRH	8.3	G, J	100	1500	0.069	32	250	6.5
0402CH-8N4 ☐ -LRH	8.4	G, J	100	1500	0.069	32	250	6.5
0402CH-8N5 ☐ -LRH	8.5	G, J	100	1500	0.069	32	250	6.5
0402CH-8N6 ☐ -LRH	8.6	G, J	100	1420	0.070	31	250	6.5
0402CH-8N7 ☐ -LRH	8.7	G, J	100	1420	0.070	31	250	6.5
0402CH-8N8 ☐ -LRH	8.8	G, J	100	1420	0.070	31	250	6.5
0402CH-8N9 ☐ -LRH	8.9	G, J	100	1420	0.070	31	250	6.5
0402CH-9N0 ☐ -LRH	9	G, J	100	1420	0.070	30	250	6.5
0402CH-9N1 ☐ -LRH	9.1	G, J	100	1400	0.080	32	250	6.5
0402CH-9N2 ☐ -LRH	9.2	G, J	100	1400	0.081	32	250	6.0
0402CH-9N3 ☐ -LRH	9.3	G, J	100	1400	0.081	34	250	6.0
0402CH-9N4 ☐ -LRH	9.4	G, J	100	1400	0.081	33	250	6.0
0402CH-9N5 ☐ -LRH	9.5	G, J	100	1400	0.081	32	250	6.0
0402CH-9N6 ☐ -LRH	9.6	G, J	100	1400	0.081	33	250	6.0
0402CH-9N7 ☐ -LRH	9.7	G, J	100	1400	0.081	33	250	6.0
0402CH-9N8 ☐ -LRH	9.8	G, J	100	1400	0.081	34	250	6.0
0402CH-9N9 ☐ -LRH	9.9	G, J	100	1400	0.081	32	250	6.0
0402CH-10N ☐ -LRH	10	G, J	100	1400	0.081	31	250	6.0
0402CH-11N ☐ -LRH	11	G, J	100	1400	0.083	32	250	6.2
0402CH-12N ☐ -LRH	12	G, J	100	1240	0.093	30	250	5.2
0402CH-13N ☐ -LRH	13	G, J	100	1240	0.093	30	250	5.2
0402CH-14N ☐ -LRH	14	G, J	100	1150	0.111	31	250	5.2
0402CH-15N ☐ -LRH	15	G, J	100	1150	0.114	31	250	5.5
0402CH-16N ☐ -LRH	16	G, J	100	1000	0.126	31	250	5.0
0402CH-17N ☐ -LRH	17	G, J	100	1000	0.126	30	250	5.0
0402CH-18N ☐ -LRH	18	G, J	100	1050	0.130	30	250	5.2
0402CH-19N ☐ -LRH	19	G, J	100	920	0.156	30	250	5.0
0402CH-20N ☐ -LRH	20	G, J	100	800	0.186	30	250	4.5
0402CH-21N ☐ -LRH	21	G, J	100	780	0.202	30	250	4.5
0402CH-22N ☐ -LRH	22	G, J	100	780	0.202	30	250	4.5
0402CH-23N ☐ -LRH	23	G, J	100	760	0.201	29	250	4.5
0402CH-24N ☐ -LRH	24	G, J	100	770	0.212	31	250	4
0402CH-25N ☐ -LRH	25	G, J	100	750	0.221	31	250	4.1
0402CH-26N ☐ -LRH	26	G, J	100	720	0.282	29	250	4.1
0402CH-27N ☐ -LRH	27	G, J	100	680	0.288	30	250	4
0402CH-30N ☐ -LRH	30	G, J	100	660	0.309	30	250	3.8
0402CH-33N ☐ -LRH	33	G, J	100	620	0.336	30	250	3.6
0402CH-36N ☐ -LRH	36	G, J	100	540	0.431	30	250	3.5
0402CH-39N ☐ -LRH	39	G, J	100	530	0.456	28	250	3.4
0402CH-43N ☐ -LRH	43	G, J	100	515	0.516	30	250	3.4
0402CH-47N ☐ -LRH	47	G, J	100	440	0.648	25	200	3.2
0402CH-51N ☐ -LRH	51	G, J	100	415	0.696	25	200	2.9
0402CH-53N ☐ -LRH	53	G, J	100	415	0.696	25	200	2.9

0402CH Series

■ SMD Wire Wound Ceramic Chip Inductors

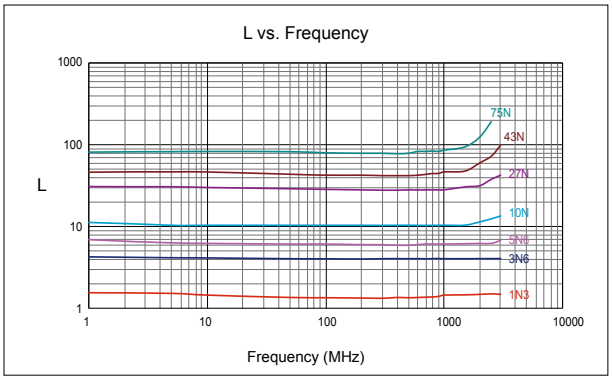
ELECTRICAL SPECIFICATION

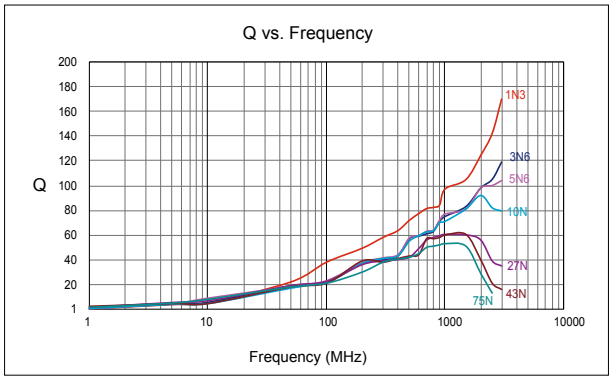
Part Number	Inductance (nH)	Inductance Tolerance	Inductance Test Frequency (MHz)	Rated Current (mA)	Max. of DC Resistance Ω	Q (min.)	Q Test Frequency (MHz)	Self-Resonance Frequency (min.) (GHz)
0402CH-56N ☐ -LRH	56	G, J	100	340	0.996	25	200	2.9
0402CH-68N ☐ -LRH	68	G, J	100	320	1.128	25	200	2.5
0402CH-75N ☐ -LRH	75	G, J	100	320	1.224	25	200	2.4

- ☐ Tolerance: J=±5%；G=±2%；W=±0.5nH；U=±0.2nH；Z=±0.1nH
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the 4287A with 16197A
- SRF measured using the HP 8753E/HP4291B with 16193A/ENA5071C or its equivalent.
- DCR measured using the AGILENT zentech 502BC or its equivalent.
- Unspecified values available on request.

CHARACTERISTIC CURVE

0402CH Series



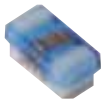


SMD

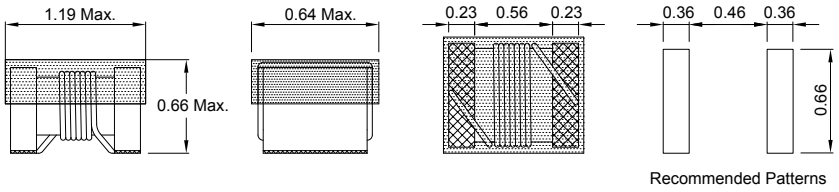
Leaded

■ SMD Wire Wound Ceramic Chip Inductors

MECHANICAL DIMENSIONS



0402CP



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (nH)	Inductance Tolerance	Q (min.)	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Rated Current (mA)
0402CP-1N0 ☐ -LRH	1.0	J, K	16	250	12.70	0.045	1360
0402CP-1N2 ☐ -LRH	1.2	J, K	16	250	12.90	0.090	740
0402CP-1N8 ☐ -LRH	1.8	J, K	16	250	12.00	0.070	1040
0402CP-1N9 ☐ -LRH	1.9	J, K	16	250	11.30	0.070	1040
0402CP-2N0 ☐ -LRH	2.0	G, J, K	16	250	11.10	0.070	1040
0402CP-2N2 ☐ -LRH	2.2	G, J, K	19	250	10.80	0.070	960
0402CP-2N4 ☐ -LRH	2.4	G, J, K	15	250	10.50	0.068	790
0402CP-2N7 ☐ -LRH	2.7	G, J, K	16	250	10.40	0.120	640
0402CP-3N3 ☐ -LRH	3.3	G, J, K	19	250	7.00	0.066	840
0402CP-3N6 ☐ -LRH	3.6	G, J, K	19	250	6.80	0.066	840
0402CP-3N9 ☐ -LRH	3.9	G, J, K	19	250	6.00	0.066	840
0402CP-4N3 ☐ -LRH	4.3	G, J, K	18	250	6.00	0.091	700
0402CP-4N7 ☐ -LRH	4.7	G, J, K	15	250	4.70	0.130	640
0402CP-5N1 ☐ -LRH	5.1	G, J, K	20	250	4.80	0.083	800
0402CP-5N6 ☐ -LRH	5.6	G, J, K	20	250	4.80	0.083	760
0402CP-6N2 ☐ -LRH	6.2	G, J, K	20	250	4.80	0.083	760
0402CP-6N8 ☐ -LRH	6.8	G, J, K	20	250	4.80	0.083	680
0402CP-7N3 ☐ -LRH	7.3	G, J, K	20	250	4.80	0.260	680
0402CP-7N5 ☐ -LRH	7.5	G, J, K	22	250	4.80	0.100	680
0402CP-8N2 ☐ -LRH	8.2	G, J, K	22	250	4.40	0.100	680
0402CP-8N7 ☐ -LRH	8.7	G, J, K	18	250	4.10	0.200	480
0402CP-9N1 ☐ -LRH	9.1	G, J, K	22	250	4.16	0.100	680
0402CP-9N5 ☐ -LRH	9.5	G, J, K	18	250	4.00	0.200	480
0402CP-10N ☐ -LRH	10	G, J, K	21	250	3.90	0.200	480
0402CP-11N ☐ -LRH	11	G, J, K	24	250	3.68	0.120	640
0402CP-12N ☐ -LRH	12	G, J, K	24	250	3.60	0.120	640
0402CP-13N ☐ -LRH	13	G, J, K	24	250	3.45	0.210	440
0402CP-15N ☐ -LRH	15	G, J, K	24	250	3.28	0.170	560
0402CP-16N ☐ -LRH	16	G, J, K	24	250	3.10	0.220	560
0402CP-18N ☐ -LRH	18	G, J, K	25	250	3.10	0.230	420
0402CP-19N ☐ -LRH	19	G, J, K	24	250	3.04	0.200	480
0402CP-20N ☐ -LRH	20	G, J, K	25	250	3.00	0.250	420
0402CP-22N ☐ -LRH	22	G, J, K	25	250	2.80	0.300	400
0402CP-23N ☐ -LRH	23	G, J, K	22	250	2.72	0.300	400
0402CP-24N ☐ -LRH	24	G, J, K	25	250	2.70	0.300	400
0402CP-27N ☐ -LRH	27	G, J, K	24	250	2.48	0.300	400
0402CP-30N ☐ -LRH	30	G, J, K	25	250	2.35	0.300	400
0402CP-33N ☐ -LRH	33	G, J, K	24	250	2.35	0.440	400
0402CP-36N ☐ -LRH	36	G, J, K	24	250	2.32	0.440	320
0402CP-39N ☐ -LRH	39	G, J, K	25	250	2.10	0.550	200
0402CP-40N ☐ -LRH	40	G, J, K	24	250	2.24	0.440	320
0402CP-43N ☐ -LRH	43	G, J, K	25	250	2.03	0.810	100
0402CP-47N ☐ -LRH	47	G, J, K	20	250	2.10	0.830	150
0402CP-51N ☐ -LRH	51	G, J, K	25	250	1.75	0.820	100
0402CP-56N ☐ -LRH	56	G, J, K	22	250	1.76	0.970	100
0402CP-68N ☐ -LRH	68	G, J, K	22	250	1.62	1.120	100
0402CP-82N ☐ -LRH	82	G, J, K	20	250	1.26	1.550	50
0402CP-R10 ☐ -LRH	100	G, J, K	20	250	1.16	2.000	30
0402CP-R12 ☐ -LRH	120	G, J, K	20	250	1.90	2.200	50

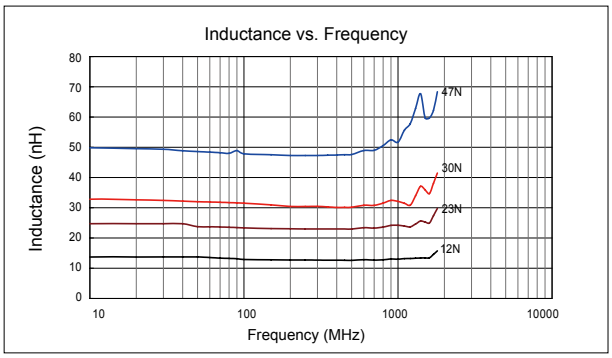
- Tolerance: K=±10% ; J=±5% ; G=±2%
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the HP4291B.
- SRF measured using the HP8753E or HP8720D.
- DCR measured using the 16502 milli-ohm meter.
- Unspeified values available on request.

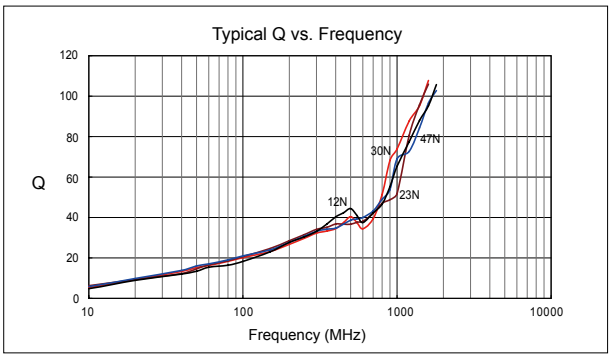
0402CP Series

■ SMD Wire Wound Ceramic Chip Inductors

CHARACTERISTIC CURVE

0402CP Series





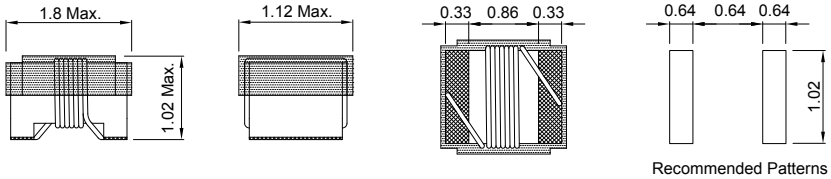
SMD

Leaded

■ SMD Wire Wound Ceramic Chip Inductors

MECHANICAL DIMENSIONS

FEC0603CP



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (nH)	Inductance Tolerance	Q (min.)	Test Freq. (MHz)	900 (MHz)		1.7 (GHz)		SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code
					L typ.	Q typ.	L typ.	Q typ.				
FEC0603CP-1N6 ☐ -LRH	1.6	J, K	24	250	1.67	49	1.65	63	12.50	0.030	700	BLACK
FEC0603CP-1N8 ☐ -LRH	1.8	J, K	16	250	1.83	35	1.86	50	12.50	0.045	700	BROWN
FEC0603CP-2N1 ☐ -LRH	2.1	J, K	20	250	2.11	31	2.09	45	5.80	0.050	700	RED
FEC0603CP-2N2 ☐ -LRH	2.2	J, K	20	250	2.22	31	2.24	44	5.80	0.100	700	ORANGE
FEC0603CP-3N3 ☐ -LRH	3.3	J, K	20	250	3.31	75	3.38	88	5.50	0.070	700	VIOLET
FEC0603CP-3N6 ☐ -LRH	3.6	J, K	22	250	3.72	53	3.71	65	5.90	0.063	700	RED
FEC0603CP-3N9 ☐ -LRH	3.9	J, K	22	250	3.95	49	3.96	67	6.90	0.080	700	ORANGE
FEC0603CP-4N3 ☐ -LRH	4.3	J, K	22	250	4.32	50	4.33	70	5.90	0.063	700	YELLOW
FEC0603CP-4N7 ☐ -LRH	4.7	J, K	20	250	4.72	47	4.75	57	5.80	0.116	700	GREEN
FEC0603CP-5N1 ☐ -LRH	5.1	J, K	20	250	4.93	47	4.95	56	5.70	0.140	700	BLUE
FEC0603CP-5N6 ☐ -LRH	5.6	J, K	15	250	5.77	63	6.05	80	5.80	0.150	700	GRAY
FEC0603CP-6N1 ☐ -LRH	6.1	J, K	25	250	5.90	59	7.08	79	5.80	0.110	700	WHITE
FEC0603CP-6N8 ☐ -LRH	6.8	G, J, K	27	250	6.75	60	7.10	81	5.80	0.110	700	VIOLET
FEC0603CP-7N5 ☐ -LRH	7.5	G, J, K	28	250	7.70	60	7.82	85	4.80	0.106	700	GRAY
FEC0603CP-8N2 ☐ -LRH	8.2	G, J, K	25	250	8.25	82	8.37	87	5.80	0.120	700	BLACK
FEC0603CP-8N4 ☐ -LRH	8.4	G, J, K	28	250	8.39	79	8.51	85	4.60	0.109	700	RED
FEC0603CP-8N5 ☐ -LRH	8.5	G, J, K	28	250	8.47	81	8.62	86	4.60	0.109	700	RED
FEC0603CP-8N7 ☐ -LRH	8.7	G, J	28	250	8.86	62	9.32	58	4.60	0.109	700	WHITE
FEC0603CP-9N5 ☐ -LRH	9.5	G, J	28	250	9.70	59	9.92	61	5.40	0.135	700	BLACK
FEC0603CP-10N ☐ -LRH	10	G, J	31	250	10.00	66	10.6	83	4.80	0.130	700	BROWN
FEC0603CP-11N ☐ -LRH	11	G, J	33	250	11.00	53	11.5	56	4.00	0.086	700	RED
FEC0603CP-12N ☐ -LRH	12	G, J	35	250	12.30	72	13.5	83	4.00	0.130	700	ORANGE
FEC0603CP-14N ☐ -LRH	14	G, J	35	250	14.20	69	15.6	85	4.00	0.170	700	BROWN
FEC0603CP-15N ☐ -LRH	15	G, J	35	250	15.40	64	16.8	89	4.00	0.170	700	YELLOW
FEC0603CP-16N ☐ -LRH	16	G, J	34	250	16.20	55	17.3	52	3.30	0.104	700	GREEN
FEC0603CP-18N ☐ -LRH	18	G, J	35	250	18.70	70	21.4	69	3.10	0.170	700	BLUE
FEC0603CP-22N ☐ -LRH	22	G, J	38	250	22.80	73	26.1	71	3.00	0.190	700	VIOLET
FEC0603CP-23N ☐ -LRH	23	G, J	38	250	24.10	71	28.0	67	2.85	0.190	700	BLACK
FEC0603CP-24N ☐ -LRH	24	G, J	37	250	24.50	45	28.7	39	2.65	0.135	700	GRAY
FEC0603CP-27N ☐ -LRH	27	G, J	40	250	29.20	74	34.6	65	2.80	0.220	600	WHITE
FEC0603CP-30N ☐ -LRH	30	G, J	37	250	31.40	47	39.9	28	2.25	0.220	600	BLACK
FEC0603CP-33N ☐ -LRH	33	G, J	40	250	36.00	67	49.5	42	2.30	0.220	600	BROWN
FEC0603CP-36N ☐ -LRH	36	G, J	38	250	39.40	47	52.7	24	2.08	0.250	600	RED
FEC0603CP-39N ☐ -LRH	39	G, J	40	250	42.70	60	60.2	40	2.20	0.250	600	ORANGE
FEC0603CP-43N ☐ -LRH	43	G, J	39	250	47.00	44	64.9	21	2.00	0.280	600	YELLOW
FEC0603CP-47N ☐ -LRH	47	G, J	38	200	52.20	62	77.2	35	2.00	0.280	600	GREEN
FEC0603CP-51N ☐ -LRH	51	G, J	35	200	55.50	69	82.2	34	1.90	0.270	600	BROWN
FEC0603CP-56N ☐ -LRH	56	G, J	38	200	62.50	56	97.0	26	1.90	0.310	600	BLUE
FEC0603CP-68N ☐ -LRH	68	G, J	37	200	80.50	54	168	21	1.70	0.340	600	VIOLET
FEC0603CP-72N ☐ -LRH	72	G, J	34	150	82.00	53	135	20	1.70	0.490	400	GRAY
FEC0603CP-82N ☐ -LRH	82	G, J	34	150	96.20	54	177	21	1.70	0.540	400	WHITE
FEC0603CP-R10 ☐ -LRH	100	G, J	34	150	124	49	-	-	1.40	0.580	400	BLACK
FEC0603CP-R11 ☐ -LRH	110	G, J	32	150	138	43	-	-	1.35	0.610	300	BROWN
FEC0603CP-R12 ☐ -LRH	120	G, J	32	150	166	39	-	-	1.30	0.650	300	RED
FEC0603CP-R15 ☐ -LRH	150	G, J	28	150	250	25	-	-	0.990	0.920	280	ORANGE
FEC0603CP-R18 ☐ -LRH	180	G, J	25	100	305	22	-	-	0.990	1.250	240	YELLOW
FEC0603CP-R20 ☐ -LRH	200	G, J	25	100	-	-	-	-	0.990	1.980	200	RED
FEC0603CP-R21 ☐ -LRH	210	G, J	27	100	-	-	-	-	0.895	2.060	200	ORANGE
FEC0603CP-R22 ☐ -LRH	220	G, J	25	100	-	-	-	-	0.900	1.900	200	GREEN
FEC0603CP-R25 ☐ -LRH	250	G, J	25	100	-	-	-	-	0.822	3.550	120	YELLOW

FEC0603CP Series

■ SMD Wire Wound Ceramic Chip Inductors

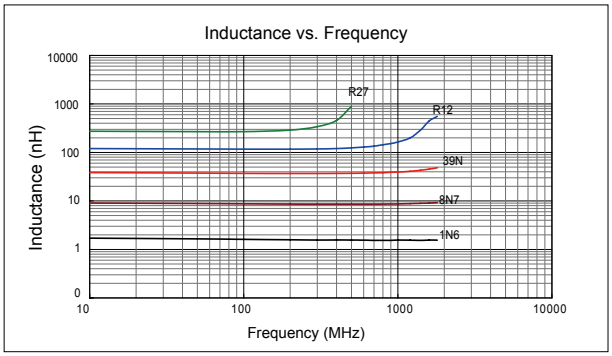
ELECTRICAL SPECIFICATION

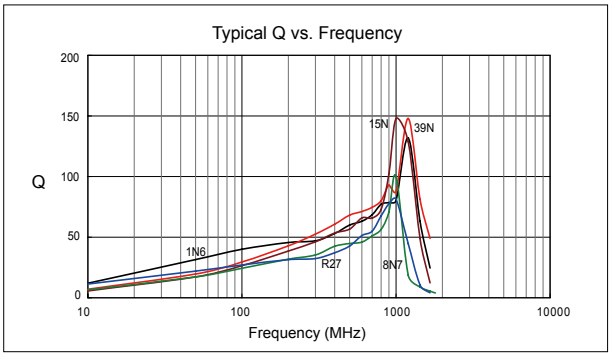
Part Number	Inductance (nH)	Inductance Tolerance	Q (min.)	Test Freq. (MHz)	900 (MHz)		1.7 (GHz)		SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code
					L typ.	Q typ.	L typ.	Q typ.				
FEC0603CP-R27 ☐ -LRH	270	G, J	24	100	-	-	-	-	0.900	2.300	170	BLUE
FEC0603CP-R33 ☐ -LRH	330	G, J	24	100	-	-	-	-	0.900	3.900	185	VIOLET
FEC0603CP-R39 ☐ -LRH	390	G, J	25	100	-	-	-	-	0.900	4.350	100	GRAY

- External electrode: FEC0603CP (Sn-plating), FEC0603C (Au-plating)
- Tolerance: K=±10%；J=±5%；G=±2%
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the HP4291B.
- SRF measured using the HP8753E，or HP8720D.
- DCR measured using the 16502BC milli-ohm meter.
- Unspecified values available on request.

CHARACTERISTIC CURVE

FEC0603CP Series





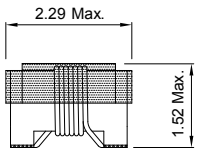
SMD

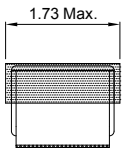
Leaded

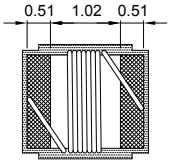
■ SMD Wire Wound Ceramic Chip Inductors

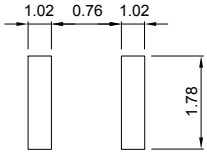
MECHANICAL DIMENSIONS

FEC0805CP









Recommended Patterns

unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (nH)	Inductance Tolerance	Test Freq. (MHz)	Q (min.)	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code
FEC0805CP-2N2 ☐ -LRH	2.20	K ,J	250	35	1500	3.00	0.08	600	WHITE
FEC0805CP-2N7 ☐ -LRH	2.70	K, J	250	80	1500	7.90	0.03	600	BROWN
FEC0805CP-2N8 ☐ -LRH	2.80	K ,J	250	80	1000	7.90	0.06	800	RED
FEC0805CP-2N9 ☐ -LRH	2.90	K, J	250	50	1000	4.70	0.05	600	BLUE
FEC0805CP-3N0 ☐ -LRH	3.00	K, J	250	65	1500	7.90	0.06	800	VIOLET
FEC0805CP-3N3 ☐ -LRH	3.30	K, J	250	35	1500	7.90	0.08	600	BLACK
FEC0805CP-5N6 ☐ -LRH	5.60	K, J	250	65	1000	5.50	0.08	600	VIOLET
FEC0805CP-6N2 ☐ -LRH	6.20	K, J	250	50	1000	5.50	0.08	600	GREEN
FEC0805CP-6N8 ☐ -LRH	6.80	K, J	250	50	1000	5.50	0.11	600	BROWN
FEC0805CP-7N5 ☐ -LRH	7.50	K, J	250	50	1000	4.50	0.10	600	BLACK
FEC0805CP-8N2 ☐ -LRH	8.20	K, J	250	50	1000	4.70	0.12	600	RED
FEC0805CP-8N7 ☐ -LRH	8.70	K, J	250	50	1000	4.70	0.10	400	WHITE
FEC0805CP-10N ☐ -LRH	10.0	K, J, G	250	60	500	4.20	0.10	600	RED
FEC0805CP-11N ☐ -LRH	11.0	K, J, G	700	45	500	3.00	0.15	600	ORANGE
FEC0805CP-12N ☐ -LRH	12.0	K, J, G	250	50	500	4.00	0.15	600	ORANGE
FEC0805CP-15N ☐ -LRH	15.0	K, J, G	250	50	500	3.40	0.17	600	YELLOW
FEC0805CP-18N ☐ -LRH	18.0	K, J, G	250	50	500	3.30	0.20	600	GREEN
FEC0805CP-22N ☐ -LRH	22.0	K, J, G	250	55	500	2.60	0.22	500	BLUE
FEC0805CP-24N ☐ -LRH	24.0	K, J, G	250	50	500	2.00	0.22	500	RED
FEC0805CP-27N ☐ -LRH	27.0	K, J, G	250	55	500	2.50	0.25	500	VIOLET
FEC0805CP-33N ☐ -LRH	33.0	K, J, G	250	60	500	2.05	0.27	500	GRAY
FEC0805CP-36N ☐ -LRH	36.0	K, J, G	250	55	500	1.70	0.27	500	YELLOW
FEC0805CP-37N ☐ -LRH	37.0	K, J, G	350	40	500	1.80	0.27	500	GREEN
FEC0805CP-38N ☐ -LRH	38.0	K, J, G	350	40	500	1.80	0.27	500	BLUE
FEC0805CP-39N ☐ -LRH	39.0	K, J, G	250	60	500	2.00	0.29	500	WHITE
FEC0805CP-43N ☐ -LRH	43.0	K, J, G	200	60	500	1.65	0.34	500	YELLOW
FEC0805CP-47N ☐ -LRH	47.0	K, J, G	200	60	500	1.65	0.31	500	BLACK
FEC0805CP-56N ☐ -LRH	56.0	K, J, G	200	60	500	1.55	0.34	500	BROWN
FEC0805CP-68N ☐ -LRH	68.0	K, J, G	200	60	500	1.45	0.38	500	RED
FEC0805CP-72N ☐ -LRH	72.0	K, J, G	150	65	500	1.40	0.40	500	GREEN
FEC0805CP-82N ☐ -LRH	82.0	K, J, G	150	65	500	1.30	0.42	400	ORANGE
FEC0805CP-91N ☐ -LRH	91.0	K, J, G	150	65	500	1.20	0.48	400	BLUE
FEC0805CP-R10 ☐ -LRH	100	K, J, G	150	65	500	1.20	0.46	400	YELLOW
FEC0805CP-R11 ☐ -LRH	110	K, J, G	150	50	500	1.00	0.48	400	VIOLET
FEC0805CP-R12 ☐ -LRH	120	K, J, G	150	50	250	1.10	0.51	400	GREEN
FEC0805CP-R15 ☐ -LRH	150	K, J, G	100	50	250	0.920	0.56	400	BLUE
FEC0805CP-R18 ☐ -LRH	180	K, J, G	100	50	250	0.870	0.64	400	VIOLET
FEC0805CP-R20 ☐ -LRH	200	K, J, G	100	50	250	0.860	0.68	400	RED
FEC0805CP-R22 ☐ -LRH	220	K, J, G	100	50	250	0.850	0.70	400	GRAY
FEC0805CP-R24 ☐ -LRH	240	K, J, G	100	44	250	0.690	1.00	350	BLACK
FEC0805CP-R25 ☐ -LRH	250	K, J, G	100	50	250	0.680	1.00	350	YELLOW
FEC0805CP-R27 ☐ -LRH	270	K, J, G	100	48	250	0.650	1.15	300	WHITE
FEC0805CP-R30 ☐ -LRH	300	K, J, G	100	48	250	0.620	1.20	300	GRAY
FEC0805CP-R33 ☐ -LRH	330	K, J, G	100	48	250	0.600	1.40	300	BLACK
FEC0805CP-R36 ☐ -LRH	360	K, J, G	100	35	250	0.400	0.90	300	ORANGE
FEC0805CP-R39 ☐ -LRH	390	K, J, G	150	48	250	0.560	1.50	300	BROWN
FEC0805CP-R43 ☐ -LRH	430	K, J, G	100	33	100	0.430	1.70	190	WHITE
FEC0805CP-R47 ☐ -LRH	470	K, J	50	33	100	0.375	1.70	250	VIOLET
FEC0805CP-R56 ☐ -LRH	560	K, J	25	23	50	0.340	1.90	230	ORANGE
FEC0805CP-R60 ☐ -LRH	600	K, J	25	23	50	0260	1.60	450	WITE
FEC0805CP-R62 ☐ -LRH	620	K, J	25	23	50	0.200	2.00	190	ORANGE

FEC0805CP Series

■ SMD Wire Wound Ceramic Chip Inductors

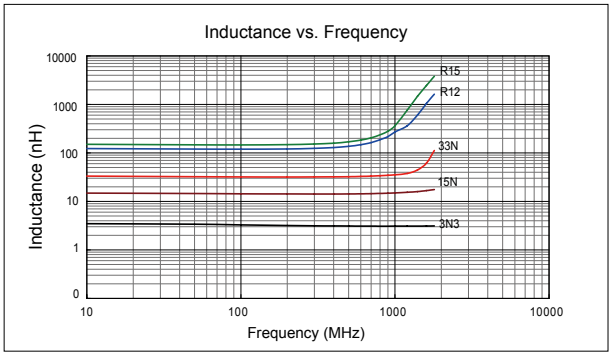
ELECTRICAL SPECIFICATION

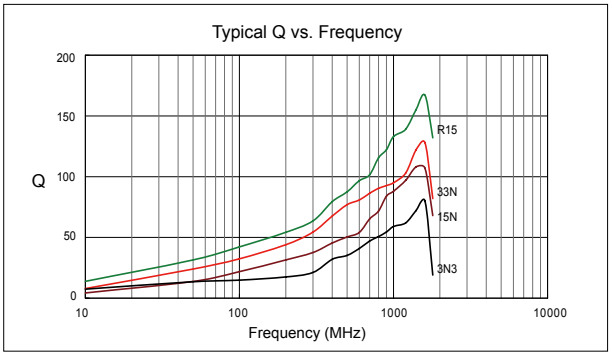
Part Number	Inductance (nH)	Inductance Tolerance	Test Freq. (MHz)	Q (min.)	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code
FEC0805CP-R68 ☐ -LRH	680	K, J	25	23	50	0.188	2.20	190	GREEN
FEC0805CP-R75 ☐ -LRH	750	K, J	25	23	50	0.200	2.30	180	BLUE
FEC0805CP-R82 ☐ -LRH	820	K, J	25	23	50	0.215	2.50	190	BROWN
FEC0805CP-R91 ☐ -LRH	910	K, J	25	24	50	0.250	2.30	170	RED
FEC0805CP-1R0 ☐ -LRH	1000	K, J	25	23	50	0.260	2.70	170	BLACK
FEC0805CP-1R2 ☐ -LRH	1200	K, J	7.9	18	25	0.100	2.50	170	WITE
FEC0805CP-1R5 ☐ -LRH	1500	K, J	7.9	16	25	0.100	2.50	170	BLACK
FEC0805CP-1R8 ☐ -LRH	1800	K, J	7.9	16	7.9	0.080	2.50	170	BROWN
FEC0805CP-2R2 ☐ -LRH	2200	K, J	7.9	16	7.9	0.060	2.70	160	RED
FEC0805CP-2R7 ☐ -LRH	2700	K, J	7.9	16	7.9	0.050	3.10	150	ORANGE
FEC0805CP-3R3 ☐ -LRH	3300	K, J	7.9	15	7.9	0.040	4.40	90	BLUE
FEC0805CP-4R7 ☐ -LRH	4700	K, J	7.9	15	7.9	0.040	6.40	90	GREEN

- External electrode: FEC0805CP (Sn-plating), FEC0805C (Au-plating)
- Tolerance: K=±10%；J=±5%；G=±2%
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the HP4291B.
- SRF measured using the HP8753E, or HP8720D + E5071C.
- DCR measured using the 16502BC milli-ohm meter.
- Unspecified values available on request.

CHARACTERISTIC CURVE

FEC0805CP Series





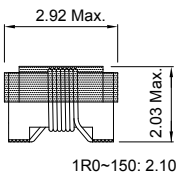
SMD

Leaded

■ SMD Wire Wound Ceramic Chip Inductors

MECHANICAL DIMENSIONS

FEC1008CP



1R0~150: 2.10 Max.

Recommended Patterns

unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (nH)	Inductance Tolerance	Test Freq. (MHz)	Q Min.	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code		
									1st	2nd	multiplier
FEC1008CP-5N6☐-LRH	5.6	K, J	50	50	1500	4.00	0.15	1000	GREEN	BLUE	WHITE
FEC1008CP-10N☐-LRH	10	K, J	50	50	500	4.10	0.08	1000	BROWN	BLACK	BLACK
FEC1008CP-12N☐-LRH	12	K, J	50	50	500	3.30	0.09	1000	BROWN	RED	BLACK
FEC1008CP-15N☐-LRH	15	K, J	50	50	500	2.50	0.10	1000	BROWN	GREEN	BLACK
FEC1008CP-18N☐-LRH	18	K, J, G	50	50	350	2.50	0.11	1000	BROWN	GRAY	BLACK
FEC1008CP-22N☐-LRH	22	K, J, G	50	55	350	2.40	0.12	1000	RED	RED	BLACK
FEC1008CP-24N☐-LRH	24	K, J, G	50	55	350	1.90	0.13	1000	RED	YELLOW	BLACK
FEC1008CP-27N☐-LRH	27	K, J, G	50	55	350	1.60	0.13	1000	RED	VIOLET	BLACK
FEC1008CP-33N☐-LRH	33	K, J, G	50	60	350	1.60	0.14	1000	ORANGE	ORANGE	BLACK
FEC1008CP-36N☐-LRH	36	K, J, G	50	60	350	1.60	0.15	1000	ORANGE	BLUE	BLACK
FEC1008CP-39N☐-LRH	39	K, J, G	50	60	350	1.50	0.15	1000	ORANGE	WHITE	BLACK
FEC1008CP-47N☐-LRH	47	K, J, G	50	65	350	1.50	0.16	1000	YELLOW	VIOLET	BLACK
FEC1008CP-56N☐-LRH	56	K, J, G	50	65	350	1.30	0.18	1000	GREEN	BLUE	BLACK
FEC1008CP-62N☐-LRH	62	K, J, G	25	45	350	1.25	0.20	1000	BLUE	RED	BLACK
FEC1008CP-68N☐-LRH	68	K, J, G	50	65	350	1.30	0.20	1000	BLUE	GRAY	BLACK
FEC1008CP-75N☐-LRH	75	K, J, G	50	60	350	1.10	0.21	1000	VIOLET	GREEN	BLACK
FEC1008CP-82N☐-LRH	82	K, J, G	50	60	350	1.00	0.22	1000	GRAY	RED	BLACK
FEC1008CP-91N☐-LRH	91	K, J, G	50	50	350	1.00	0.45	1000	WHITE	BROWN	BLACK
FEC1008CP-R10☐-LRH	100	K, J, G	25	60	350	1.00	0.56	650	BROWN	BLACK	BROWN
FEC1008CP-R12☐-LRH	120	K, J, G	25	60	350	0.950	0.63	650	BROWN	RED	BROWN
FEC1008CP-R15☐-LRH	150	K, J, G	25	45	100	0.850	0.70	580	BROWN	GREEN	BROWN
FEC1008CP-R18☐-LRH	180	K, J, G	25	45	100	0.750	0.77	620	BROWN	GRAY	BROWN
FEC1008CP-R20☐-LRH	200	K, J, G	25	50	100	0.750	0.81	500	RED	BLACK	BROWN
FEC1008CP-R22☐-LRH	220	K, J, G	25	45	100	0.700	0.84	500	RED	RED	BROWN
FEC1008CP-R24☐-LRH	240	K, J, G	25	50	100	0.650	0.84	500	RED	YELLOW	BROWN
FEC1008CP-R27☐-LRH	270	K, J, G	25	45	100	0.600	0.91	500	RED	VIOLET	BROWN
FEC1008CP-R30☐-LRH	300	K, J, G	25	45	100	0.590	1.00	660	ORANGE	BLACK	BROWN
FEC1008CP-R33☐-LRH	330	K, J, G	25	45	100	0.570	1.05	450	ORANGE	ORANGE	BROWN
FEC1008CP-R36☐-LRH	360	K, J, G	25	45	100	0.530	1.05	660	ORANGE	BLUE	BROWN
FEC1008CP-R39☐-LRH	390	K, J, G	25	45	100	0.500	1.12	470	ORANGE	WHITE	BROWN
FEC1008CP-R43☐-LRH	430	K, J, G	25	45	100	0.480	1.15	600	YELLOW	ORANGE	BROWN
FEC1008CP-R47☐-LRH	470	K, J, G	25	45	100	0.450	1.19	470	YELLOW	VIOLET	BROWN
FEC1008CP-R56☐-LRH	560	K, J, G	25	45	100	0.415	1.33	400	GREEN	BLUE	BROWN
FEC1008CP-R62☐-LRH	620	K, J, G	25	45	100	0.375	1.40	300	BLUE	RED	BROWN
FEC1008CP-R68☐-LRH	680	K, J, G	25	45	100	0.375	1.47	400	BLUE	GRAY	BROWN
FEC1008CP-R75☐-LRH	750	K, J, G	25	45	100	0.360	1.54	360	VIOLET	GREEN	BROWN
FEC1008CP-R82☐-LRH	820	K, J, G	25	45	100	0.350	1.61	400	GRAY	RED	BROWN
FEC1008CP-R91☐-LRH	910	K, J, G	25	35	50	0.320	1.68	380	WHITE	BROWN	BROWN
FEC1008CP-1R0☐-LRH	1000	K, J, G	25	35	50	0.290	1.75	370	BROWN	BLACK	RED
FEC1008CP-1R2☐-LRH	1200	K, J, G	7.9	35	50	0.250	2.00	310	BROWN	RED	RED
FEC1008CP-1R5☐-LRH	1500	K, J, G	7.9	28	50	0.200	2.30	330	BROWN	GREEN	RED
FEC1008CP-1R8☐-LRH	1800	K, J, G	7.9	28	50	0.160	2.60	300	BROWN	GRAY	RED
FEC1008CP-2R0☐-LRH	2000	K, J, G	7.9	25	50	0.160	2.80	280	RED	BLACK	RED
FEC1008CP-2R2☐-LRH	2200	K, J, G	7.9	28	50	0.160	2.80	280	RED	RED	RED
FEC1008CP-2R7☐-LRH	2700	K, J, G	7.9	22	25	0.140	3.20	290	RED	VIOLET	RED
FEC1008CP-3R3☐-LRH	3300	K, J, G	7.9	22	25	0.110	3.40	290	ORANGE	ORANGE	RED
FEC1008CP-3R9☐-LRH	3900	K, J, G	7.9	20	25	0.100	3.60	260	ORANGE	WHITE	RED
FEC1008CP-4R7☐-LRH	4700	K, J, G	7.9	20	25	0.090	4.00	260	YELLOW	VIOLET	RED
FEC1008CP-5R6☐-LRH	5600	K, J	7.9	16	7.96	0.020	4.00	240	GREEN	BLUE	RED

FEC1008CP Series

■ SMD Wire Wound Ceramic Chip Inductors

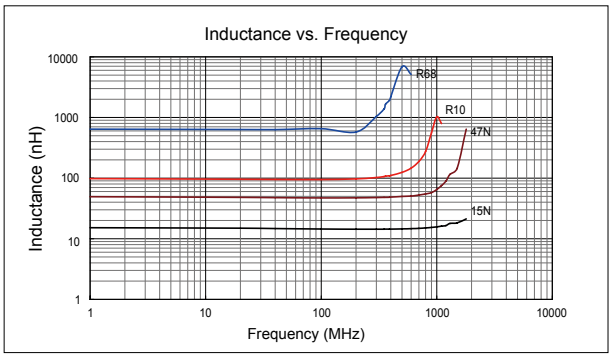
ELECTRICAL SPECIFICATION

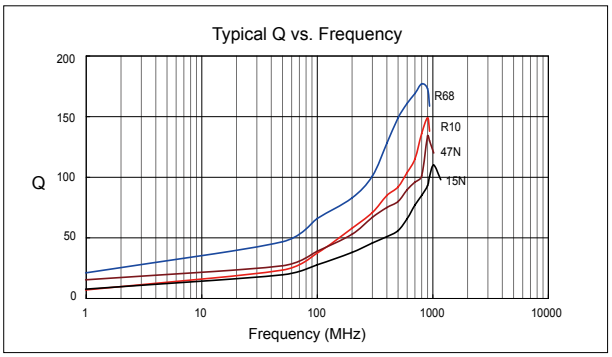
Part Number	Inductance (nH)	Inductance Tolerance	Test Freq. (MHz)	Q Min.	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code		
									1st	2nd	multiplier
FEC1008CP-6R8□-LRH	6800	K, J	7.9	15	7.96	0.040	4.90	200	BLUE	GRAY	RED
FEC1008CP-8R2□-LRH	8200	K, J	7.9	15	7.96	0.025	6.00	170	GRAY	RED	RED
FEC1008CP-100□-LRH	10000	K, J	2.52	15	7.96	0.020	9.00	150	BROWN	BLACK	ORANGE
FEC1008CP-120□-LRH	12000	K, J	2.52	15	7.96	0.018	10.50	130	BROWN	RED	ORANGE
FEC1008CP-150□-LRH	15000	K, J	2.52	15	7.96	0.015	11.50	120	BROWN	GREEN	ORANGE

- External electrode: FEC1008CP (Sn-plating), FEC1008C (Au-plating)
- Tolerance: K=±10%；J=±5%；G=±2%
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the HP4291B.
- SRF measured using the HP8753E，or HP8720D.
- DCR measured using the 16502BC milli-ohm meter.
- Unspecified values available on request.

CHARACTERISTIC CURVE

FEC1008CP Series





SMD

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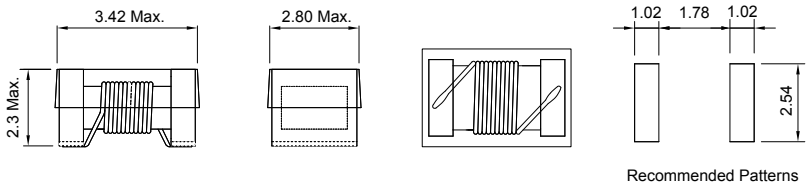
■ SMD Wire Wound Ceramic Chip Inductors

MECHANICAL DIMENSIONS

1210C



Recommended Patterns

unit: mm

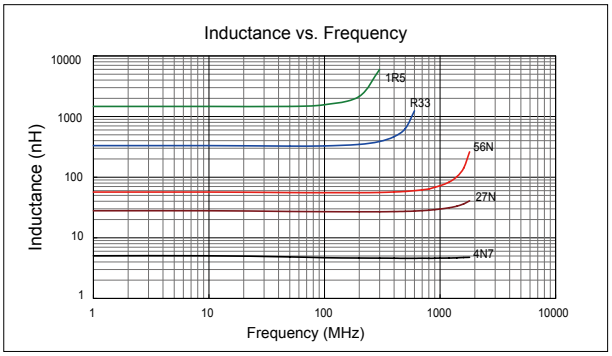
ELECTRICAL SPECIFICATION

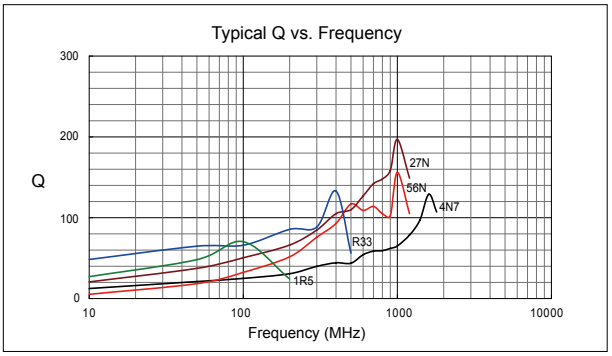
Part Number	Inductance (nH)	Test Freq. (MHz)	Inductance Tolerance	Q Min.	Test Freq. (MHz)	SRF (MHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code		
									1st	2nd	multiplier
1210C-4N7☐-LRH	4.7	100	K, J	50	1000	6000	0.06	600	YELLOW	VIOLET	BLACK
1210C-5N6☐-LRH	5.6	100	K, J	50	1000	5500	0.08	600	GREEN	BLUE	BLACK
1210C-10N☐-LRH	10	100	K, J, G	60	500	4000	0.06	600	BROWN	BLACK	BROWN
1210C-12N☐-LRH	12	100	K, J, G	60	500	3400	0.06	600	BROWN	RED	BROWN
1210C-15N☐-LRH	15	100	K, J, G	60	500	3200	0.06	600	BROWN	GREEN	BROWN
1210C-18N☐-LRH	18	100	K, J, G	60	300	2800	0.06	600	BROWN	GRAY	BROWN
1210C-22N☐-LRH	22	100	K, J, G	60	300	2300	0.08	600	RED	RED	BROWN
1210C-27N☐-LRH	27	100	K, J, G	60	300	2000	0.08	600	RED	VIOLET	BROWN
1210C-33N☐-LRH	33	100	K, J, G	60	300	1800	0.08	600	ORANGE	ORANGE	BROWN
1210C-39N☐-LRH	39	100	K, J, G	60	300	1800	0.08	600	ORANGE	WHITE	BROWN
1210C-47N☐-LRH	47	100	K, J, G	60	300	1600	0.08	600	YELLOW	VIOLET	BROWN
1210C-56N☐-LRH	56	100	K, J, G	60	300	1500	0.10	600	GREEN	BLUE	BROWN
1210C-68N☐-LRH	68	100	K, J, G	60	300	1300	0.10	600	BLUE	GRAY	BROWN
1210C-82N☐-LRH	82	100	K, J, G	60	300	1200	0.10	600	GRAY	RED	BROWN
1210C-91N☐-LRH	91	100	K, J, G	60	300	1100	0.10	1000	WHITE	BROWN	BROWN
1210C-R10☐-LRH	100	100	K, J, G	60	300	1100	0.10	500	BROWN	BLACK	RED
1210C-R12☐-LRH	120	50	K, J, G	60	300	900	0.12	500	BROWN	RED	RED
1210C-R15☐-LRH	150	50	K, J, G	60	300	800	0.18	500	BROWN	GREEN	RED
1210C-R18☐-LRH	180	50	K, J, G	60	300	760	0.21	500	BROWN	GRAY	RED
1210C-R22☐-LRH	220	50	K, J, G	60	300	760	0.27	500	RED	RED	RED
1210C-R27☐-LRH	270	50	K, J, G	50	300	660	0.33	500	RED	VIOLET	RED
1210C-R33☐-LRH	330	50	K, J, G	50	100	650	0.37	500	ORANGE	ORANGE	RED
1210C-R36☐-LRH	360	50	K, J, G	50	100	500	0.63	600	ORANGE	BLUE	RED
1210C-R39☐-LRH	390	50	K, J, G	50	100	600	0.63	500	ORANGE	WHITE	RED
1210C-R47☐-LRH	470	50	K, J, G	50	100	550	0.69	400	YELLOW	VIOLET	RED
1210C-R56☐-LRH	560	50	K, J, G	50	100	470	0.90	400	GREEN	BLUE	RED
1210C-R68☐-LRH	680	25	K, J, G	50	100	450	1.05	400	BLUE	GRAY	RED
1210C-R82☐-LRH	820	25	K, J, G	50	100	400	1.45	350	GRAY	RED	RED
1210C-1R0☐-LRH	1000	25	K, J, G	45	100	340	2.10	280	BROWN	BLACK	ORANGE
1210C-1R2☐-LRH	1200	7.96	K, J, G	45	50	320	2.40	250	BROWN	RED	ORANGE
1210C-1R5☐-LRH	1500	7.96	K, J, G	45	50	300	2.70	220	BROWN	GREEN	ORANGE
1210C-1R8☐-LRH	1800	7.96	K, J, G	45	50	280	3.50	180	BROWN	GRAY	ORANGE
1210C-2R2☐-LRH	2200	7.96	K, J, G	45	50	260	3.80	150	RED	RED	ORANGE
1210C-3R3☐-LRH	3300	27	K, J, G	25	27	140	10	150	ORANGE	ORANGE	ORANGE

- Tolerance: M=±20%；K=±10%；J=±5%；G=±2%
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the HP4291B.
- SRF measured using the HP8753E or HP8720D.
- DCR measured using the 16502 milli-ohm meter.
- Unspeified values available on request.

CHARACTERISTIC CURVE

1210C Series



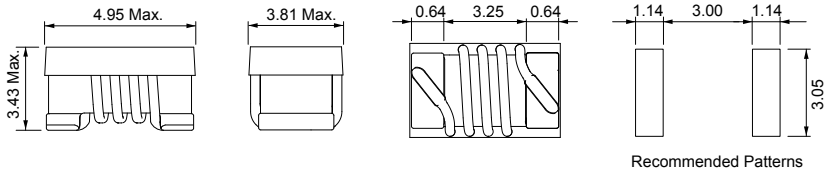


1812CP Series

■ SMD Wire Wound Ceramic Chip Inductors

MECHANICAL DIMENSIONS

1812CP



unit: mm

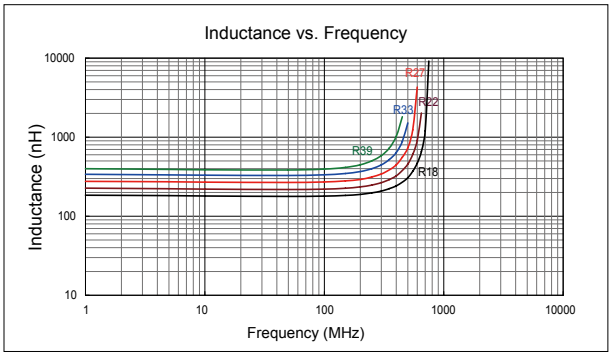
ELECTRICAL SPECIFICATION

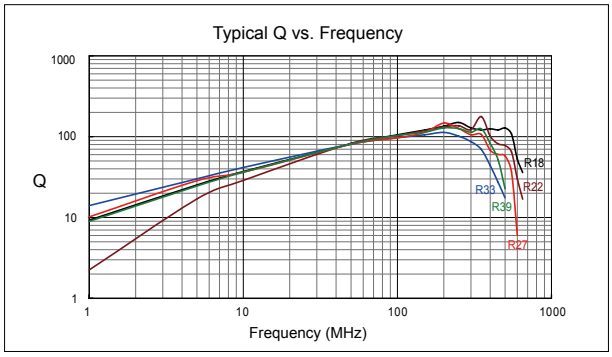
Part Number	Inductance (nH)	Test Freq. (MHz)	Inductance Tolerance	Q Min.	Test Freq. (MHz)	SRF (MHz) Min.	DCR (mΩ) Max.	Irms (mA)	Color Code		
									1st	2nd	multiplier
1812CP-82N☐-LRH	82	50	K, J, G	70	50	800	60	1500	GRAY	RED	BLACK
1812CP-R10☐-LRH	100	50	K, J, G	70	50	850	110	1150	BROWN	BLACK	BROWN
1812CP-R15☐-LRH	150	50	K, J, G	75	50	860	110	1150	BROWN	GREEN	BROWN
1812CP-R18☐-LRH	180	50	K, J, G	80	50	850	110	1150	BROWN	GRAY	BROWN
1812CP-R22☐-LRH	220	50	K, J, G	80	50	700	105	940	RED	RED	BROWN
1812CP-R27☐-LRH	270	50	K, J, G	85	50	730	120	940	RED	VIOLET	BROWN
1812CP-R33☐-LRH	330	50	K, J, G	80	50	600	135	850	ORANGE	ORANGE	BROWN
1812CP-R39☐-LRH	390	50	K, J, G	80	50	600	140	850	ORANGE	WHITE	BROWN
1812CP-1R2☐-LRH	1200	50	K, J, G	62	50	230	1200	480	BROWN	RED	RED

- External electrode: 1812CP (Sn-plating), 1812C (Au-plating)
- Tolerance: K=±10%；J=±5%；G=±2%
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the HP4291B.
- SRF measured using the HP8753E or HP8720D.
- DCR measured using the 16502 milli-ohm meter.
- Unspecified values available on request.

CHARACTERISTIC CURVE

1812CP Series



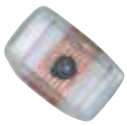


SMD

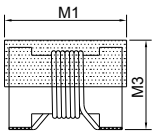
Leaded

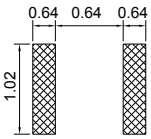
■ SMD Wire Wound Ceramic Chip Inductors

MECHANICAL DIMENSIONS



0603HQ





Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4	M5
0603HQ	1.70±0.1	1.02±0.1	0.92±0.1	0.33±0.5	0.86±0.5

ELECTRICAL SPECIFICATION

Part Number	Inductance (nH)	Inductance Tolerance	Test Freq. (MHz)	Q (typ.)	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code
0603HQ-1N8 ☐ -LRH	1.8	J	250	23	250	16.0	0.033	2100	BLACK
0603HQ-2N2 ☐ -LRH	2.2	J	250	13	250	15.0	0.180	900	YELLOW
0603HQ-3N3 ☐ -LRH	3.3	J	250	32	250	9.60	0.024	1900	BLUE
0603HQ-3N6 ☐ -LRH	3.6	J, G	250	40	250	9.70	0.031	1900	RED
0603HQ-3N9 ☐ -LRH	3.9	J, G	250	35	250	7.50	0.039	1600	BROWN
0603HQ-4N3 ☐ -LRH	4.3	J, G	250	30	250	7.50	0.080	1300	ORANGE
0603HQ-4N7 ☐ -LRH	4.7	J, G	250	26	250	7.90	0.100	1100	VIOLET
0603HQ-5N6 ☐ -LRH	5.6	J, G	250	48	250	6.60	0.036	1700	BLACK
0603HQ-6N0 ☐ -LRH	6.0	J, G	250	49	250	6.00	0.036	1700	WHITE
0603HQ-6N8 ☐ -LRH	6.8	J, G	250	42	250	5.80	0.042	1400	RED
0603HQ-7N2 ☐ -LRH	7.2	J, G	250	48	250	5.40	0.052	1400	WHITE
0603HQ-7N5 ☐ -LRH	7.5	J, G	250	41	250	5.30	0.080	1300	BROWN
0603HQ-8N2 ☐ -LRH	8.2	J, G	250	46	250	5.90	0.054	1400	ORANGE
0603HQ-8N7 ☐ -LRH	8.7	J, G	250	46	250	5.50	0.054	1400	YELLOW
0603HQ-9N1 ☐ -LRH	9.1	J, G	250	40	250	5.10	0.037	1400	BLACK
0603HQ-9N5 ☐ -LRH	9.5	J, G	250	49	250	4.90	0.053	1400	BLUE
0603HQ-10N ☐ -LRH	10	J, G	250	49	250	4.30	0.048	1400	ORANGE
0603HQ-11N ☐ -LRH	11	J, G	250	41	250	4.10	0.042	1400	GRAY
0603HQ-12N ☐ -LRH	12	J, G	250	37	250	4.10	0.088	1100	YELLOW
0603HQ-15N ☐ -LRH	15	J, G	250	48	250	3.60	0.078	1200	GREEN
0603HQ-16N ☐ -LRH	16	J, G	250	45	250	3.50	0.085	1100	WHITE
0603HQ-18N ☐ -LRH	18	J, G	250	41	250	3.30	0.066	1200	BLUE
0603HQ-22N ☐ -LRH	22	J, G	250	44	250	3.15	0.140	850	VIOLET
0603HQ-23N ☐ -LRH	23	J, G	250	40	250	3.00	0.150	850	ORANGE
0603HQ-24N ☐ -LRH	24	J, G	250	42	250	2.95	0.074	1100	BLACK
0603HQ-27N ☐ -LRH	27	J, G	250	44	250	2.80	0.150	780	GRAY
0603HQ-30N ☐ -LRH	30	J, G	250	49	250	2.80	0.130	920	BROWN
0603HQ-33N ☐ -LRH	33	J, G	250	45	250	2.70	0.170	680	WHITE
0603HQ-36N ☐ -LRH	36	J, G	250	44	250	2.50	0.225	720	RED
0603HQ-39N ☐ -LRH	39	J, G	250	48	250	2.45	0.190	680	BLACK
0603HQ-43N ☐ -LRH	43	J, G	250	45	250	2.45	0.170	810	ORANGE
0603HQ-47N ☐ -LRH	47	J, G	200	47	250	2.30	0.24	680	BROWN
0603HQ-51N ☐ -LRH	51	J, G	200	49	250	2.30	0.28	660	BLUE
0603HQ-56N ☐ -LRH	56	J, G	200	50	250	2.20	0.30	610	RED
0603HQ-68N ☐ -LRH	68	J, G	200	46	250	2.00	0.33	600	ORANGE
0603HQ-72N ☐ -LRH	72	J, G	150	46	250	1.90	0.42	550	YELLOW
0603HQ-75N ☐ -LRH	75	J, G	150	46	250	1.90	0.52	500	VIOLET
0603HQ-82N ☐ -LRH	82	J, G	150	45	250	1.80	0.56	510	GREEN
0603HQ-91N ☐ -LRH	91	J, G	150	45	250	1.65	0.58	440	WHITE
0603HQ-R10 ☐ -LRH	100	J, G	150	49	250	1.70	0.54	470	BLUE
0603HQ-R11 ☐ -LRH	110	J, G	150	47	250	1.60	0.58	440	VIOLET
0603HQ-R12 ☐ -LRH	120	J, G	150	47	250	1.55	0.72	420	GRAY
0603HQ-R18 ☐ -LRH	180	J, G	100	48	250	1.30	1.50	310	BLACK
0603HQ-R20 ☐ -LRH	200	J, G	100	47	250	1.25	2.00	280	GREEN

0603HQ Series

■ SMD Wire Wound Ceramic Chip Inductors

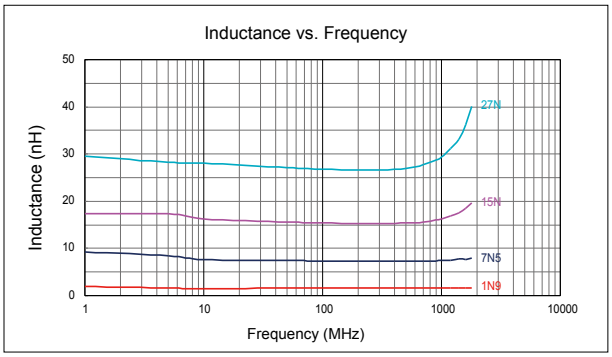
ELECTRICAL SPECIFICATION

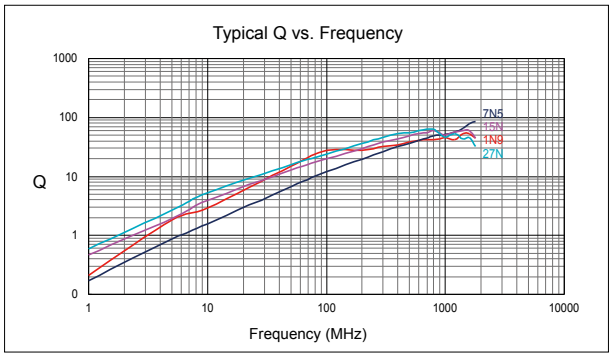
Part Number	Inductance (nH)	Inductance Tolerance	Test Freq. (MHz)	Q (typ.)	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code
0603HQ-R21 ☐ -LRH	210	J, G	100	48	250	1.20	2.00	280	GRAY
0603HQ-R22 ☐ -LRH	220	J, G	100	47	250	1.10	2.00	280	BROWN
0603HQ-R25 ☐ -LRH	250	J, G	100	45	250	1.05	3.00	240	VIOLET
0603HQ-R27 ☐ -LRH	270	J, G	100	46	250	1.05	2.25	260	RED
0603HQ-R30 ☐ -LRH	300	J, G	100	47	250	0.99	2.80	220	GREEN
0603HQ-R33 ☐ -LRH	330	J, G	100	46	250	0.93	3.60	180	BLUE
0603HQ-R36 ☐ -LRH	360	J, G	100	47	250	0.93	4.00	170	GRAY
0603HQ-R39 ☐ -LRH	390	J, G	100	47	250	0.88	4.00	170	YELLOW

- ☐ Tolerance: G=±2%；J=±5%
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the 4287A with 16197A
- SRF measured using the HP 8753E or HP4291B with 16193A.
- DCR measured using the AGILENT 4338B.
- Unspecified values available on request.

CHARACTERISTIC CURVE

0603HQ Series





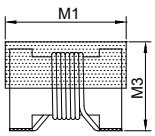
SMD

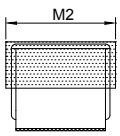
Leaded

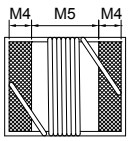
■ SMD Wire Wound Ceramic Chip Inductors

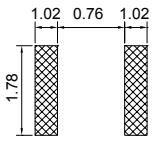
MECHANICAL DIMENSIONS

0805HQ









Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4	M5
0805HQ	2.40 MAX.	1.65 MAX.	1.45 MAX.	0.4±0.5	1.1±0.5

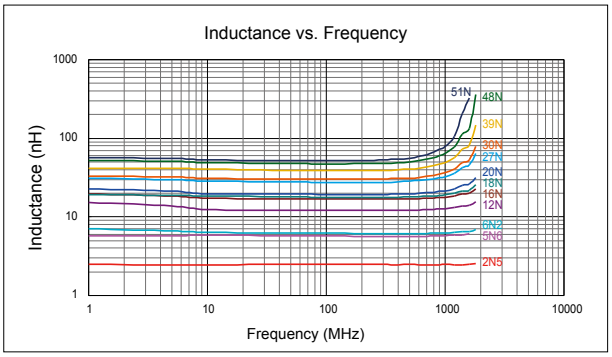
ELECTRICAL SPECIFICATION

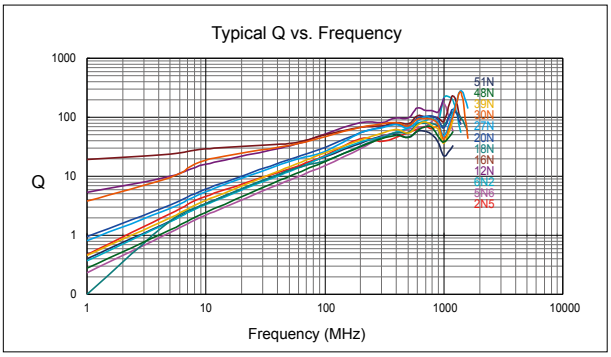
Part Number	Inductance (nH)	Inductance Tolerance	Test Freq. (MHz)	Q (min.)	Test Freq. (MHz)	SRF (GHz) Min.	DCR (mΩ) Max.	Irms (A)	Color Code
0805HQ-6N2 ☐ -LRH	6.2	J	250	88	1000	4.75	35	1.6	Red
0805HQ-12N ☐ -LRH	12	J, G	250	80	1000	3.00	45	1.6	Orange
0805HQ-16N ☐ -LRH	16	J, G	250	72	500	2.95	60	1.5	Yellow
0805HQ-18N ☐ -LRH	18	J, G	250	75	500	2.55	60	1.4	Green
0805HQ-20N ☐ -LRH	20	J, G	250	70	500	2.05	55	1.4	Blue
0805HQ-27N ☐ -LRH	27	J, G	250	75	500	2.00	70	1.3	Violet
0805HQ-30N ☐ -LRH	30	J, G	250	65	500	1.95	95	1.2	Gray
0805HQ-39N ☐ -LRH	39	J, G	250	65	500	1.60	110	1.1	White
0805HQ-48N ☐ -LRH	48	J, G	200	65	500	1.40	95	1.2	Black
0805HQ-51N ☐ -LRH	51	J, G	200	65	500	1.40	120	1.0	Brown

- ☐ Tolerance: G=±2% ; J=±5%
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the 4287A with 16197A
- SRF measured using the HP 8753E or HP4291B with 16193A / ENA5017C or equivalent.
- DCR measured using the AGILENT 4338B.
- Unspecified values available on request.

CHARACTERISTIC CURVE

0805HQ Series



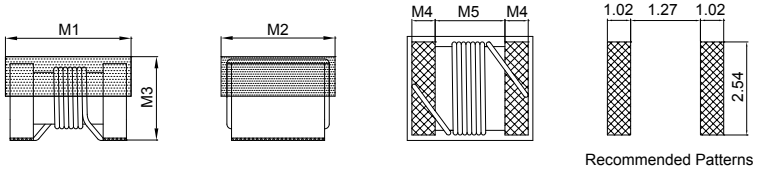


1008HQ Series

■ SMD Wire Wound Ceramic Chip Inductors

MECHANICAL DIMENSIONS

1008HQ



Recommended Patterns

unit: mm

Part Number	M1	M2	M3	M4	M5
1008HQ	2.92 MAX.	2.79 MAX.	2.03 MAX.	0.51±0.5	1.52±0.5

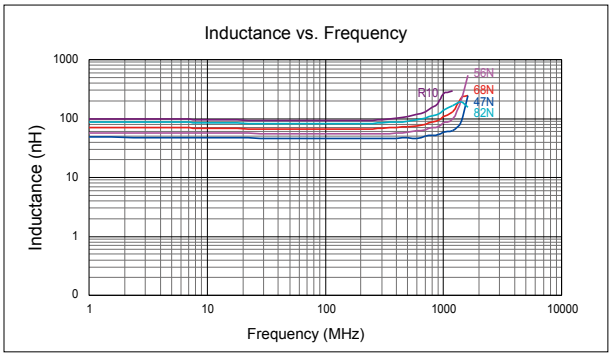
ELECTRICAL SPECIFICATION

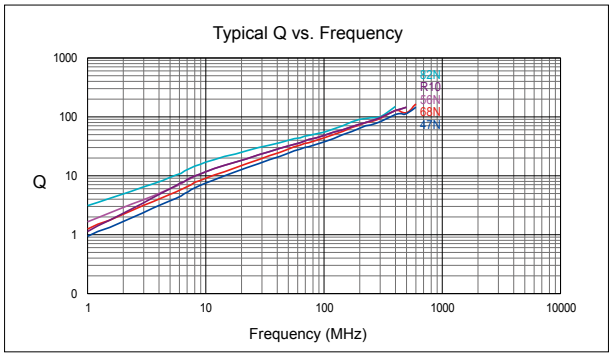
Part Number	Inductance (nH)	Inductance Tolerance	Test Freq. (MHz)	Q Min.	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code		
									1st	2nd	multiplier
1008HQ-3N0☐-LRH	3.0	J	50	70	1500	8.10	0.04	1.6	ORANGE	BLACK	BLACK
1008HQ-4N1☐-LRH	4.1	J	50	75	1500	6.20	0.05	1.6	YELLOW	BROWN	BLACK
1008HQ-7N8☐-LRH	7.8	J	50	75	500	3.80	0.05	1.6	VIOLET	GRAY	BLACK
1008HQ-10N☐-LRH	10	J, G	50	60	500	3.60	0.06	1.6	BROWN	BLACK	BROWN
1008HQ-12N☐-LRH	12	J, G	50	70	500	2.80	0.06	1.5	BROWN	RED	BROWN
1008HQ-18N☐-LRH	18	J, G	50	62	350	2.70	0.07	1.4	BROWN	GRAY	BROWN
1008HQ-22N☐-LRH	22	J, G	50	62	350	2.05	0.07	1.4	RED	RED	BROWN
1008HQ-33N☐-LRH	33	J, G	50	75	350	1.70	0.09	1.3	ORANGE	ORANGE	BROWN
1008HQ-36N☐-LRH	36	J, G	50	65	350	1.40	0.09	1.3	ORANGE	BLUE	BROWN
1008HQ-39N☐-LRH	39	J, G	50	75	350	1.30	0.09	1.3	ORANGE	WHITE	BROWN
1008HQ-47N☐-LRH	47	J, G	50	75	350	1.45	0.12	1.2	YELLOW	VIOLET	BROWN
1008HQ-56N☐-LRH	56	J, G	50	75	350	1.23	0.12	1.2	GREEN	BLUE	BROWN
1008HQ-68N☐-LRH	68	J, G	50	80	350	1.15	0.13	1.1	BLUE	GRAY	BROWN
1008HQ-82N☐-LRH	82	J, G	50	80	350	1.06	0.16	1.1	GRAY	RED	BROWN
1008HQ-R10☐-LRH	100	J, G	50	62	350	0.82	0.16	1.0	BROWN	BLACK	RED

- ☐ Tolerance: G=±2%；J=±5%
- Operating Temp: -40℃ to +125℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the 4287A with 16197A
- SRF measured using the HP 8753E or HP4291B with 16193A / ENA5071 or equivalent.
- DCR measured using the AGILENT 4338B.
- Unspecified values available on request.

CHARACTERISTIC CURVE

1008HQ Series





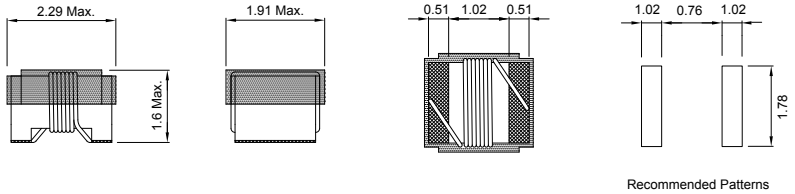
SMD

Leaded

■ SMD Wire Wound Ferrite Chip Inductors

MECHANICAL DIMENSIONS

0805F



Recommended Patterns

unit: mm

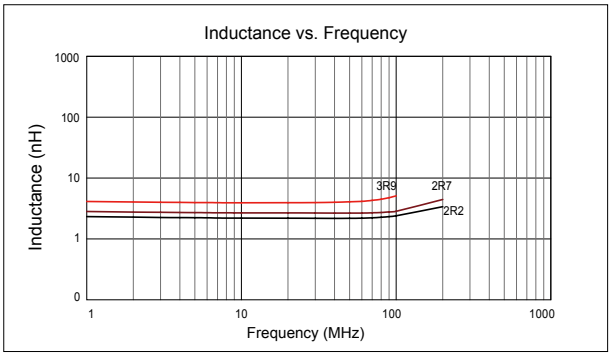
ELECTRICAL SPECIFICATION

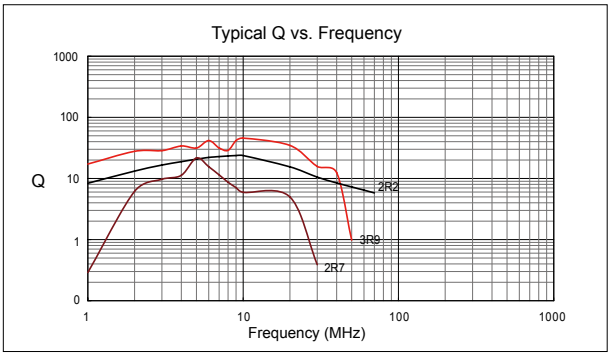
Part Number	Inductance (μH)	Inductance Tolerance	Test Freq. (MHz)	Q (min.)	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code
0805F-78N ☐ -LRH	0.078	K, J	7.9	19	7.9	1.44	0.042	2000	BLACK
0805F-R11 ☐ -LRH	0.110	K, J	7.9	19	7.9	1.40	0.050	2000	BROWN
0805F-R18 ☐ -LRH	0.180	K, J	7.9	15	7.9	1.00	0.15	500	GRAY
0805F-R22 ☐ -LRH	0.220	K, J	7.9	15	7.9	1.00	0.15	500	VIOLET
0805F-R33 ☐ -LRH	0.330	K, J	7.9	15	7.9	0.862	0.25	300	WHITE
0805F-R39 ☐ -LRH	0.390	K, J	7.9	15	7.9	0.800	0.30	500	BLACK
0805F-R47 ☐ -LRH	0.470	K, J	7.9	19	7.9	0.500	0.31	720	RED
0805F-R56 ☐ -LRH	0.560	K, J	7.9	12	7.9	0.800	1.20	300	RED
0805F-R68 ☐ -LRH	0.680	K, J	7.9	20	7.9	0.400	0.46	590	ORANGE
0805F-R82 ☐ -LRH	0.820	K, J	7.9	12	7.9	0.600	1.00	300	YELLOW
0805F-1R0 ☐ -LRH	1.00	K, J	7.9	20	7.9	0.340	0.69	500	YELLOW
0805F-1R2 ☐ -LRH	1.20	K, J	7.9	20	7.9	0.400	0.75	800	BLACK
0805F-1R5 ☐ -LRH	1.50	K, J	7.9	20	7.9	0.275	0.83	490	GREEN
0805F-1R8 ☐ -LRH	1.80	K, J	7.9	20	7.9	0.246	1.15	410	BLUE
0805F-2R2 ☐ -LRH	2.20	K, J	7.9	20	7.9	0.106	1.28	365	VIOLET
0805F-2R7 ☐ -LRH	2.70	K, J	7.9	20	7.9	0.105	1.48	350	GRAY
0805F-3R3 ☐ -LRH	3.30	K, J	7.9	20	7.9	0.083	1.57	330	WHITE
0805F-3R9 ☐ -LRH	3.90	K, J	7.9	20	7.9	0.052	1.70	300	BLACK
0805F-4R7 ☐ -LRH	4.70	K, J	7.9	20	7.9	0.050	1.87	280	BROWN
0805F-5R6 ☐ -LRH	5.60	K, J	7.9	18	7.9	0.040	2.00	270	BLUE
0805F-6R8 ☐ -LRH	6.80	K, J	7.9	20	7.9	0.035	2.25	260	RED
0805F-8R2 ☐ -LRH	8.20	K, J	2.5	18	2.5	0.027	2.55	250	ORANGE
0805F-100 ☐ -LRH	10.0	K, J	2.5	18	2.5	0.021	3.45	200	YELLOW
0805F-120 ☐ -LRH	12.0	K, J	2.5	18	2.5	0.037	3.80	220	BROWN
0805F-150 ☐ -LRH	15.0	K, J	2.5	18	2.5	0.017	5.03	180	GREEN
0805F-180 ☐ -LRH	18.0	K, J	2.5	18	2.5	0.023	4.48	180	ORANGE
0805F-220 ☐ -LRH	22.0	K, J	2.5	18	2.5	0.013	6.18	150	BLUE
0805F-270 ☐ -LRH	27.0	K, J	2.5	15	2.5	0.011	11.04	120	VIOLET

- Tolerance: K=±10% ; J=±5%
- Operating Temp: -40℃ to +85℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the HP4291B.
- SRF measured using the HP8753E or HP8720D.
- DCR measured using the 16502 milli-ohm meter.
- Unspecified values available on request.

CHARACTERISTIC CURVE

0805F Series



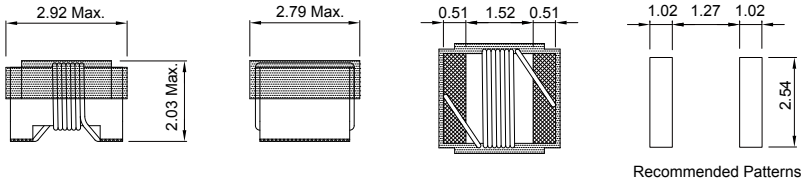


1008F Series

■ SMD Wire Wound Ferrite Chip Inductors

MECHANICAL DIMENSIONS

1008F



Recommended Patterns

unit: mm

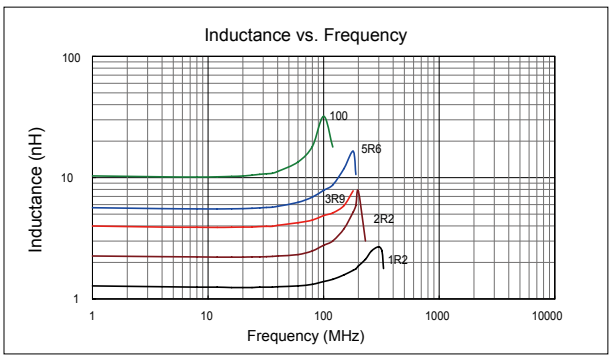
ELECTRICAL SPECIFICATION

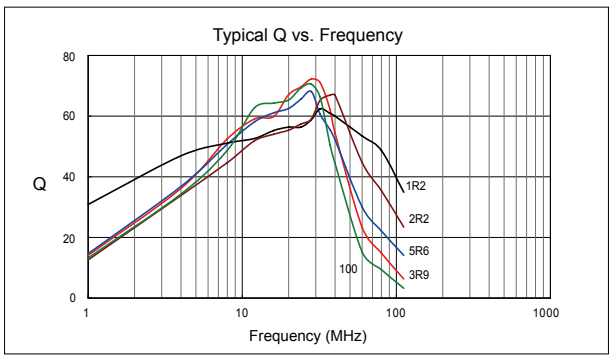
Part Number	Inductance (μH)	Inductance Tolerance	Test Freq. (MHz)	Q Min.	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	Color Code		
									1st	2nd	multiplier
1008F-47N☐-LRH	0.047	K, J	50	50	50	1.80	0.045	650	YELLOW	VIOLET	BLACK
1008F-68N☐-LRH	0.068	K, J	50	40	50	1.80	0.045	650	BLUE	GRAY	BLACK
1008F-R10☐-LRH	0.100	K, J	50	50	50	1.80	0.196	700	BROWN	BLACK	BROWN
1008F-R18☐-LRH	0.180	K, J	50	50	50	1.00	0.290	700	BROWN	GRAY	BROWN
1008F-R20☐-LRH	0.200	K, J	50	50	50	0.900	0.285	700	RED	BLACK	BROWN
1008F-R24☐-LRH	0.240	K, J	50	50	50	0.900	0.135	700	RED	YELLOW	BROWN
1008F-R56☐-LRH	0.560	K, J	7.9	40	50	0.460	0.300	700	GREEN	BLUE	BROWN
1008F-R68☐-LRH	0.680	K, J	7.9	27	50	0.400	0.320	700	BLUE	GRAY	BROWN
1008F-1R0☐-LRH	1.00	K, J	50	50	50	0.380	0.260	650	BROWN	BLACK	RED
1008F-1R2☐-LRH	1.20	K, J	7.9	48	50	0.210	0.680	650	BROWN	RED	RED
1008F-1R5☐-LRH	1.50	K, J	7.9	41	50	0.190	0.760	630	BROWN	GREEN	RED
1008F-1R8☐-LRH	1.80	K, J	7.9	39	50	0.170	0.840	600	BROWN	GRAY	RED
1008F-2R2☐-LRH	2.20	K, J	7.9	34	50	0.150	1.10	520	RED	RED	RED
1008F-2R7☐-LRH	2.70	K, J	7.9	34	50	0.135	1.28	490	RED	VIOLET	RED
1008F-3R3☐-LRH	3.30	K, J	7.9	32	50	0.120	1.46	450	ORANGE	ORANGE	RED
1008F-3R9☐-LRH	3.90	K, J	7.9	32	7.9	0.105	1.56	420	ORANGE	WHITE	RED
1008F-4R3☐-LRH	4.30	K, J	7.9	30	7.9	0.085	1.70	400	YELLOW	ORANGE	RED
1008F-4R7☐-LRH	4.70	K, J	7.9	31	7.9	0.090	1.68	400	YELLOW	VIOLET	RED
1008F-5R6☐-LRH	5.60	K, J	7.9	31	7.9	0.080	1.82	380	GREEN	BLUE	RED
1008F-6R8☐-LRH	6.80	K, J	7.9	31	7.9	0.070	2.00	360	BLUE	GRAY	RED
1008F-8R2☐-LRH	8.20	K, J	7.9	23	7.9	0.065	2.65	330	GRAY	RED	RED
1008F-100☐-LRH	10.0	K, J	7.9	31	7.9	0.060	2.95	300	BROWN	BLACK	ORANGE
1008F-120☐-LRH	12.0	K, J	7.9	30	7.9	0.050	3.35	270	BROWN	RED	ORANGE
1008F-150☐-LRH	15.0	K, J	7.9	38	7.9	0.050	3.04	250	BROWN	GREEN	ORANGE
1008F-220☐-LRH	22.0	K, J	2.52	10	2.52	0.010	2.80	125	RED	RED	ORANGE

- Tolerance: K=±10%；J=±5%
- Operating Temp: -40℃ to +85℃
- For 15℃ Temperature Rise.
- Inductance & Q measured using the HP4291B.
- SRF measured using the HP8753E or HP8720D.
- DCR measured using the 16502 milli-ohm meter.
- Unspecified values available on request.

CHARACTERISTIC CURVE

1008F Series





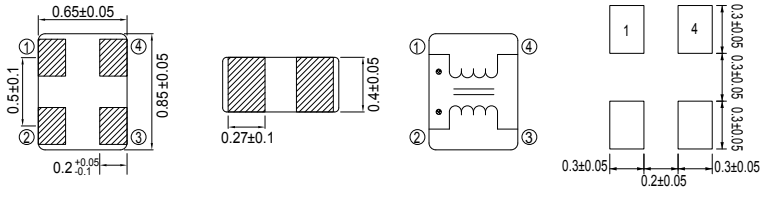
SMD

Leaded

■ Multilayer Common Mode Choke Coils

MECHANICAL DIMENSIONS

MCM08062G



Recommended Patterns

unit: mm

ELECTRICAL SPECIFICATION

Part Number	Impedance @100MHz (Ω)	Rated Current (mA) Max.	DCR (Ω) Max.	Rated Voltage (Vdc) Max.	Insulation Resistance (MΩ) Min.
MCM08062G-120-LRH	12±5Ω	130	2.5	5	100
MCM08062G-470-LRH	47±20%	100	5.0		
MCM08062G-900-LRH	90±20%	100	6.5		

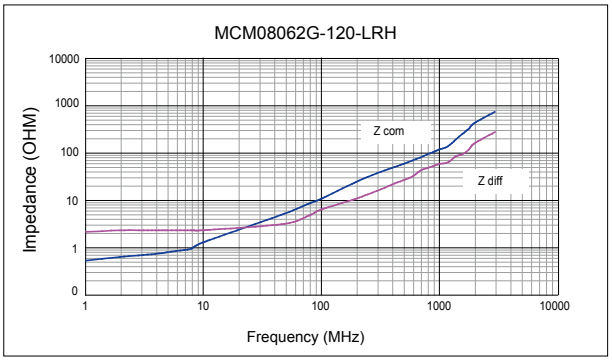
- Tolerance: M=±20%
- Small size, low profile.
- Various common mode impedance from 12Ω to 90Ω.
- Operating Temp.: -40℃ to +85℃
- Storage temperature: -40℃ to +85℃
- Impedance measured using the HP4291B RF RF Impedance Analyzer.
- DCR measured using the 16502 milli-ohm meter.

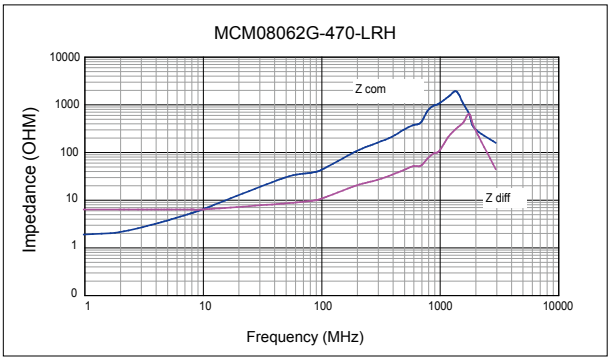
APPLICATIONS

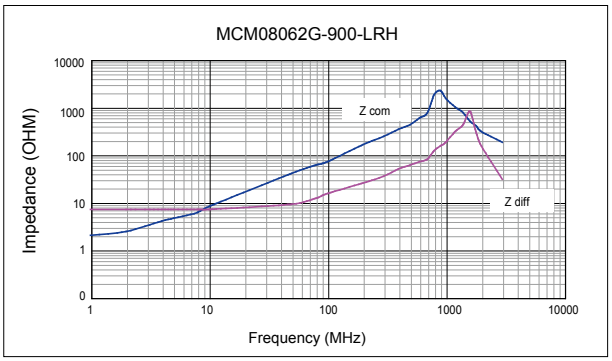
❑ Its Application is limited for the High speed differential transmission line like as followings.
❑ Suitable for differential signal line such as USB, LVDS, MIPI, MDDI, MHL, HDMI, DVI.

CHARACTERISTIC CURVE

MCM08062G Series





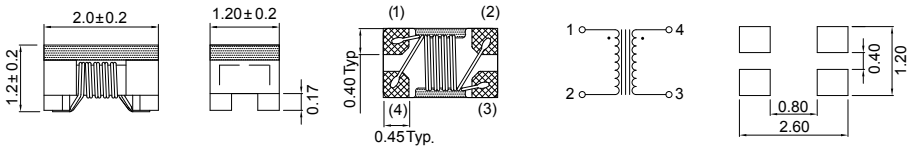


SCM2012F Series (SHIELDED)

■ SMD Molded Wire Wound Ferrite Chip

MECHANICAL DIMENSIONS

SCM2012F



Recommended Patterns

unit: mm

ELECTRICAL SPECIFICATION

Part Number	Impedance @100MHz (Ω)	Rated Current (mA) Max.	DCR (Ω) Max.	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance @125VDC (MΩ) Min.
SCM2012F-670M-I-LRH	67	400	0.25	50	125	10
SCM2012F-900M-I-LRH	90	330	0.35			
SCM2012F-121M-I-LRH	120	370	0.30			
SCM2012F-181M-I-LRH	180	330	0.35			
SCM2012F-261M-I-LRH	260	300	0.40			
SCM2012F-371M-I-LRH	370	280	0.45			
SCM2012F-601M-I-LRH	600	240	0.60			

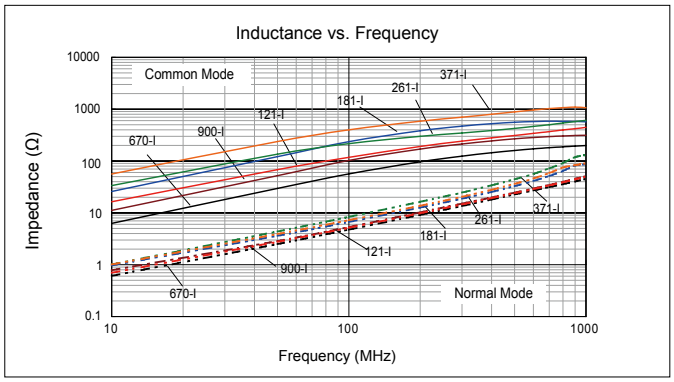
- Tolerance: M=±20%
- Small size, low profile.
- Various common mode impedance from 67Ω to 600Ω.
- Operating Temp.: -40℃ to +125℃
- Storage temperature: -40℃ to +125℃
- Temperature rise: 15℃
- Impedance measured using the HP4291B RF RF Impedance Analyzer.
- DCR measured using the 16502 milli-ohm meter.

APPLICATIONS

- ❑ Common mode noise suppression of signal lines in high speed and high-density digital equipment such as personal computers and peripherals.
- ❑ Suitable for differential signal line such as USB2.0, IEEE1394 and LVDS, Capable of high speed signal transmission without distortion due to its high coupling.

CHARACTERISTIC CURVE

SCM2012F Series



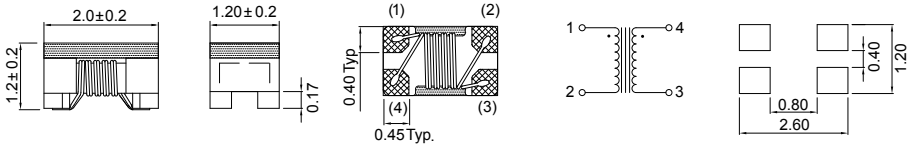
SMD

Leaded

■ SMD Molded Wire Wound Ferrite Chip

MECHANICAL DIMENSIONS

SCM2012FH



Recommended Patterns

unit: mm

ELECTRICAL SPECIFICATION

Part Number	Impedance @100MHz (Ω)	Rated Current (mA) Max.	DCR (Ω) Max.	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance @125VDC (MΩ) Min.
SCM2012FH-670M-I-LRH	67	400	0.25	50	125	10
SCM2012FH-900M-I-LRH	90	370	0.30			
SCM2012FH-121M-I-LRH	120	330	0.35			

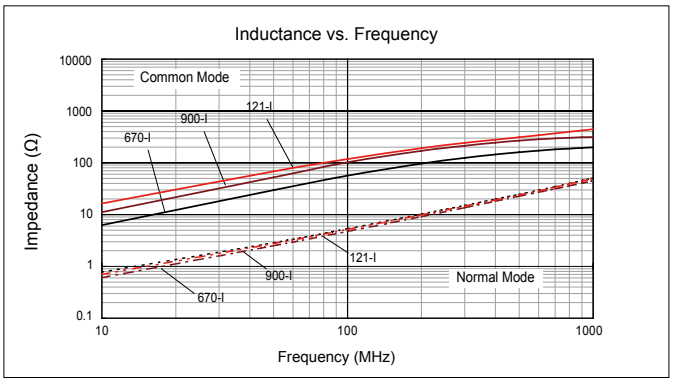
- Tolerance: M=±20%
- Small size, low profile.
- Various common mode impedance from 67Ω to 600Ω.
- Operating Temp.: -40℃ to +125℃
- Storage temperature: -40℃ to +125℃
- Temperature rise: 15℃
- Impedance measured using the HP4291B RF RF Impedance Analyzer.
- DCR measured using the 16502 milli-ohm meter.

APPLICATIONS

❑ Common mode noise suppression of signal lines in high speed and high-density digital equipment such as personal computers and peripherals.
❑ The cut-off frequency of HDMI for differential mode are 3.5GHz and 6GHz repectively, so they don't interfere with higher-speed differential signals such as DVI, HDMI. The product is suited for use on the transmission side of digital Tvs, DVD recorders and liquid crystal projectors.

CHARACTERISTIC CURVE

SCM2012FH Series

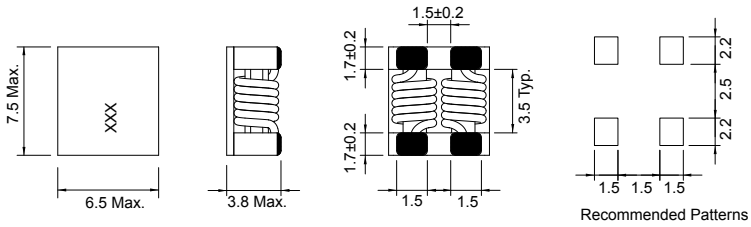


SCM7038F Series (SHIELDED)

■ SMD Molded Wire Wound Ferrite Chip

MECHANICAL DIMENSIONS

SCM7038F



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Impedance @100MHz (Ω)		Rated Current (A)	DCR (mΩ) Max.	Rated Voltage (Vdc)	Insulation Resistance @125VDC (MΩ) Min.
	Min.	Typ.				
SCM7038F-301M-LRH	225	300	5	10	80	10
SCM7038F-501M-LRH	300	500	4	13		
SCM7038F-701M-LRH	500	700	4	15		
SCM7038F-102M-LRH	800	1020	3	17		

- Tolerance: M=±20%
- Small size, low profile.
- Various common mode impedance from 300Ω to 1020Ω
- Operating Temp.: -40℃ to +105℃ (Including self temp. rise)
- Storage temperature: -40℃ to +105℃
- Impedance measured using the HP4291B RF Impedance Analyzer.
- DCR measured using the 16502 milli-ohm meter.

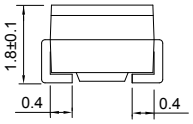
APPLICATIONS

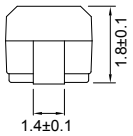
❑ Use for power line noise suppression for any electronic devices.
❑ Use to counter adapter/battery line noise for relatively large electronic devices such as Notebook PCs, Stand-alone Word Processors, etc.

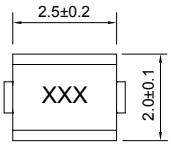
■ SMD Molded Wire Wound Ferrite Chip

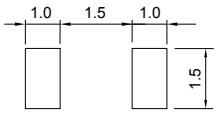
MECHANICAL DIMENSIONS

CF252018









Recommended Patterns

unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (μH)	Inductance Tolerance	Q (min.)	Test Freq. (MHz)	DCR (Ω) Max.	SRF (MHz) Min.	Rated Current (mA) Max.
CF252018-10N ☐ -LRH	0.010	M, K, J	15	100	0.26	2150	530
CF252018-12N ☐ -LRH	0.012	M, K, J	15	100	0.27	2050	500
CF252018-15N ☐ -LRH	0.015	M, K, J	15	100	0.29	2000	480
CF252018-18N ☐ -LRH	0.018	M, K, J	15	100	0.31	1850	450
CF252018-22N ☐ -LRH	0.022	M, K, J	15	100	0.37	1650	420
CF252018-27N ☐ -LRH	0.027	M, K, J	15	100	0.40	1550	410
CF252018-33N ☐ -LRH	0.033	M, K, J	20	100	0.42	1450	400
CF252018-39N ☐ -LRH	0.039	M, K, J	20	100	0.45	1350	380
CF252018-47N ☐ -LRH	0.047	M, K, J	20	100	0.50	1200	360
CF252018-56N ☐ -LRH	0.056	M, K, J	20	100	0.60	1100	340
CF252018-68N ☐ -LRH	0.068	M, K, J	20	100	0.65	1050	320
CF252018-82N ☐ -LRH	0.082	M, K, J	20	100	0.75	900	300
CF252018-R10 ☐ -LRH	0.10	M, K, J	20	100	0.80	800	280
CF252018-R12 ☐ -LRH	0.12	M, K, J	30	25.2	0.30	700	550
CF252018-R15 ☐ -LRH	0.15	M, K, J	30	25.2	0.35	550	500
CF252018-R18 ☐ -LRH	0.18	M, K, J	30	25.2	0.40	500	460
CF252018-R22 ☐ -LRH	0.22	M, K, J	30	25.2	0.50	450	430
CF252018-R27 ☐ -LRH	0.27	M, K, J	30	25.2	0.55	425	420
CF252018-R33 ☐ -LRH	0.33	M, K, J	30	25.2	0.60	400	400
CF252018-R39 ☐ -LRH	0.39	M, K, J	30	25.2	0.65	375	375
CF252018-R47 ☐ -LRH	0.47	M, K, J	30	25.2	0.68	350	350
CF252018-R56 ☐ -LRH	0.56	M, K, J	30	25.2	0.75	325	325
CF252018-R68 ☐ -LRH	0.68	M, K, J	30	25.2	0.85	300	300
CF252018-R82 ☐ -LRH	0.82	M, K, J	30	25.2	1.00	260	260
CF252018-1R0 ☐ -LRH	1.0	K, J	30	7.96	1.10	245	245
CF252018-1R2 ☐ -LRH	1.2	K, J	30	7.96	1.20	230	230
CF252018-1R5 ☐ -LRH	1.5	K, J	30	7.96	1.30	182	220
CF252018-1R8 ☐ -LRH	1.8	K, J	30	7.96	1.45	135	210
CF252018-2R2 ☐ -LRH	2.2	K, J	30	7.96	1.55	105	200
CF252018-2R7 ☐ -LRH	2.7	K, J	30	7.96	1.70	70	195
CF252018-3R3 ☐ -LRH	3.3	K, J	30	7.96	1.90	55	185
CF252018-3R9 ☐ -LRH	3.9	K, J	30	7.96	2.10	48	180
CF252018-4R7 ☐ -LRH	4.7	K, J	30	7.96	2.30	43	175
CF252018-5R6 ☐ -LRH	5.6	K, J	25	7.96	2.50	42	170
CF252018-6R8 ☐ -LRH	6.8	K, J	25	7.96	2.70	39	165
CF252018-8R2 ☐ -LRH	8.2	K, J	25	7.96	3.05	36	160
CF252018-100 ☐ -LRH	10.0	K, J	25	2.52	3.50	33	155
CF252018-120 ☐ -LRH	12.0	K, J	25	2.52	3.80	30	150
CF252018-150 ☐ -LRH	15.0	K, J	25	2.52	4.40	26	140
CF252018-180 ☐ -LRH	18.0	K, J	25	2.52	4.80	24	130
CF252018-220 ☐ -LRH	22.0	K, J	25	2.52	5.50	22	125
CF252018-270 ☐ -LRH	27.0	K, J	25	2.52	6.30	21	115

CF252018 Series

■ SMD Molded Wire Wound Ferrite Chip

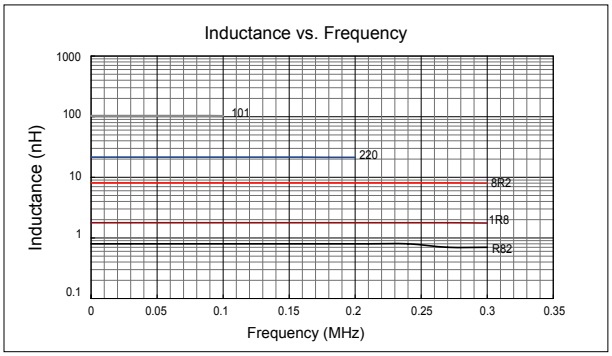
ELECTRICAL SPECIFICATION

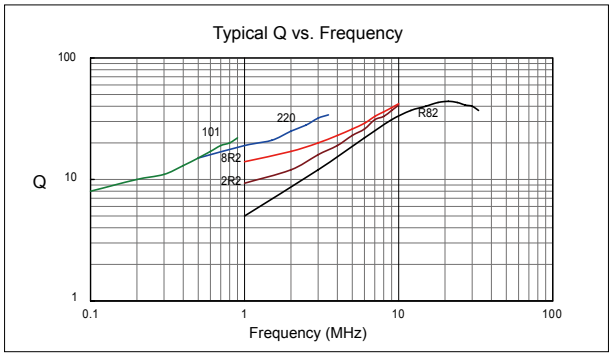
Part Number	Inductance (μH)	Inductance Tolerance	Q (min.)	Test Freq. (MHz)	DCR (Ω) Max.	SRF (MHz) Min.	Rated Current (mA) Max.
CF252018-330 ☐ -LRH	33.0	K, J	25	2.52	7.10	20	110
CF252018-390 ☐ -LRH	39.0	K, J	20	2.52	9.50	18	90
CF252018-470 ☐ -LRH	47.0	K, J	20	2.52	11.10	17	80
CF252018-560 ☐ -LRH	56.0	K, J	20	2.52	12.10	16	75
CF252018-680 ☐ -LRH	68.0	K, J	20	2.52	16.60	15	70
CF252018-820 ☐ -LRH	82.0	K, J	20	2.52	19.00	13	66
CF252018-101 ☐ -LRH	100.0	K, J	15	0.796	21.00	12	60

- Tolerance: M=±20%；K=±10%；J=±5%.
- Operating Temperature Range: -40℃ to +85℃
- Storage Temperature Range: -40℃ to +85℃
- For 20℃ Temperature Rise.
- Inductance & Q measured using the HP4285A.
- SRF measured using the HP8753E or HP4291B .
- DCR measured using the 16502 milli-ohm meter.
- Resistance to solder heat: 260℃ for 10 seconds.

CHARACTERISTIC CURVE

CF252018 Series





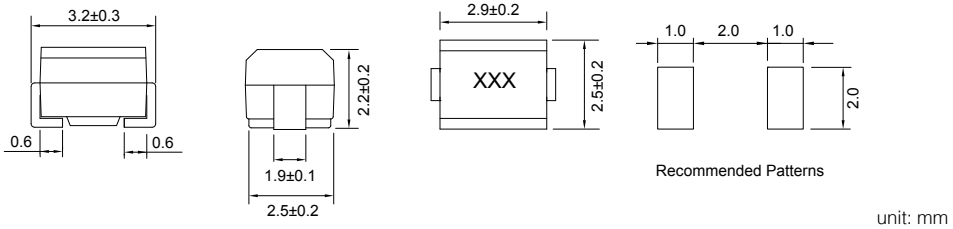
SMD

Leaded

■ SMD Molded Wire Wound Ferrite Chip

MECHANICAL DIMENSIONS

CF322522



Recommended Patterns

unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (μH)	Inductance Tolerance	Q (min.)	Test Freq. (MHz)	DCR (Ω) Max.	SRF (MHz) Min.	Rated Current (mA) Max.
CF322522-R12 ☐ -LRH	0.12	M, K	30	25.2	0.22	500	450
CF322522-R15 ☐ -LRH	0.15	M, K	30	25.2	0.25	450	450
CF322522-R18 ☐ -LRH	0.18	M, K	30	25.2	0.28	400	450
CF322522-R22 ☐ -LRH	0.22	M, K	30	25.2	0.32	350	450
CF322522-R27 ☐ -LRH	0.27	M, K	30	25.2	0.36	320	450
CF322522-R33 ☐ -LRH	0.33	M, K	30	25.2	0.40	300	450
CF322522-R39 ☐ -LRH	0.39	M, K	30	25.2	0.45	250	450
CF322522-R47 ☐ -LRH	0.47	M, K	30	25.2	0.50	220	450
CF322522-R56 ☐ -LRH	0.56	M, K	30	25..2	0.55	180	450
CF322522-R68 ☐ -LRH	0.68	M, K	30	25.2	0.60	160	450
CF322522-R82 ☐ -LRH	0.82	M, K	30	25.2	0.65	140	450
CF322522-1R0 ☐ -LRH	1.0	M, K	30	7.96	0.70	120	400
CF322522-1R2 ☐ -LRH	1.2	M, K	30	7.96	0.75	100	390
CF322522-1R5 ☐ -LRH	1.5	M, K	30	7.96	0.85	85	370
CF322522-1R8 ☐ -LRH	1.8	M, K	30	7.96	0.90	80	350
CF322522-2R2 ☐ -LRH	2.2	M, K	30	7.96	1.00	75	320
CF322522-2R7 ☐ -LRH	2.7	M, K	30	7.96	1.10	70	290
CF322522-3R3 ☐ -LRH	3.3	K, J	30	7.96	1.20	60	260
CF322522-3R9 ☐ -LRH	3.9	K, J	30	7.96	1.30	55	250
CF322522-4R7 ☐ -LRH	4.7	K, J	30	7.96	1.50	50	220
CF322522-5R6 ☐ -LRH	5.6	K, J	30	7.96	1.60	47	200
CF322522-6R8 ☐ -LRH	6.8	K, J	30	7.96	1.80	43	180
CF322522-8R2 ☐ -LRH	8.2	K, J	30	7.96	2.00	40	170
CF322522-100 ☐ -LRH	10.0	K, J	30	2.52	2.10	36	150
CF322522-120 ☐ -LRH	12.0	K, J	30	2.52	2.50	33	140
CF322522-150 ☐ -LRH	15.0	K, J	30	2.52	2.80	28	130
CF322522-180 ☐ -LRH	18.0	K, J	30	2.52	3.30	25	120
CF322522-220 ☐ -LRH	22.0	K, J	30	2.52	3.70	23	110
CF322522-270 ☐ -LRH	27.0	K, J	30	2.52	5.00	18	80
CF322522-330 ☐ -LRH	33.0	K, J	30	2.52	5.60	17	70
CF322522-390 ☐ -LRH	39.0	K, J	30	2.52	6.40	16	65
CF322522-470 ☐ -LRH	47.0	K, J	30	2.52	7.00	15	60
CF322522-560 ☐ -LRH	56.0	K, J	30	2.52	8.00	13	55
CF322522-680 ☐ -LRH	68.0	K, J	30	2.52	9.00	12	50
CF322522-820 ☐ -LRH	82.0	K, J	30	2.52	10.0	11	45
CF322522-101 ☐ -LRH	100	K, J	20	0.796	11.0	10	40
CF322522-121 ☐ -LRH	120	K, J	20	0.796	12.0	10	70
CF322522-151 ☐ -LRH	150	K, J	20	0.796	15.0	8	65
CF322522-181 ☐ -LRH	180	K, J	20	0.796	17.0	7	60
CF322522-221 ☐ -LRH	220	K, J	20	0.796	21.0	7	50
CF322522-271 ☐ -LRH	270	K, J	20	0.796	28.0	6	45

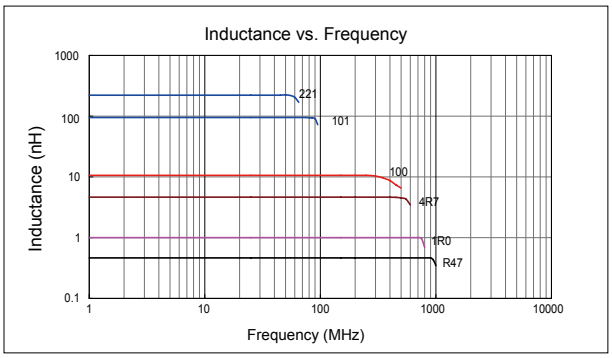
- Tolerance: M=±20%；L=±15%；K=±10%；J=±5%
- Operating Temperature Range: -25℃ to +100℃
- Storage Temperature Range: -40℃ to +100℃
- For 20℃ Temperature Rise.
- Ambient temperature：80℃ Max.
- Rated Current: Current cause inductance drop within 10% from 0℃ to 50℃
- Resistance to solder heat: 260℃ for 10 seconds.
- Inductance & Q measured using the HP4285A.
- SRF measured using the HP8753E or HP4291B .
- DCR measured using the 16502 milli-ohm meter.

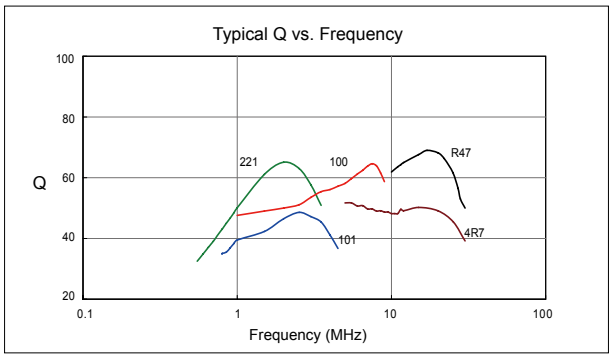
CF322522 Series

■ SMD Molded Wire Wound Ferrite Chip

CHARACTERISTIC CURVE

CF322522 Series





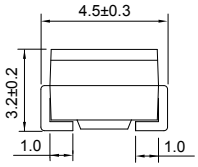
SMD

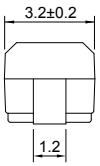
Leaded

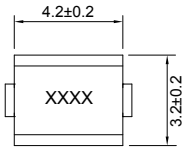
■ SMD Molded Wire Wound Ferrite Chip

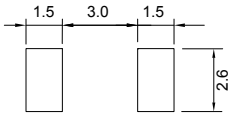
MECHANICAL DIMENSIONS

CF453232









Recommended Patterns

unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (μH)	Inductance Tolerance	Q (min.)	Test Freq. (MHz)	DCR (Ω) Max.	SRF (MHz) Min.	Rated Current (mA) Max.
CF453232-R10 ☐ -LRH	0.10	M, K	35	25.2	0.18	300	800
CF453232-R12 ☐ -LRH	0.12	M, K	35	25.2	0.20	280	770
CF453232-R15 ☐ -LRH	0.15	M, K	35	25.2	0.22	250	730
CF453232-R18 ☐ -LRH	0.18	M, K	35	25.2	0.24	220	700
CF453232-R22 ☐ -LRH	0.22	M, K	40	25.2	0.25	200	665
CF453232-R27 ☐ -LRH	0.27	M, K	40	25.2	0.26	180	635
CF453232-R33 ☐ -LRH	0.33	M, K	40	25.2	0.28	165	605
CF453232-R39 ☐ -LRH	0.39	M, K	40	25.2	0.30	150	575
CF453232-R47 ☐ -LRH	0.47	M, K	40	25.2	0.32	145	545
CF453232-R56 ☐ -LRH	0.56	M, K	40	25.2	0.36	140	520
CF453232-R68 ☐ -LRH	0.68	M, K	40	25.2	0.40	135	500
CF453232-R82 ☐ -LRH	0.82	M, K	40	25.2	0.45	130	475
CF453232-1R0 ☐ -LRH	1.0	K, J	50	7.96	0.50	100	450
CF453232-1R2 ☐ -LRH	1.2	K, J	50	7.96	0.55	80	430
CF453232-1R5 ☐ -LRH	1.5	K, J	50	7.96	0.60	70	410
CF453232-1R8 ☐ -LRH	1.8	K, J	50	7.96	0.65	60	390
CF453232-2R2 ☐ -LRH	2.2	K, J	50	7.96	0.70	55	380
CF453232-2R7 ☐ -LRH	2.7	K, J	50	7.96	0.75	50	370
CF453232-3R3 ☐ -LRH	3.3	K, J	50	7.96	0.80	45	355
CF453232-3R9 ☐ -LRH	3.9	K, J	50	7.96	0.90	40	330
CF453232-4R7 ☐ -LRH	4.7	K, J	50	7.96	1.00	35	315
CF453232-5R6 ☐ -LRH	5.6	K, J	50	7.96	1.10	33	300
CF453232-6R8 ☐ -LRH	6.8	K, J	50	7.96	1.20	27	285
CF453232-8R2 ☐ -LRH	8.2	K, J	50	7.96	1.40	25	270
CF453232-100 ☐ -LRH	10	K, J	50	2.52	1.60	20	250
CF453232-120 ☐ -LRH	12	K, J	50	2.52	2.00	18	225
CF453232-150 ☐ -LRH	15	K, J	50	2.52	2.50	17	200
CF453232-180 ☐ -LRH	18	K, J	50	2.52	2.80	15	190
CF453232-220 ☐ -LRH	22	K, J	50	2.52	3.20	13	180
CF453232-270 ☐ -LRH	27	K, J	50	2.52	3.60	12	170
CF453232-330 ☐ -LRH	33	K, J	50	2.52	4.00	11	160
CF453232-390 ☐ -LRH	39	K, J	50	2.52	4.50	10	150
CF453232-470 ☐ -LRH	47	K, J	50	2.52	5.00	10	140
CF453232-560 ☐ -LRH	56	K, J	50	2.52	5.50	9.0	135
CF453232-680 ☐ -LRH	68	K, J	50	2.52	6.00	9.0	130
CF453232-820 ☐ -LRH	82	K, J	50	2.52	7.00	8.0	120
CF453232-101 ☐ -LRH	100	K, J	40	0.796	8.00	8.0	110
CF453232-121 ☐ -LRH	120	K, J	40	0.796	8.00	6.0	110
CF453232-151 ☐ -LRH	150	K, J	40	0.796	9.00	5.0	105
CF453232-181 ☐ -LRH	180	K, J	40	0.796	9.50	5.0	102
CF453232-221 ☐ -LRH	220	K, J	40	0.796	10.00	4.0	100
CF453232-271 ☐ -LRH	270	K, J	40	0.796	12.00	4.0	92
CF453232-331 ☐ -LRH	330	K, J	40	0.796	14.00	3.5	85
CF453232-391 ☐ -LRH	390	K, J	40	0.796	18.00	3.0	80
CF453232-471 ☐ -LRH	470	K, J	40	0.796	26.00	3.0	62
CF453232-561 ☐ -LRH	560	K, J	30	0.796	30.00	3.0	50
CF453232-681 ☐ -LRH	680	K, J	30	0.796	30.00	3.0	50
CF453232-821 ☐ -LRH	820	K, J	30	0.796	35.00	2.5	30
CF453232-102 ☐ -LRH	1000	K, J	20	0.252	40.00	2.5	30

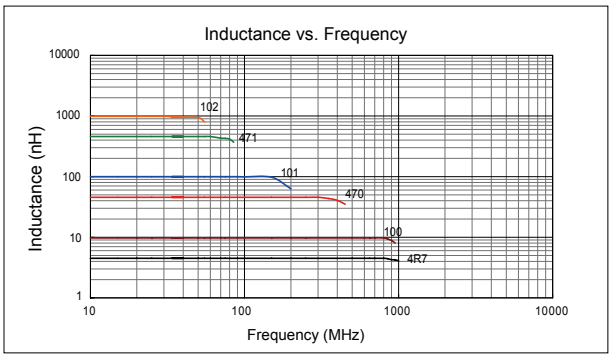
- Tolerance: M=±20%；K=±10%；J=±5%
- Operating Temperature Range: -25℃ to +100℃
- Storage Temperature Range: -40℃ to +100℃
- For 20℃ Temperature Rise.
- Ambient temperature：80℃ Max.
- Rated Current: Current cause inductance drop within 10% from 0℃ to 50℃
- Resistance to solder heat: 260℃ for 10 seconds.
- Inductance & Q measured using the HP4285A.
- SRF measured using the HP8753E or HP4291B .
- DCR measured using the 16502 milli-ohm meter.

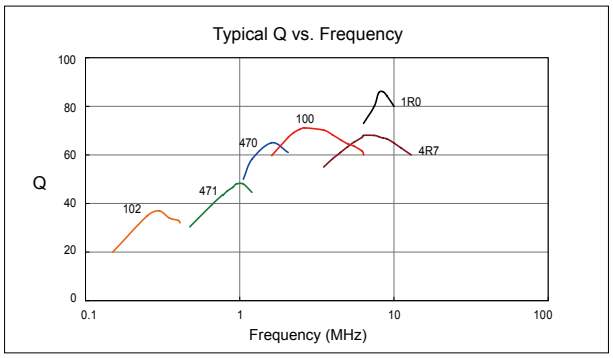
CF453232 Series

■ SMD Molded Wire Wound Ferrite Chip

CHARACTERISTIC CURVE

CF453232 Series

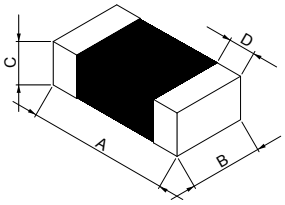


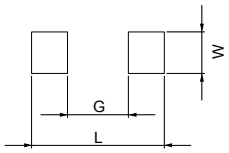


■ SMD Multi-Layer Ceramic Chip Inductors

MECHANICAL DIMENSIONS

FL





Recommended Patterns

unit: mm

TYPE	A	B	C	D	L	W	G
160808	1.6±0.2 (0.063±0.008)	0.8±0.2 (0.031±0.008)	0.8±0.2 (0.031±0.008)	0.3±0.2 (0.012±0.008)	2.08 (0.110)	1.00 (0.039)	0.60 (0.024)
201209	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	0.9±0.2 (0.035±0.008)	0.5±0.3 (0.020±0.012)	3.20 (0.126)	1.50 (0.059)	1.60 (0.024)
201212	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	1.2±0.2 (0.047±0.008)	0.5±0.3 (0.020±0.012)	3.20 (0.126)	1.50 (0.059)	0.6 (0.024)

PART NUMBER KEY

FL □□□□□□ - □□□ □ - □□□

(1) (2) (3) (4) (5)

(A) (B) (C)

(1) Product Symbol: Multilayer Chip Inductors
(2) Dimensions: Length (A) x Width (B) x Thickness (C)
(3) Inductance
(4) Tolerance
(5) Internal code

FEATURES

- ❑ Tolerance：J=±5%；K=±10%；M=±20%
- ❑ The product’ s material：Ferrite.
- ❑ No cross coupling between inductors due to magnetic shield. Ideal for high-density installation.
- ❑ The completely monolithic structure gives high reliability and allows high SRF.
- ❑ Operating temperature range：-40℃ to +125℃ .
- ❑ Monolithic structure for highly reliable surface mount applications.
- ❑ Excellent solderability and high heat resistance for either flow or reflow soldering.
- ❑ Superior Q characteristics guaranteed over the wide frequency allow high frequency application.

ELECTRICAL SPECIFICATION: 1608 TYPE

Part Number	Inductance at 100MHz (μH)	Q (min.)	Test Frequency (MHz)	SRF (MHz) Min.	DC Resistance (Ω) Max.	Rated Current (mA) Max.
FL160808-47NM-LRH	0.047±20%	10	50	260	0.30	50
FL160808-68NM-LRH	0.068±20%	10	50	250	0.30	50
FL160808-R10K-LRH	0.10±10%	15	25	240	0.50	50
FL160808-R12K-LRH	0.12±10%	15	25	205	0.50	50
FL160808-R15K-LRH	0.15±10%	15	25	180	0.60	50
FL160808-R18K-LRH	0.18±10%	15	25	165	0.60	50
FL160808-R22K-LRH	0.22±10%	15	25	150	0.80	50
FL160808-R27K-LRH	0.27±10%	15	25	136	0.80	50
FL160808-R33K-LRH	0.33±10%	15	25	125	0.85	35
FL160808-R39K-LRH	0.39±10%	15	25	110	1.00	35
FL160808-R47K-LRH	0.47±10%	15	25	105	1.35	35
FL160808-R56K-LRH	0.56±10%	15	25	95	1.55	35
FL160808-R68K-LRH	0.68±10%	15	25	90	1.70	35
FL160808-R82K-LRH	0.82±10%	15	25	85	2.10	35
FL160808-1R0K-LRH	1.0±10%	35	10	75	0.60	25
FL160808-1R2K-LRH	1.2±10%	35	10	65	0.80	25
FL160808-1R5K-LRH	1.5±10%	35	10	60	0.80	25
FL160808-1R8K-LRH	1.8±10%	35	10	55	0.95	25
FL160808-2R2K-LRH	2.2±10%	35	10	50	1.15	15
FL160808-2R7K-LRH	2.7±10%	35	10	45	1.35	15

FL Series (STANDAR)

■ SMD Multi-Layer Ceramic Chip Inductors

ELECTRICAL SPECIFICATION: 1608 TYPE

Part Number	Inductance at 100MHz (μH)	Q (min.)	Test Frequency (MHz)	SRF (MHz) Min.	DC Resistance (Ω) Max.	Rated Current (mA) Max.
FL160808-3R3K-LRH	3.3±10%	35	10	40	1.55	15
FL160808-3R9K-LRH	3.9±10%	35	10	35	1.70	15
FL160808-4R7K-LRH	4.7±10%	35	10	33	2.10	15
FL160808-5R6K-LRH	5.6±10%	35	4	22	1.55	5
FL160808-6R8K-LRH	6.8±10%	35	4	20	1.70	5
FL160808-8R2K-LRH	8.2±10%	35	4	18	2.10	5
FL160808-100K-LRH	10±10%	30	2	17	1.85	3
FL160808-120K-LRH	12±10%	30	2	15	2.10	3

ELECTRICAL SPECIFICATION: 2012 TYPE

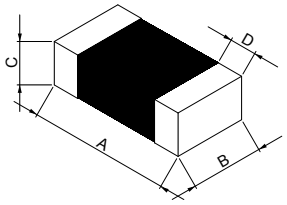
Part Number	Inductance at 100MHz (μH)	Q (min.)	Test Frequency (MHz)	SRF (MHz) Min.	DC Resistance (Ω) Max.	Rated Current (mA) Max.
FL201209-47NM-LRH	0.047±20%	15	50	320	0.20	300
FL201209-68NM-LRH	0.068±20%	15	50	280	0.20	300
FL201209-R10K-LRH	0.10±10%	20	25	235	0.30	250
FL201209-R12K-LRH	0.12±10%	20	25	220	0.30	250
FL201209-R15K-LRH	0.15±10%	20	25	200	0.40	250
FL201209-R18K-LRH	0.18±10%	20	25	185	0.40	250
FL201209-R22K-LRH	0.22±10%	20	25	170	0.50	250
FL201209-R27K-LRH	0.27±10%	20	25	150	0.50	250
FL201209-R33K-LRH	0.33±10%	20	25	145	0.55	250
FL201209-R39K-LRH	0.39±10%	25	25	135	0.65	200
FL201209-R47K-LRH	0.47±10%	25	25	125	0.65	200
FL201209-R56K-LRH	0.56±10%	25	25	115	0.75	150
FL201209-R68K-LRH	0.68±10%	25	25	105	0.80	150
FL201209-R82K-LRH	0.82±10%	25	25	100	1.00	150
FL201209-1R0K-LRH	1.0±10%	45	10	75	0.40	50
FL201209-1R2K-LRH	1.2±10%	45	10	65	0.50	50
FL201209-1R5K-LRH	1.5±10%	45	10	60	0.50	50
FL201209-1R8K-LRH	1.8±10%	45	10	55	0.60	50
FL201209-2R2K-LRH	2.2±10%	45	10	50	0.65	30
FL201212-2R7K-LRH	2.7±10%	45	10	45	0.75	30
FL201212-3R3K-LRH	3.3±10%	45	10	41	0.80	30
FL201212-3R9K-LRH	3.9±10%	45	10	38	0.90	30
FL201212-4R7K-LRH	4.7±10%	45	10	35	1.00	30
FL201212-5R6K-LRH	5.6±10%	50	4	32	0.90	15
FL201212-6R8K-LRH	6.8±10%	50	4	29	1.00	15
FL201212-8R2K-LRH	8.2±10%	50	4	26	1.10	15
FL201212-100K-LRH	10±10%	50	2	24	1.15	15
FL201212-220K-LRH	22±10%	35	1	16	1.10	5

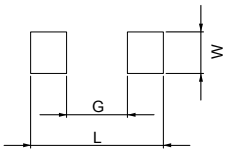
FH201210 Series (HIGH CURRENT)

■ SMD Multi-Layer Ceramic Chip Inductors

MECHANICAL DIMENSIONS

FH201210





Recommended Patterns

unit: mm

TYPE	A	B	C	D	L	W	G
201210	2.0±0.2 (0.079±0.008)	1.25±0.2 (0.049±0.008)	1.0 Max. (0.039 Max.)	0.5±0.3 (0.020±0.012)	3.2 (0.126)	1.55 (0.061)	0.6 (0.024)

PART NUMBER KEY

FH □□□□□□ - □□□ □ - □□□

(1) (2) (3) (4) (5)

(A) (B) (C)

(1) Product Symbol: Multilayer Chip Inductors
(2) Dimensions: Length (A) x Width (B) x Thickness (C)
(3) Inductance
(4) Tolerance
(5) Internal code

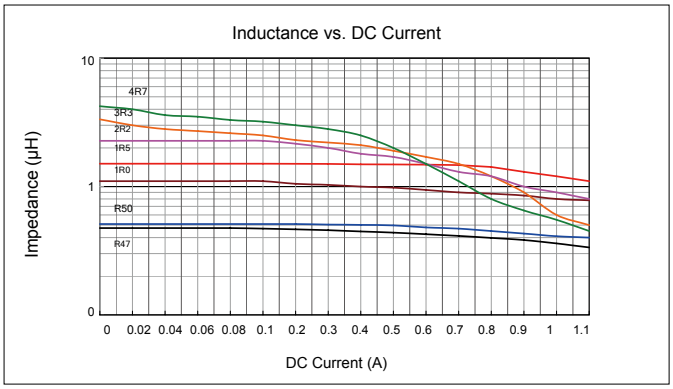
ELECTRICAL SPECIFICATION

Part Number	Inductance (μH)	Inductance Tolerance	Test Frequency (MHz)	DC Resistance (Ω) Max.	Rated Current (A) Max.
FH201210-R47M-LRH	0.47	±20%	1.0	0.08	1.2
FH201210-R50M-LRH	0.50	±20%	1.0	0.08	1.2
FH201210-1R0M-LRH	1.00	±20%	1.0	0.14	1.0
FH201210-1R5M-LRH	1.50	±20%	1.0	0.20	0.8
FH201210-2R2M-LRH	2.20	±20%	1.0	0.20	0.8
FH201210-3R3M-LRH	3.30	±20%	1.0	0.24	0.7
FH201210-4R7M-LRH	4.70	±20%	1.0	0.28	0.7

- Inductance tolerance: M=±20%
- Operating Temperature Range: -40℃ to +85℃
- Storage Temperature Range: -40℃ to +85℃
- Inductance using the HP4285A
- DCR measured using the 16502 milli-ohm meter
- Rated current: The value of current at which the temperature of the element is increased within 40℃ (at Ta:20℃)

CHARACTERISTIC CURVE

FH201210 Series



SMD

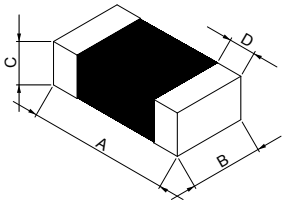
Leaded

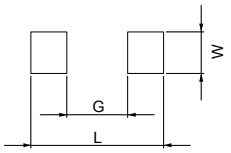
FH201610 Series (HIGH CURRENT)

■ SMD Multi-Layer Ceramic Chip Inductors

MECHANICAL DIMENSIONS

FH201610





Recommended Patterns

unit: mm

TYPE	A	B	C	D	L	W	G
201610	2.0±0.2 (0.079±0.008)	1.6±0.2 (0.063±0.008)	1.0 Max. (0.039 Max.)	0.5±0.3 (0.020±0.012)	3.2 (0.126)	1.8 (0.071)	0.6 (0.024)

PART NUMBER KEY

FH □□□□□□ - □□□ □ - □□□

(1) (2) (3) (4) (5)

(A) (B) (C)

(1) Product Symbol: Multilayer Chip Inductors
(2) Dimensions: Length (A) x Width (B) x Thickness (C)
(3) Inductance
(4) Tolerance
(5) Internal code

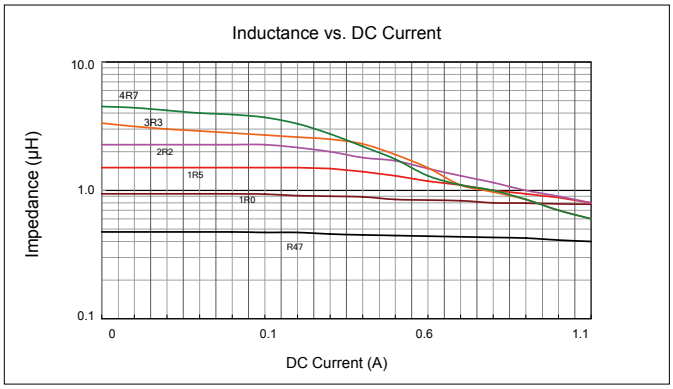
ELECTRICAL SPECIFICATION

Part Number	Inductance (μH)	Inductance Tolerance	Test Frequency (MHz)	DC Resistance (Ω) Max.	Rated Current (A) Max.
FH201610-R47M-LRH	0.47	±20%	1.0	0.075	1.6
FH201610-1R0M-LRH	1.00	±20%	1.0	0.12	1.3
FH201610-1R5M-LRH	1.50	±20%	1.0	0.13	1.2
FH201610-2R2M-LRH	2.20	±20%	1.0	0.14	1.2
FH201610-3R3M-LRH	3.30	±20%	1.0	0.16	1.1
FH201610-4R7M-LRH	4.70	±20%	1.0	0.20	0.9

- Inductance tolerance: M=±20%
- Operating Temperature Range: -40℃ to +85℃
- Storage Temperature Range: -40℃ to +85℃
- Inductance using the HP4285A
- DCR measured using the 16502 milli-ohm meter
- Rated current: The value of current at which the temperature of the element is increased within 40℃ (at Ta:20℃)

CHARACTERISTIC CURVE

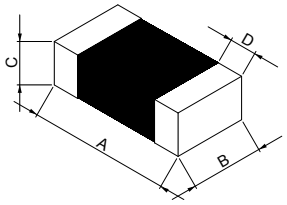
FH201610 Series

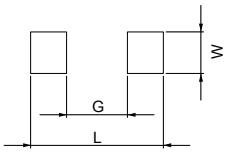


■ SMD Multi-Layer Ferrite Chip Beads

MECHANICAL DIMENSIONS

TI





Recommended Patterns

unit: mm

TYPE	A	B	C	D	L	W	G
160808	1.6±0.2 (0.063±0.008)	0.8±0.2 (0.031±0.008)	0.8±0.2 (0.031±0.008)	0.3±0.2 (0.012±0.008)	2.80 (0.110)	1.00 (0.039)	0.6 (0.024)
201209	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	0.9±0.2 (0.035±0.008)	0.5±0.3 (0.020±0.012)	3.2 (0.126)	1.50 (0.059)	0.6 (0.024)
321611	3.2±0.2 (0.126±0.008)	1.6±0.2 (0.063±0.008)	1.1±0.2 (0.043±0.008)	0.5±0.3 (0.020±0.012)	4.4 (0.173)	1.80 (0.071)	1.20 (0.047)
322513	3.2±0.2 (0.126±0.008)	2.5±0.2 (0.098±0.008)	1.3±0.2 (0.051±0.008)	0.5±0.3 (0.020±0.012)	4.4 (0.173)	2.70 (0.106)	1.20 (0.047)
451616	4.5±0.2 (0.177±0.008)	1.6±0.2 (0.063±0.008)	1.6±0.2 (0.063±0.008)	0.5±0.3 (0.020±0.012)	5.80 (0.228)	1.8 (0.071)	2.00 (0.079)
453215	4.5±0.2 (0.177±0.008)	3.2±0.2 (0.126±0.008)	1.5±0.2 (0.059±0.008)	0.5±0.3 (0.020±0.012)	5.80 (0.228)	3.4 (0.134)	2.00 (0.079)

PART NUMBER KEY

TI □□□□□□ - □□□ □ - □□□

(1) (2) (3) (4) (5)

(A) (B) (C)

(1) Product Symbol: Multilayer Chip Beads
(2) Dimensions: Length (A) x Width (B) x Thickness (C)
(3) Material Code: Z, U, G, B, L
(4) Impedance: abc=ab x 10^{c} Ω
(5) Internal code

FEATURES

- ❑ High density packaging with a pitch of 2.54 mm（0.1 inch）max. is possible. This series requires less space and has greater EMI suppression effects.
- ❑ Different types with the same shape are available.
- ❑ Excellent in physical properties, such as terminal strength, flexure strength, soldering resistance and solderability.
- ❑ Applicable to both flow and reflow soldering.
- ❑ High impedance cover wide frequency ranges.
- ❑ TI series can be used in high current circuits due to its low DC resistance.
- ❑ Operating temperature range: -40℃ to +125℃
- ❑ The products have five types of material: Material L, B, G, U, Z

MATERIALS

ITEM		UNIT	STANDARD VALUE				
Material Code		—	L	B	G	U	Z
Initial permeability	μiac	—	25	45	110	200	500
Maximum Permeability	μM	—	125	125	250	450	900
Saturation Flux Density at 10 Oe	Bs	Gauss	2000	2000	1700	1400	1500
Curie Temperature	Tc	℃	>200	>200	>130	>130	>100
Volume Resistivity	ρ	Ω-m	10^5	10^5	10^5	10^5	10^5
Temperature Coefficient (Inductance)		10^{-4}/℃	10	10	12	13	5
Density		g/cm^3	4.8	4.8	4.8	4.8	4.8

TI Series (LARGE CURRENT)

■ SMD Multi-Layer Ferrite Chip Beads

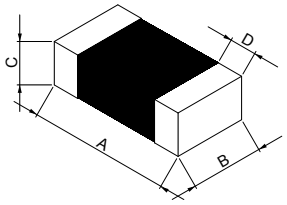
ELECTRICAL SPECIFICATION

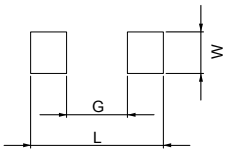
Part Number	Impedance At 100MHz (Ω) ±25%	DC Resistance (Ω) Max.	Rated Current (A) Max.
TI160808U300-LRH	30	0.050	3.0
TI160808U600-LRH	60	0.050	3.0
TI160808U121-LRH	120	0.100	2.0
TI160808U301-LRH	300	0.150	1.5
TI160808U601-LRH	600	0.300	1.0
TI201209U110-LRH	11	0.010	6.0
TI201209U170-LRH	17	0.010	6.0
TI201209U220-LRH	22	0.010	6.0
TI201209U300-LRH	30	0.030	4.0
TI201209U600-LRH	60	0.050	3.0
TI201209U121-LRH	120	0.080	2.5
TI201209U221-LRH	220	0.100	2.0
TI201209U301-LRH	300	0.100	2.0
TI201209U601-LRH	600	0.300	1.0
TI201209B070-LRH	7	0.050	3.0
TI321611Z260-LRH	26	0.010	6.0
TI321611U310-LRH	31	0.010	6.0
TI321611U500-LRH	50	0.025	3.0
TI321611U121-LRH	120	0.080	2.5
TI321611U301-LRH	300	0.080	2.5
TI321611U601-LRH	600	0.10	2.0
TI321611G800-LRH	80	0.050	3.0
TI321611G101-LRH	100	0.050	3.0
TI321611B190-LRH	19	0.040	3.0
TI322513U300-LRH	30	0.050	3.0
TI322513U520-LRH	52	0.050	3.0
TI322513U650-LRH	65	0.030	3.0
TI451616U600-LRH	60	0.050	6.0
TI451616U750-LRH	75	0.050	3.0
TI451616U800-LRH	80	0.050	3.0
TI453215Z121-LRH	120	0.050	3.0
TI453215U700-LRH	70	0.030	6.0
TI453215U121-LRH	120	0.050	3.0

■ SMD Multi-Layer Ferrite Chip Beads

MECHANICAL DIMENSIONS

FB





Recommended Patterns

unit: mm

TYPE	A	B	C	D	L	W	G
100505	1.0±0.1 (0.040±0.004)	0.5±0.1 (0.020±0.004)	0.5±0.1 (0.020±0.004)	0.25±0.15 (0.010±0.006)	2.2 (0.086)	0.7 (0.028)	0.40 (0.016)
160808	1.6±0.2 (0.063±0.008)	0.8±0.2 (0.031±0.008)	0.8±0.2 (0.031±0.008)	0.3±0.2 (0.012±0.008)	2.8 (0.110)	1.0 (0.039)	0.60 (0.024)
201209	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	0.9±0.2 (0.035±0.008)	0.5±0.3 (0.020±0.012)	3.2 (0.126)	1.5 (0.059)	0.60 (0.024)
321611	3.2±0.2 (0.126±0.008)	1.6±0.2 (0.063±0.008)	1.1±0.2 (0.043±0.008)	0.5±0.3 (0.020±0.012)	4.4 (0.173)	1.8 (0.071)	1.20 (0.047)
322513	3.2±0.2 (0.126±0.008)	2.5±0.2 (0.098±0.008)	1.3±0.2 (0.051±0.008)	0.5±0.3 (0.020±0.012)	4.4 (0.173)	2.7 (0.106)	1.20 (0.047)
451616	4.5±0.2 (0.177±0.008)	1.6±0.2 (0.063±0.008)	1.6±0.2 (0.063±0.008)	0.5±0.3 (0.020±0.012)	5.80 (0.228)	1.8 (0.071)	2.00 (0.079)
453215	4.5±0.2 (0.177±0.008)	3.2±0.2 (0.126±0.008)	1.5±0.2 (0.059±0.008)	0.5±0.3 (0.020±0.012)	5.80 (0.228)	3.4 (0.134)	2.00 (0.079)

PART NUMBER KEY

FB □□□□□□ - □□□ □ - □□□

(1) (2) (3) (4) (5)

(A) (B) (C)

(1) Product Symbol: Multilayer Chip Beads
(2) Dimensions: Length (A) x Width (B) x Thickness (C)
(3) Material Code: Z, U, G, B, L
(4) Impedance: abc=ab x 10^c Ω
(5) Internal code

FEATURES

- ❑ High density packaging with a pitch of 2.54 mm（0.1 inch）max. is possible. This series requires less space and has greater EMI suppression effects.
- ❑ Different types with the same shape are available.
- ❑ Excellent solderability and high heat resistance for either flow or reflow soldering.
- ❑ Applicable to both flow and reflow soldering.
- ❑ High impedance cover wide frequency ranges.
- ❑ L material type can minimize attenuation of the signal waveform due to its sharp impedance characteristics.
- ❑ Dimensions are suitable for automatic mounting.
- ❑ Operating temperature range: -40℃ to +125℃
- ❑ The products have five types of material: Material L,B,G,U,Z

MATERIALS

ITEM		UNIT	STANDARD VALUE				
Material Code		—	L	B	G	U	Z
Initial permeability	μiac	—	25	45	110	200	500
Maximum Permeability	μM	—	125	125	250	450	900
Saturation Flux Density at 10 Oe	Bs	Gauss	2000	2000	1700	1400	1500
Curie Temperature	Tc	℃	>200	>200	>130	>130	>100
Volume Resistivity	ρ	Ω-m	10^5	10^5	10^5	10^5	10^5
Temperature Coefficient (Inductance)		10^{-4}/℃	10	10	12	13	5
Density		g/cm^3	4.8	4.8	4.8	4.8	4.8

• Z Material is for applications whose blocking region is near 100 MHz.
• L material, an improvement of B material, has sharp impedance characteristics at high frequency.
• G material is for application whose signal frequency is far from the cut off region.
• Suitable for application requires low insertion loss at high frequency.
• Different materials are available for different application range.

■ SMD Multi-Layer Ferrite Chip Beads

ELECTRICAL SPECIFICATION: 100505 TYPE

Part Number	Impedance At 100MHz (Ω) ±25%	DC Resistance (Ω) Max.	Rated Current (mA) Max.
FB100505U300-LRH	30	0.30	500
FB100505U600-LRH	60	0.40	200
FB100505U121-LRH	120	0.50	200
FB100505U221-LRH	220	0.70	100
FB100505U301-LRH	300	0.80	100
FB100505U451-LRH	450	0.90	100
FB100505U601-LRH	600	1.00	100
FB100505U102-LRH	1000	1.50	50
FB100505Z300-LRH	30	0.30	500
FB100505Z600-LRH	60	0.40	200
FB100505Z121-LRH	120	0.50	200
FB100505Z221-LRH	220	0.70	100
FB100505Z301-LRH	300	0.80	100
FB100505Z451-LRH	450	0.90	100
FB100505Z601-LRH	600	1.00	100
FB100505G300-LRH	30	0.30	500
FB100505G600-LRH	60	0.40	200
FB100505G121-LRH	120	0.50	200
FB100505G221-LRH	220	0.70	100
FB100505G301-LRH	300	0.80	100
FB100505G451-LRH	450	0.90	100
FB100505G601-LRH	600	1.00	100
FB100505G102-LRH	1000	1.30	100
FB100505B300-LRH	30	0.40	200
FB100505B600-LRH	60	0.50	200
FB100505B121-LRH	120	0.70	100
FB100505B221-LRH	220	0.90	100
FB100505B301-LRH	300	1.00	100

ELECTRICAL SPECIFICATION: 160808 TYPE

Part Number	Impedance At 100MHz (Ω) ±25%	DC Resistance (Ω) Max.	Rated Current (mA) Max.
FB160808Z600-LRH	60	0.20	300
FB160808Z800-LRH	80	0.20	300
FB160808Z121-LRH	120	0.20	200
FB160808Z221-LRH	220	0.20	200
FB160808Z301-LRH	300	0.35	200
FB160808Z451-LRH	450	0.40	250
FB160808Z601-LRH	600	0.45	200
FB160808Z102-LRH	1000	0.60	100
FB160808U090-LRH	9	0.20	500
FB160808U300-LRH	30	0.20	400
FB160808U600-LRH	60	0.20	300
FB160808U800-LRH	80	0.20	300
FB160808U121-LRH	120	0.20	200
FB160808U221-LRH	220	0.20	200
FB160808U301-LRH	300	0.35	200
FB160808U451-LRH	450	0.40	200
FB160808U601-LRH	600	0.45	200
FB160808U102-LRH	1000	0.60	100
FB160808G600-LRH	60	0.20	300
FB160808G800-LRH	80	0.20	300
FB160808G121-LRH	120	0.20	200
FB160808G221-LRH	220	0.20	200
FB160808G301-LRH	300	0.35	200
FB160808G451-LRH	450	0.40	200
FB160808G601-LRH	600	0.45	200

■ SMD Multi-Layer Ferrite Chip Beads

ELECTRICAL SPECIFICATION: 160808 TYPE

Part Number	Impedance At 100MHz (Ω) ±25%	DC Resistance (Ω) Max.	Rated Current (mA) Max.
FB160808G102-LRH	1000	0.60	100
FB160808G152-LRH	1500	0.70	50
FB160808G202-LRH	2000	0.80	50
FB160808G252-LRH	2500	1.00	50
FB160808B050-LRH	5	0.20	600
FB160808B400-LRH	40	0.30	300
FB160808B600-LRH	60	0.30	300
FB160808B800-LRH	80	0.30	200
FB160808B121-LRH	120	0.30	200
FB160808B181-LRH	180	0.35	200
FB160808B221-LRH	220	0.40	200
FB160808B301-LRH	300	0.45	200
FB160808B601-LRH	600	0.65	200
FB160808B102-LRH	1000	0.80	50
FB160808L150-LRH	15	0.30	200
FB160808L300-LRH	30	0.30	200
FB160808L600-LRH	60	0.30	200
FB160808L800-LRH	80	0.40	150
FB160808L121-LRH	120	0.40	150
FB160808L221-LRH	220	0.45	150
FB160808L301-LRH	300	0.60	100

ELECTRICAL SPECIFICATION: 201209 TYPE

Part Number	Impedance At 100MHz (Ω) ±25%	DC Resistance (Ω) Max.	Rated Current (mA) Max.
FB201209Z100-LRH	10	0.15	600
FB201209Z800-LRH	80	0.15	300
FB201209Z121-LRH	120	0.25	300
FB201209Z151-LRH	150	0.25	300
FB201209Z221-LRH	220	0.30	200
FB201209Z301-LRH	300	0.30	200
FB201209Z501-LRH	500	0.30	200
FB201209Z601-LRH	600	0.35	200
FB201209Z102-LRH	1000	0.45	200
FB201209U110-LRH	11	0.15	600
FB201209U320-LRH	32	0.15	400
FB201209U800-LRH	80	0.15	300
FB201209U121-LRH	120	0.25	300
FB201209U151-LRH	150	0.25	300
FB201209U221-LRH	220	0.30	200
FB201209U301-LRH	300	0.30	200
FB201209U501-LRH	500	0.30	200
FB201209U601-LRH	600	0.35	200
FB201209U102-LRH	1000	0.45	200
FB201209G800-LRH	80	0.15	300
FB201209G121-LRH	120	0.25	300
FB201209G151-LRH	150	0.25	300
FB201209G221-LRH	220	0.30	200
FB201209G301-LRH	300	0.30	200
FB201209G501-LRH	500	0.30	200
FB201209G601-LRH	600	0.35	200
FB201209G102-LRH	1000	0.45	200
FB201209G152-LRH	1500	0.55	200
FB201209G202-LRH	2000	0.60	200
FB201209G222-LRH	2200	0.80	200

■ SMD Multi-Layer Ferrite Chip Beads

ELECTRICAL SPECIFICATION: 201209 TYPE

Part Number	Impedance At 100MHz (Ω) ±25%	DC Resistance (Ω) Max.	Rated Current (mA) Max.
FB201209G272-LRH	2700	0.80	200
FB201209B070-LRH	7	0.15	600
FB201209B400-LRH	40	0.20	300
FB201209B800-LRH	80	0.20	300
FB201209B121-LRH	120	0.25	200
FB201209B221-LRH	220	0.35	200
FB201209B301-LRH	300	0.40	200
FB201209B601-LRH	600	0.50	200
FB201209B102-LRH	1000	0.60	200

ELECTRICAL SPECIFICATION: 321611 TYPE

Part Number	Impedance At 100MHz (Ω) ±25%	DC Resistance (Ω) Max.	Rated Current (mA) Max.
FB321611Z260-LRH	26	0.20	500
FB321611Z151-LRH	150	0.30	300
FB321611Z301-LRH	300	0.30	300
FB321611Z601-LRH	600	0.30	200
FB321611Z122-LRH	1200 (at 50 MHz)	0.50	100
FB321611Z202-LRH	2000 (at 30 MHz)	0.60	100
FB321611U310-LRH	31	0.20	500
FB321611U600-LRH	60	0.30	400
FB321611U900-LRH	90	0.30	300
FB321611U151-LRH	150	0.30	300
FB321611U301-LRH	300	0.30	300
FB321611U601-LRH	600	0.30	200
FB321611U122-LRH	1200 (at 50 MHz)	0.50	100
FB321611U152-LRH	1500 (at 50 MHz)	0.50	100
FB321611U202-LRH	2000 (at 30 MHz)	0.60	100
FB321611G151-LRH	150	0.30	300
FB321611G301-LRH	300	0.30	300
FB321611G601-LRH	600	0.30	200
FB321611B190-LRH	19	0.20	500

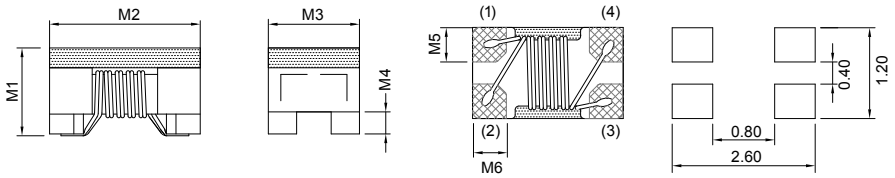
ELECTRICAL SPECIFICATION: 322513, 451616, 453225 TYPE

Part Number	Impedance At 100MHz (Ω) ±25%	DC Resistance (Ω) Max.	Rated Current (mA) Max.
FB322513Z520-LRH	52	0.30	400
FB322513U600-LRH	60	0.30	400
FB322513U900-LRH	90	0.30	300
FB322513B310-LRH	31	0.30	400
FB451616Z800-LRH	80	0.10	500
FB451616Z151-LRH	150	0.30	300
FB451616U600-LRH	60	0.10	500
FB451616U151-LRH	150	0.30	300
FB453215Z121-LRH	120	0.30	300
FB453215U131-LRH	130	0.30	300
FB453215B700-LRH	70	0.30	300

■ SMD Balun Transformer

MECHANICAL DIMENSIONS

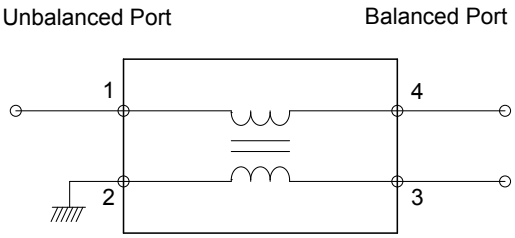
BIH2012OB



unit: mm

TYPE	M1	M2	M3	M4	M5	M6
BIH2012OB	1.2±0.2	2.0±0.2	1.2±0.2	0.17	0.40 Typ.	0.45 Typ.

EQUIVALENT CIRCUIT



FEATURES

- ❑ Input impedance is 50Ω or 75Ω.
- ❑ Impedance ration is 1:1
- ❑ Frequency band width is 40MHz to 1.8GHz
- ❑ RoHs compliant and Halogen Free.

ELECTRICAL SPECIFICATION

Part Number	UB/B Impedance (Ω)	Insulation (M OHM) Min.	Withstand Voltage (DCV)	DCR (Ω) Max.	Rated Voltage (DCV)	Rated Current (mA)	Frequency Range	Insertion Loss at Freq.Range (dB) Max.
BIH2012OB-001H	50/50	10	125	0.35	50	330	40MHz to 0.86GHz	2.5
BIH2012OB-002H	75/75	10	125	0.35	50	330	50MHz to 1.2GHz	1.2
BIH2012OB-003H	75/75	10	125	0.35	50	330	1.0GHz to 1.5GHz	1.4
BIH2012OB-004H	75/75	10	125	0.35	50	330	50MHz to 1.2GHz	1.2
BIH2012OB-005H	50/50	10	125	0.35	50	330	400MHz to 1.8GHz	2.2
BIH2012OB-006H	75/75	10	125	0.50	50	330	400MHz to 1.8GHz	2.0
BIH2012OB-007H	75/75	10	125	0.50	50	330	50MHz to 1.2GHz	1.2

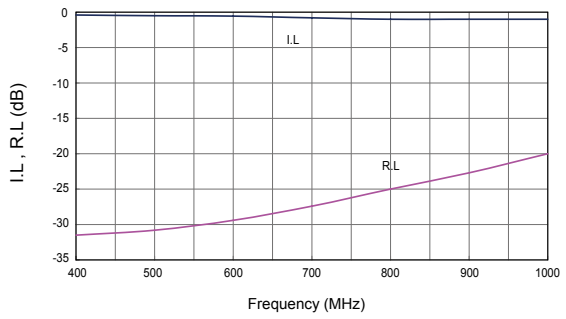
BIH2012OB Series

■ SMD Balun Transformer

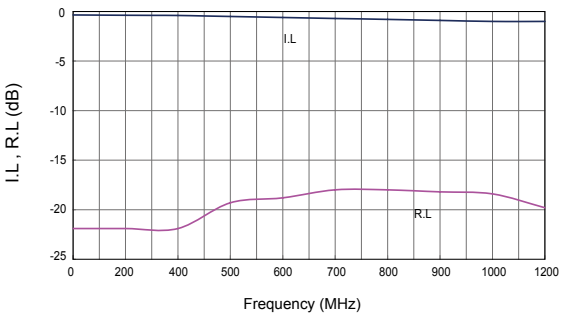
CHARACTERISTIC CURVE

BIH2012OB Series

BIH2012OB-001H



BIH2012OB-002H



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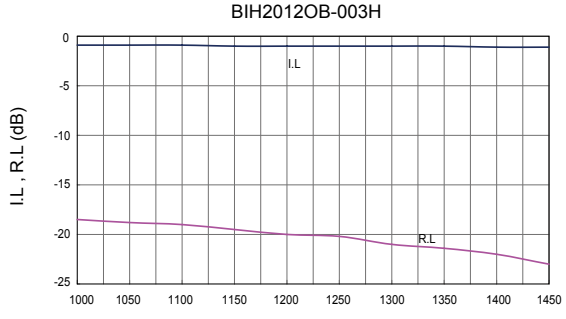
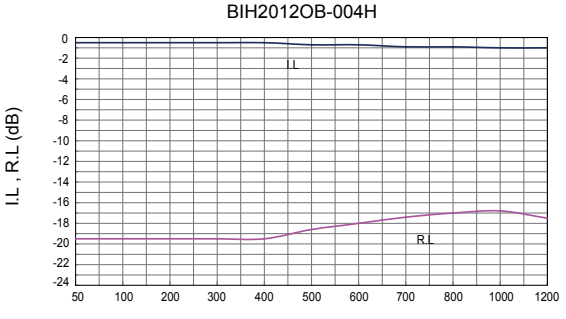


BIH2012OB-004H

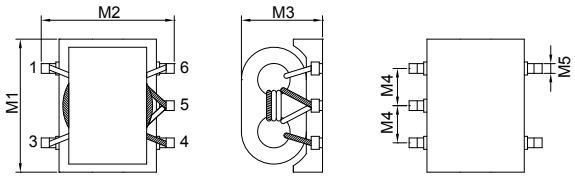


BIH2012OB-005H

■ SMD Balun Transformer

MECHANICAL DIMENSIONS

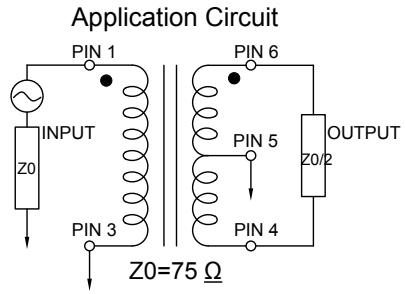
BIY3520UM-001H



unit: mm

TYPE	M1	M2	M3	M4	M5
BIY3520UM-001H	4.3±0.3	5.5±0.3	3.2±0.3	1.5±0.2	0.5±0.2

EQUIVALENT CIRCUIT



FEATURES

- ❑ Surface mount
- ❑ 2:1 Impedance ratio
- ❑ Centre tap on secondary
- ❑ Suitable for DOCSIS 3.0
- ❑ RoHS compliant
- ❑ Available on tape and reel

ELECTRICAL SPECIFICATION

INSERTION LOSS (Pin 1 – Pin 6)	0.7dB MAX. 5~85MHz
INSERTION LOSS (Pin 1 – Pin 4)	0.7dB MAX. 5~85MHz
AMPLITUDE BALANCE	±0.3dB MAX. 5~85MHz
PHASE BALANCE	±3.0° MAX. 5~85MHz
INPUT RETURN LOSS (Pin 1)	15.0dB MIN. 5~85MHz

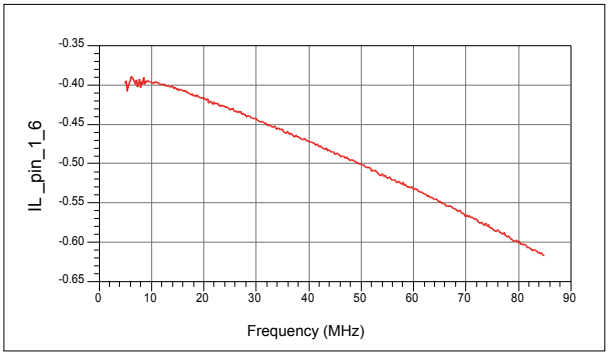
T_A=25℃ , Z_0=75Ω , P_{in}=0dBm

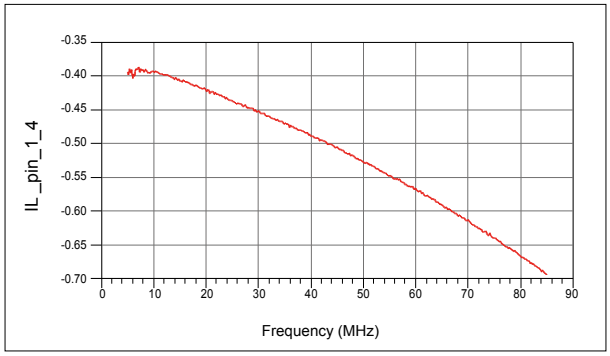
BIY3520UM-001H Series

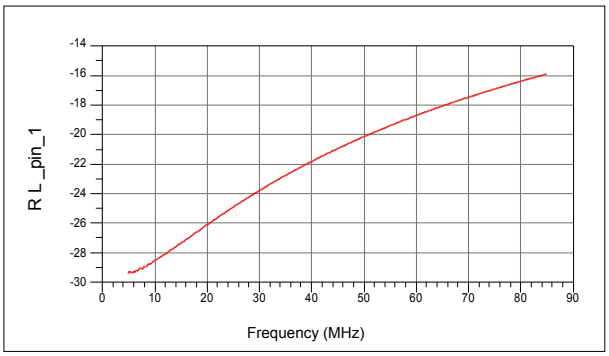
■ SMD Balun Transformer

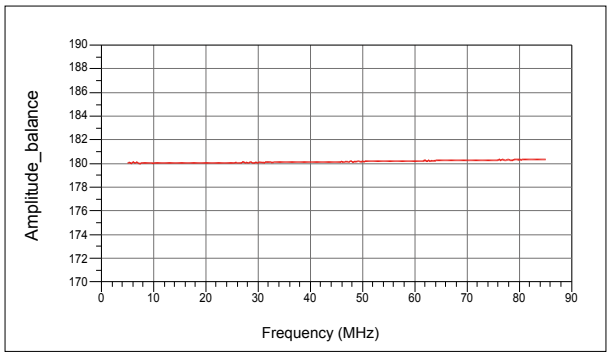
CHARACTERISTIC CURVE

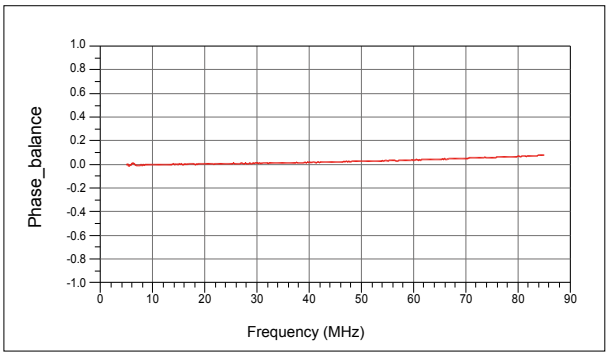
BIY3520UM-001H Series







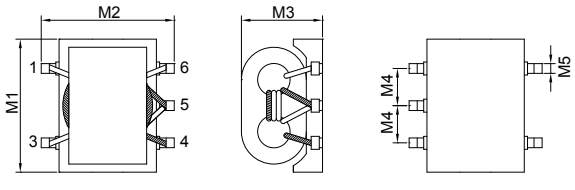




■ SMD Balun Transformer

MECHANICAL DIMENSIONS

BIY3520UM-002H

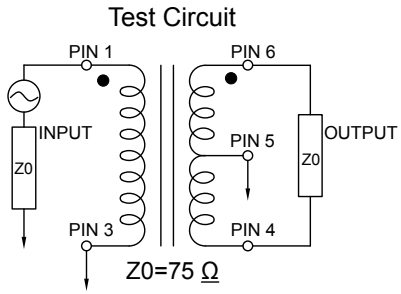


Recommended Patterns

unit: mm

TYPE	M1	M2	M3	M4	M5
BIY3520UM-002H	4.3±0.3	5.5±0.3	3.2±0.3	1.5±0.2	0.5±0.2

EQUIVALENT CIRCUIT



FEATURES

- ❑ Surface mount
- ❑ 1:1 Impedance ratio
- ❑ Centre tap on secondary
- ❑ Suitable for DOCSIS 3.0
- ❑ 260℃ reflow compatible
- ❑ RoHS compliant
- ❑ Available on tape and reel

ELECTRICAL SPECIFICATION

INSERTION LOSS	1.0dB MAX. 5~200MHz
AMPLITUDE BALANCE (Nominal 0dB)	±0.4dB MAX. 5~200MHz
PHASE BALANCE (Nominal 180°)	±4.0° MAX. 5~200MHz
INPUT RETURN LOSS	14.0dB MIN. 5~200MHz
INSERTION LOSS	1.0dB MAX. 5~200MHz

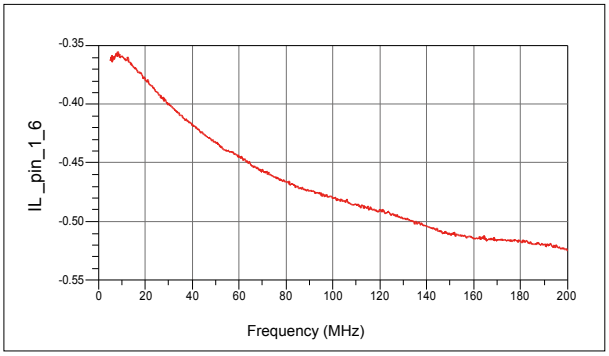
T_A=25℃ , Z_0=75Ω , P_{in}=0dBm

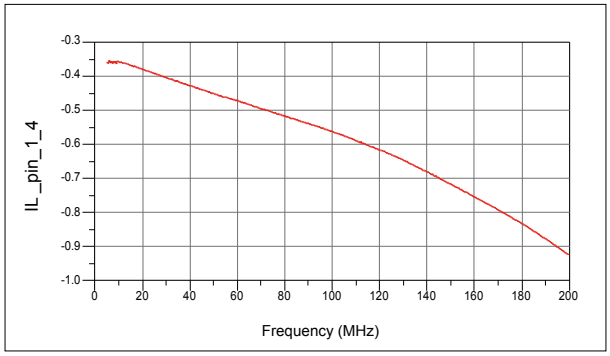
BIY3520UM-002H Series

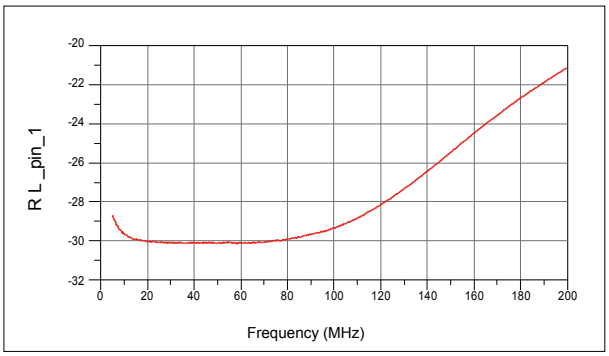
■ SMD Balun Transformer

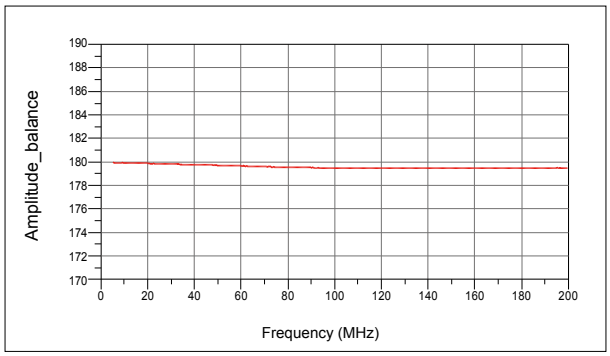
CHARACTERISTIC CURVE

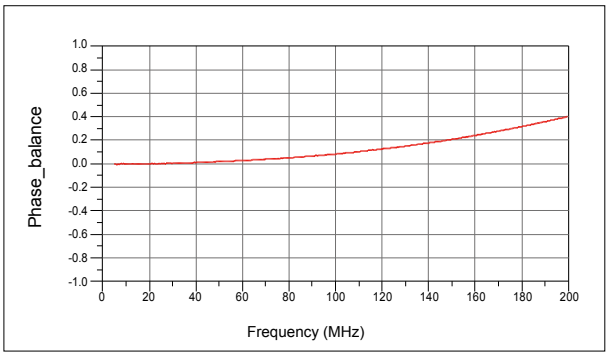
BIY3520UM-002H Series







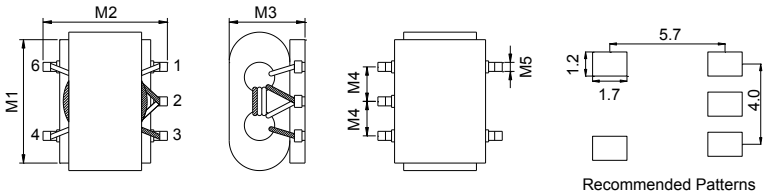




■ SMD Balun Transformer

MECHANICAL DIMENSIONS

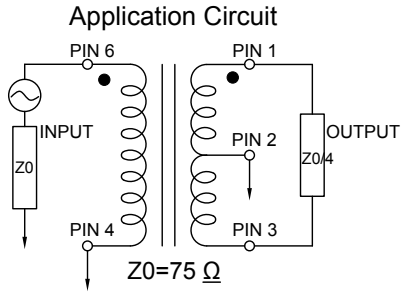
BIY6230PM-001H



unit: mm

TYPE	M1	M2	M3	M4	M5
BIY6230PM-001H	6.8 Max.	6.6 Max.	4.7 Max.	2.0±0.3	0.6±0.15

EQUIVALENT CIRCUIT



FEATURES

- ❑ Surface mount
- ❑ 4:1 Impedance ratio
- ❑ 260℃ reflow compatible
- ❑ RoHS compliant
- ❑ Available on tape and reel

ELECTRICAL SPECIFICATION

INSERTION LOSS 1 (Pin 6 – Pin 1)	3.1dB MAX. 5~200MHz
INSERTION LOSS 2 (Pin 6 – Pin 3)	3.6dB MAX. 5~200MHz
AMPLITUDE BALANCE	±1.4dB MAX. 5~200MHz
PHASE BALANCE	±9.0° MAX. 5~200MHz
INPUT RETURN LOSS (Pin 6)	3.0dB MIN. 5~200MHz

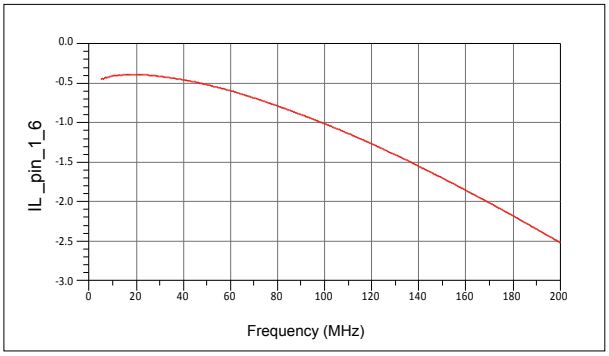
T_A=25℃ , Z_0=75Ω , P_{in}=0dBm

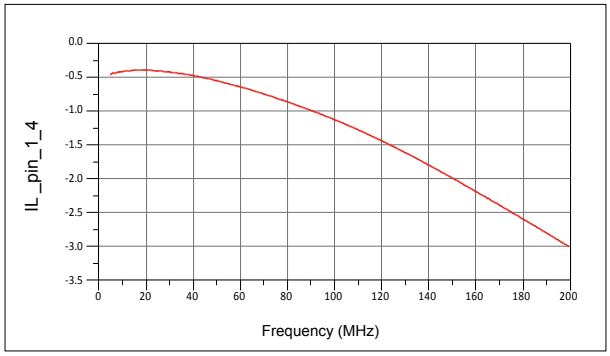
BIY6230PM-001H Series

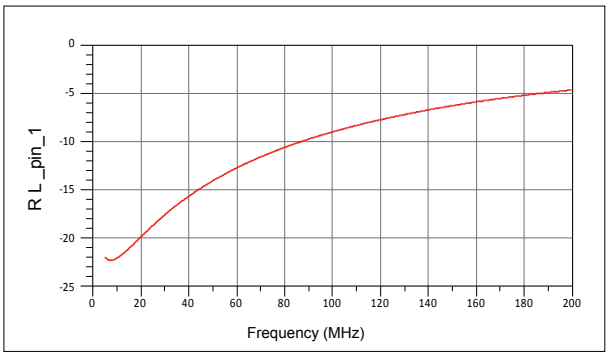
■ SMD Balun Transformer

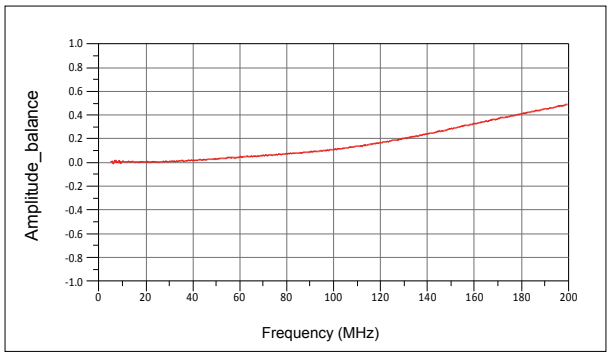
CHARACTERISTIC CURVE

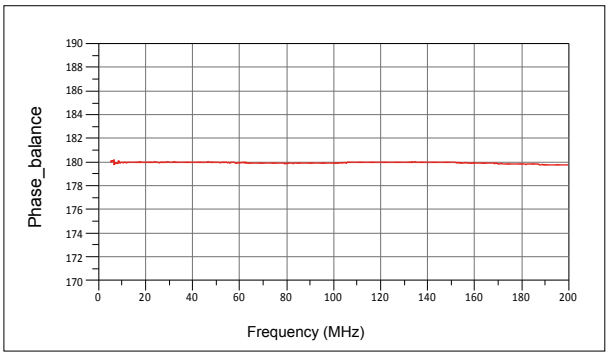
BIY6230PM-001H Series







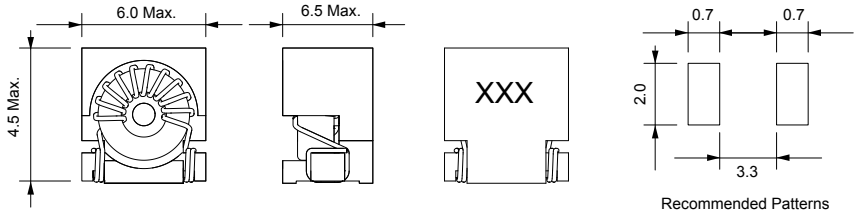




■ RF Signal Choke

MECHANICAL DIMENSIONS

OI0604DV



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Marking	Inductance (nH)	Q Min.	Test Freq.
OI0604DV-R15☐H	R15	150	80	40MHz
OI0604DV-R18☐H	R18	180	80	40MHz
OI0604DV-R27☐H	R27	270	80	40MHz
OI0604DV-R33☐H	R33	330	80	40MHz

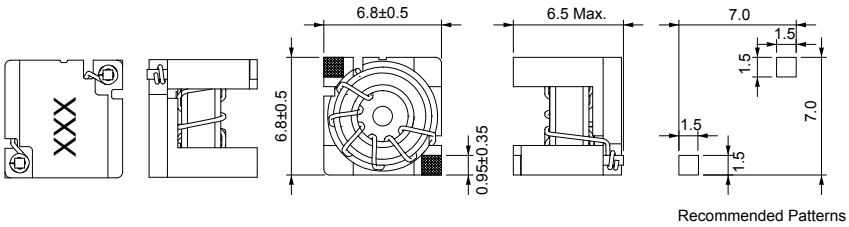
- Tolerance: H=±3%； J=±5%；K=±10%
- Operating Temp.: -25℃ to +85℃
- Inductance measured using the HP4291B or HP4287A
- Q measured using the HP4291B or HP4287A
- Test Fixture: HP16193A

APPLICATIONS

❑ LC filter，for CATV diplex filter.

MECHANICAL DIMENSIONS

OI0707BI



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Marking	Inductance (nH)	Inductance Tolerance	Q Min.	Test Freq.
OI0707BI-R20☐H	200	200	G, J, K	100	40 MHz
OI0707BI-R22☐H	220	220	G, J, K	100	40 MHz
OI0707BI-R24☐H	240	240	G, J, K	100	40 MHz
OI0707BI-R30☐H	300	300	G, J, K	100	40 MHz
OI0707BI-R33☐H	330	330	G, J, K	100	40 MHz
OI0707BI-R43☐H	430	430	G, J, K	100	40 MHz

- Tolerance: G=±2%；J=±5%；K=±10%
- Operating Temp.: -40℃ to +125℃
- Inductance measured using the HP4291B or HP4287A
- Q measured using the HP4291B or HP4287A
- Test Fixture: HP16092A or HP16193A

APPLICATIONS

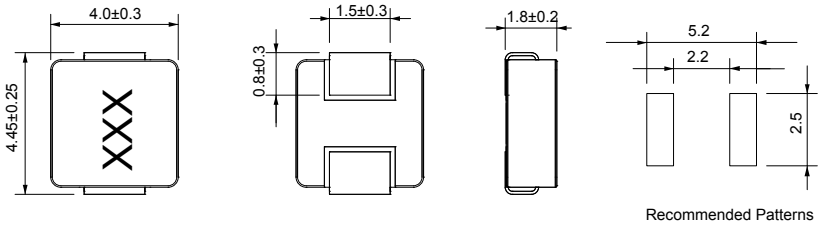
❑ LC filter，for CATV diplex filter.

MCS0420 Series (SHIELDED)

■ High Current Molding Power Choke

MECHANICAL DIMENSIONS

MCS0420



unit: mm

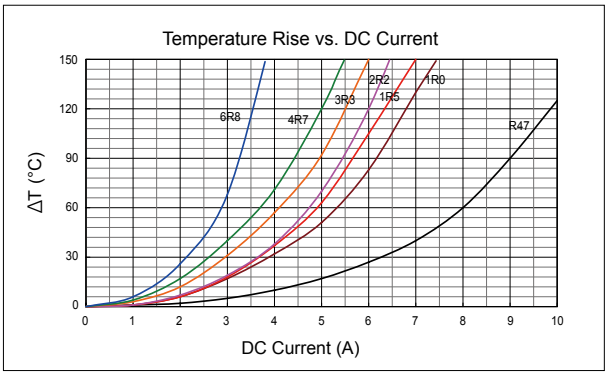
ELECTRICAL SPECIFICATION

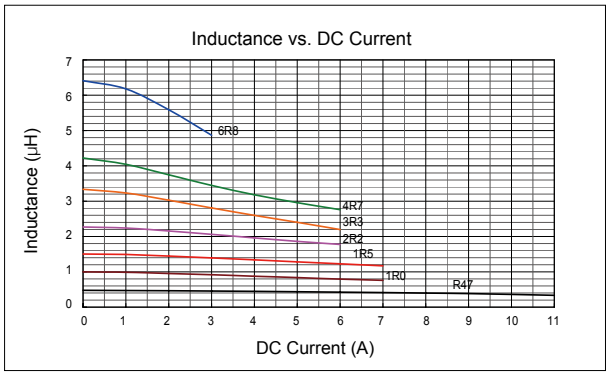
Part Number	Marking	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Typ.	DCR (mΩ) Max.	Rated Current (A) Typ.	Isat (A) Typ.
MCS0420-R47MN2	R47	0.47	M	100	12.5	14.0	7.0	9.5
MCS0420-1R0MN2	1R0	1.0	M	100	24.0	27.0	4.5	7.0
MCS0420-1R5MN2	1R5	1.5	M	100	38.0	46.0	4.0	6.0
MCS0420-2R2MN2	2R2	2.2	M	100	52.0	58.0	3.0	5.0
MCS0420-3R3MN2	3R3	3.3	M	100	74.0	87.0	2.5	4.0
MCS0420-4R7MN2	4R7	4.7	M	100	92.0	105.0	2.2	3.0
MCS0420-6R8MN2	6R8	6.8	M	100	162.0	178.0	2.0	2.1

- Tolerance: M=±20%；N=±30%
- All test data is referenced to 25℃ ambient
- Operating Temperature Range -55℃ to +125℃
- Rated current (A) that will cause an approximate △T of 40℃
- Isat (A) that will cause Lo to drop approximately 30%
- The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.
- Test Instrument: Chroma16502, Chroma11300

CHARACTERISTIC CURVE

MCS0420 Series





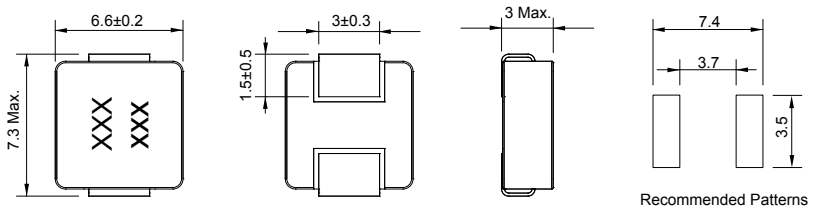
SMD

Leaded

■ High Current Molding Power Choke

MECHANICAL DIMENSIONS

MCS0630



unit: mm

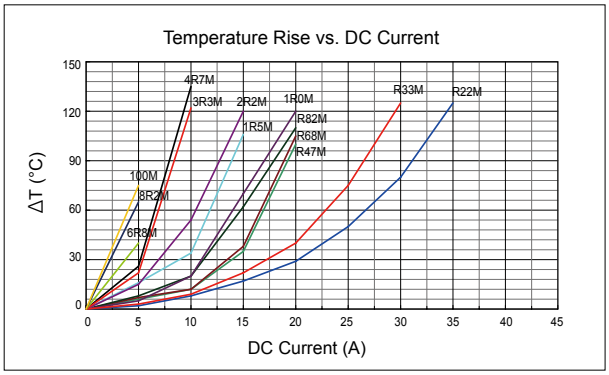
ELECTRICAL SPECIFICATION

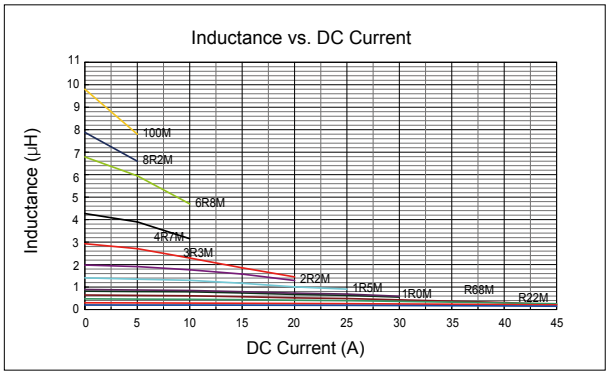
Part Number	Marking	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Typ.	DCR (mΩ) Max.	Rated Current (A) Typ.	Isat (A) Typ.
MCS0630-R22MN2	R22	0.22	M	100	2.50	2.80	23.0	40.0
MCS0630-R33MN2	R33	0.33	M	100	3.50	3.90	20.0	30.0
MCS0630-R47MN2	R47	0.47	M	100	4.00	4.20	17.5	26.0
MCS0630-R56MN2	R56	0.56	M	100	4.70	5.00	16.5	25.5
MCS0630-R68MN2	R68	0.68	M	100	5.00	5.50	15.5	25.0
MCS0630-R82MN2	R82	0.82	M	100	6.70	8.00	13.0	20.0
MCS0630-1R0MN2	1R0	1.00	M	100	9.00	10.0	11.0	20.0
MCS0630-1R5MN2	1R5	1.50	M	100	14.0	15.0	9.00	16.0
MCS0630-2R2MN2	2R2	2.20	M	100	17.0	20.0	8.00	12.0
MCS0630-3R3MN2	3R3	3.30	M	100	28.0	30.0	6.00	10.0
MCS0630-4R7MN2	4R7	4.70	M	100	37.0	40.0	5.50	7.00
MCS0630-6R8MN2	6R8	6.80	M	100	54.0	60.0	4.50	6.50
MCS0630-8R2MN1	8R2	8.20	M	100	54.0	60.0	4.50	6.50
MCS0630-100MN1	100	10.0	M	100	62.0	68.0	4.00	5.50
MCS0630-150MN1	150	15.0	M	100	120.0	160.0	2.0	4.0
MCS0630-220MCC	220	22.0	M	100	165.0	190.0	2.0	3.5

- Tolerance: M=±20%；N=±30%
- All test data is referenced to 25℃ ambient
- Operating Temperature Range -55℃ to +125℃
- Rated current (A) that will cause an approximate △T of 40℃
- Isat (A) that will cause Lo to drop approximately 30%
- The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.
- Test Instrument: Chroma16502, Chroma11300

CHARACTERISTIC CURVE

MCS0630 Series



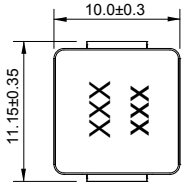


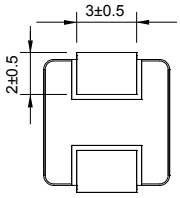
MCS1040 Series (SHIELDED)

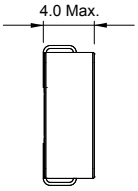
■ High Current Molding Power Choke

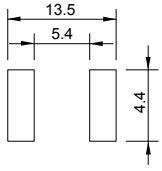
MECHANICAL DIMENSIONS

MCS1040









Recommended Patterns

unit: mm

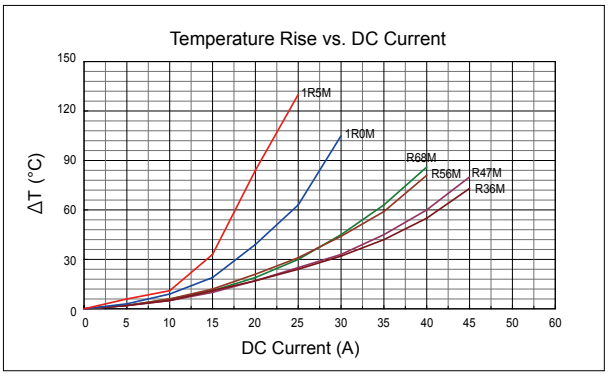
ELECTRICAL SPECIFICATION

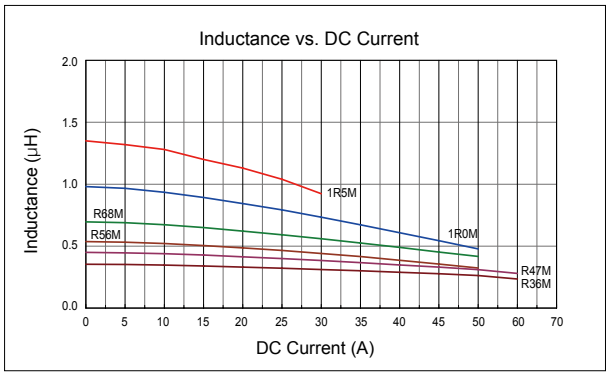
Part Number	Marking	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Typ.	DCR (mΩ) Max.	Rated Current (A) Typ.	Isat (A) Typ.
MCS1040-R22MN1	R22	0.22	M	100	0.80	1.00	35.0	50.0
MCS1040-R36MN1	R36	0.36	M	100	1.10	1.20	34.0	40.0
MCS1040-R47MN1	R47	0.47	M	100	1.30	1.55	25.0	35.0
MCS1040-R56MN1	R56	0.56	M	100	1.60	1.80	25.0	32.0
MCS1040-R68MN1	R68	0.68	M	100	2.40	2.70	22.0	30.0
MCS1040-1R0MN1	1R0	1.00	M	100	3.00	3.30	18.0	28.0
MCS1040-1R5MN1	1R5	1.50	M	100	3.80	4.20	16.0	21.0
MCS1040-2R2MN1	2R2	2.20	M	100	6.70	7.00	12.0	18.0
MCS1040-3R3MN1	3R3	3.30	M	100	10.8	11.8	10.0	16.0
MCS1040-4R7MN1	4R7	4.70	M	100	17.0	20.0	8.50	15.0
MCS1040-6R8MN1	6R8	6.80	M	100	22.5	25.0	6.50	9.00
MCS1040-100MN1	100	10.0	M	100	27.0	30.0	7.50	8.50
MCS1040-150MCC	150	15.0	M	100	40.0	45.0	6.25	7.00
MCS1040-220MCC	220	22.0	M	100	60.0	66.0	5.00	5.50
MCS1040-330MCC	330	33.0	M	100	85.0	92.0	4.40	5.00
MCS1040-470MCC	470	47.0	M	100	130.0	145.0	3.30	3.50

- Tolerance: M=±20%；N=±30%
- All test data is referenced to 25℃ ambient
- Operating Temperature Range -55℃ to +125℃
- Rated current (A) that will cause an approximate △T of 40℃
- Isat (A) that will cause Lo to drop approximately 30%
- The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.
- Test Instrument: Chroma16502, Chroma11300

CHARACTERISTIC CURVE

MCS1040 Series

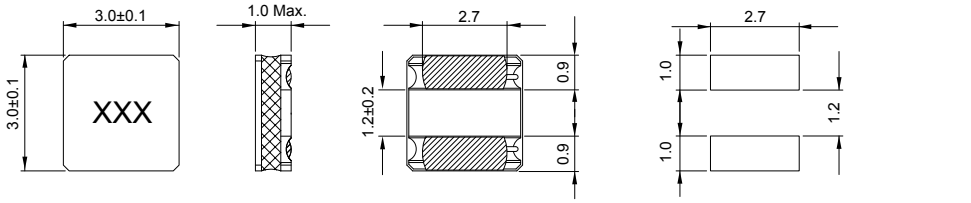




■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSM0310D



Recommended Patterns

unit: mm

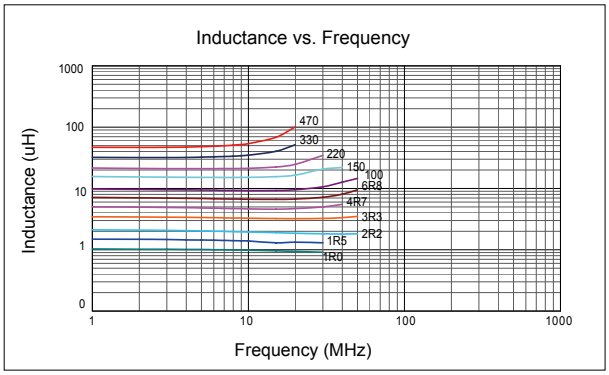
ELECTRICAL SPECIFICATION

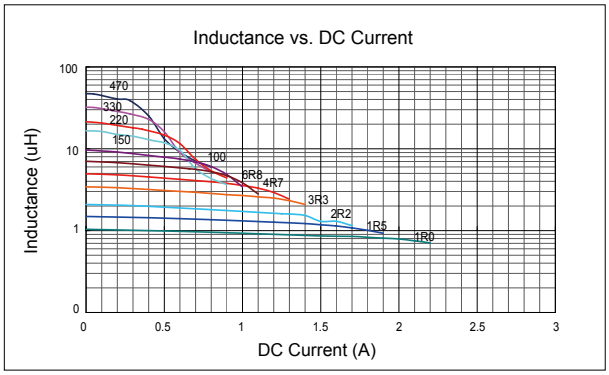
Part Number	Marking	Inductance (μH)	Test Freq. (MHz)	DCR (Ω) Max.	Isat (A) Max.	Irms (A) Max.	Inductance Tolerance
CSM0310D-1R0N-LRH	1R0	1.00	1	0.078	1.70	1.525	
CSM0310D-1R5N-LRH	1R5	1.50	1	0.096	1.40	1.470	
CSM0310D-2R2M-LRH	2R2	2.20	1	0.114	1.25	1.270	
CSM0310D-2R7M-LRH	2R7	2.70	1	0.169	1.00	1.020	
CSM0310D-3R3M-LRH	3R3	3.30	1	0.192	0.90	1.130	
CSM0310D-3R6M-LRH	3R6	3.60	1	0.215	0.95	0.900	
CSM0310D-4R7M-LRH	4R7	4.70	1	0.228	0.85	0.925	
CSM0310D-5R6M-LRH	5R6	5.60	1	0.342	0.72	0.820	
CSM0310D-6R8M-LRH	6R8	6.80	1	0.360	0.66	0.710	M:±20% N:±30%
CSM0310D-100M-LRH	100	10.0	1	0.540	0.53	0.630	
CSM0310D-150M-LRH	150	15.0	1	0.888	0.42	0.475	
CSM0310D-180M-LRH	180	18.0	1	0.793	0.42	0.470	
CSM0310D-220M-LRH	220	22.0	1	1.176	0.36	0.430	
CSM0310D-270M-LRH	270	27.0	1	1.404	0.30	0.350	
CSM0310D-330M-LRH	330	33.0	1	1.860	0.28	0.345	
CSM0310D-390M-LRH	390	39.0	1	2.275	0.28	0.280	
CSM0310D-470M-LRH	470	47.0	1	2.400	0.24	0.270	

- Tolerance: N=± 30% ; M=± 20%
- Test Equipment:
  L/Q: CHROMA CH-3302, HP 4286A or equivalent.
  RDC: CHROMA 16502 or equivalent.
- Isat: Based on Inductance decrease 30% (at 20℃)
- Irms: Based on Temperature increase 40℃ (at 20℃)
- Operating temperature Range: -40℃ to +125℃ (Including self-temperature rise)
- Storage Temp.: -40℃ to +85℃

CHARACTERISTIC CURVE

CSM0310D Series



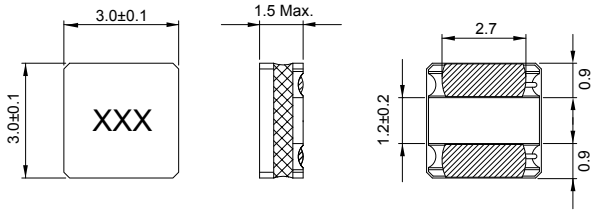


CSM0315D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSM0315D



Recommended Patterns

unit: mm

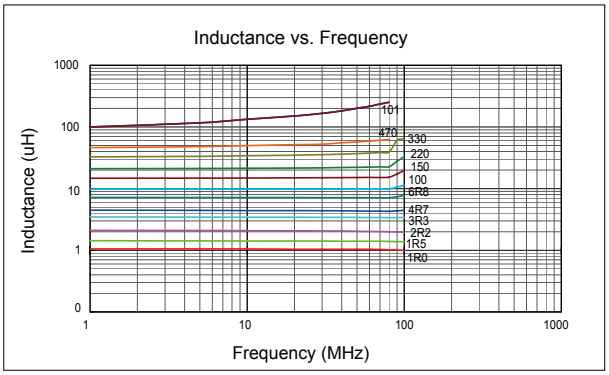
ELECTRICAL SPECIFICATION

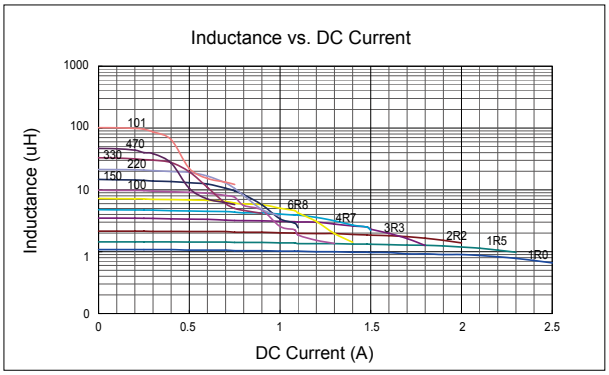
Part Number	Marking	Inductance (μH)	Test Freq. (MHz)	DCR (Ω) Max.	Isat (A) Max.	Irms (A) Max.	Inductance Tolerance
CSM0315D-1R0N-LRH	1R0	1.00	1	0.048	2.10	2.10	
CSM0315D-1R5N-LRH	1R5	1.50	1	0.066	1.80	1.90	
CSM0315D-1R8M-LRH	1R8	1.80	1	0.065	1.75	1.70	
CSM0315D-2R2M-LRH	2R2	2.20	1	0.072	1.48	1.60	
CSM0315D-3R3M-LRH	3R3	3.30	1	0.112	1.21	1.45	
CSM0315D-4R7M-LRH	4R7	4.70	1	0.136	1.08	1.25	
CSM0315D-5R1M-LRH	5R1	5.10	1	0.1625	1.08	1.09	
CSM0315D-6R8M-LRH	6R8	6.80	1	0.211	0.90	0.90	
CSM0315D-100M-LRH	100	10.0	1	0.267	0.75	0.87	M:±20% N:±30%
CSM0315D-120M-LRH	120	12.0	1	0.416	0.70	0.68	
CSM0315D-150M-LRH	150	15.0	1	0.422	0.58	0.65	
CSM0315D-180M-LRH	180	18.0	1	0.559	0.56	0.59	
CSM0315D-220M-LRH	220	22.0	1	0.598	0.47	0.55	
CSM0315D-330M-LRH	330	33.0	1	0.959	0.39	0.45	
CSM0315D-470M-LRH	470	47.0	1	1.406	0.32	0.40	
CSM0315D-560M-LRH	560	56.0	1	1.664	0.33	0.34	
CSM0315D-101M-LRH	101	100	1	2.920	0.23	0.25	

- Tolerance: N=± 30% ; M=± 20%
- Test Equipment:
  L/Q: CHROMA CH-3302, HP 4286A or equivalent.
  RDC: CHROMA 16502 or equivalent.
- Isat: Based on Inductance decrease 30% (at 20℃)
- Irms: Based on Temperature increase 40℃ (at 20℃)
- Operating temperature Range: -40℃ to +125℃ (Including self-temperature rise)
- Storage Temp.: -40℃ to +85℃

CHARACTERISTIC CURVE

CSM0315D Series

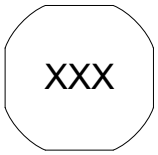




■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSM0645D



Recommrnded Patterns

unit: mm

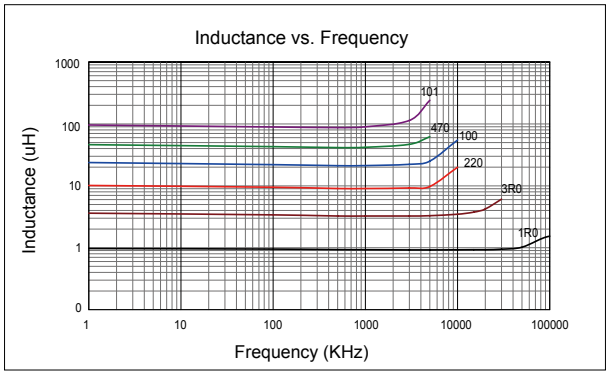
ELECTRICAL SPECIFICATION

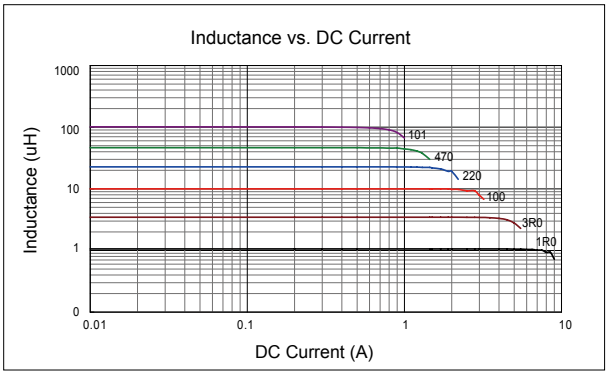
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ)	Isat (A)	Irms (A)	SRF (MHz)	Inductance Tolerance
				Max.	Max.	Max.	Min.	
CSM0645D-1R0N-LRH	1R0	1.0	100	18.2	8.50	6.00	110	
CSM0645D-1R3N-LRH	1R3	1.3	100	20.8	8.00	5.20	95	
CSM0645D-1R8N-LRH	1R8	1.8	100	23.4	7.00	5.00	80	±30%
CSM0645D-2R3N-LRH	2R3	2.3	100	27.3	6.00	4.50	60	
CSM0645D-3R0N-LRH	3R0	3.0	100	31.2	5.00	4.00	45	
CSM0645D-4R5M-LRH	4R5	4.5	100	40.3	4.00	3.70	25	
CSM0645D-6R3M-LRH	6R3	6.3	100	49.4	3.80	3.50	15	
CSM0645D-100M-LRH	100	10	100	61.1	3.00	2.80	12	
CSM0645D-150M-LRH	150	15	100	100.1	2.30	2.30	10	
CSM0645D-220M-LRH	220	22	100	149.5	1.90	1.70	7.0	±20%
CSM0645D-330M-LRH	330	33	100	188.5	1.50	1.50	6.0	
CSM0645D-470M-LRH	470	47	100	286.0	1.30	1.30	5.0	
CSM0645D-680M-LRH	680	68	100	429.0	1.00	1.00	4.0	
CSM0645D-820M-LRH	820	82	100	533.0	0.90	0.90	3.5	
CSM0645D-101M-LRH	101	100	100	650.0	0.80	0.80	3.0	

- Tolerance: N=± 30%, M=± 20%
- Test Equipment:
  L/Q: CHROMA-3302.
  SRF: HP-4291B or equivalent.
  RDC: CH16502 or equivalent.
- Isat: Based on Inductance decrease 30% (at 20℃)
- Irms: Based on Temperature increase 40℃ (at 20℃)
- Operating temperature range: -25℃ to +120℃ (Including self-temperature rise)
- Storage Temp.: -40℃ to +85℃

CHARACTERISTIC CURVE

CSM0645D Series



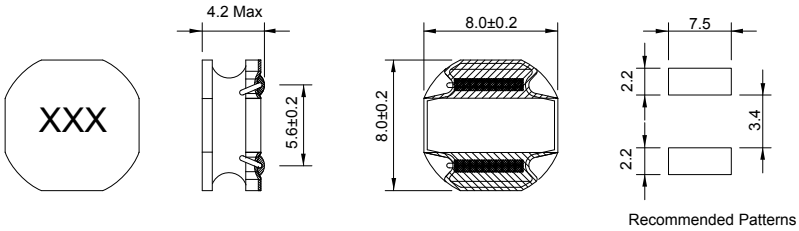


CSM0840D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSM0840D



unit: mm

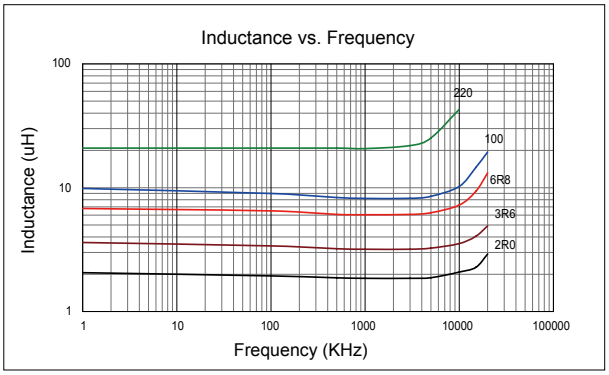
ELECTRICAL SPECIFICATION

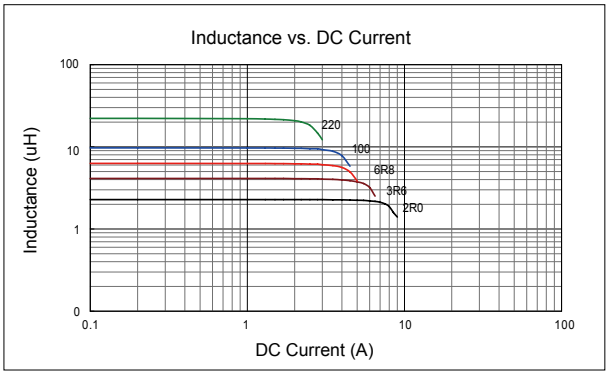
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Isat (A) Max.	Irms (A) Max.	SRF (MHz) Min.	Inductance Tolerance
CSM0840D-R90N-LRH	R90	0.90	100	7.80	12.0	8.00	85.0	±30%
CSM0840D-1R4N-LRH	1R4	1.40	100	9.10	10.8	7.80	63.0	
CSM0840D-2R0N-LRH	2R0	2.00	100	11.7	9.00	7.40	50.0	
CSM0840D-2R2N-LRH	2R2	2.20	100	15.6	7.50	6.00	41.0	
CSM0840D-3R3N-LRH	3R3	3.30	100	19.5	7.00	5.10	27.0	
CSM0840D-3R6N-LRH	3R6	3.60	100	19.5	6.00	4.90	34.0	
CSM0840D-4R7N-LRH	4R7	4.70	100	23.4	5.50	4.60	30.0	
CSM0840D-6R8N-LRH	6R8	6.80	100	31.2	5.00	4.40	24.0	
CSM0840D-100M-LRH	100	10.0	100	45.0	4.00	3.80	22.0	±20%
CSM0840D-150M-LRH	150	15.0	100	61.1	3.00	2.80	16.0	
CSM0840D-220M-LRH	220	22.0	100	89.7	2.80	2.60	13.0	
CSM0840D-330M-LRH	330	33.0	100	126.1	2.00	1.80	12.0	
CSM0840D-470M-LRH	470	47.0	100	176.8	1.90	1.75	8.00	
CSM0840D-680M-LRH	680	68.0	100	254.8	1.70	1.45	7.00	
CSM0840D-101M-LRH	101	100	100	377.0	1.10	1.10	6.00	

- Tolerance: N=± 30%, M=± 20%
- Test Equipment:
  L/Q: CHROMA-3302.
  SRF: HP-4291B or equivalent.
  RDC: CH16502 or equivalent.
- Isat: Based on Inductance decrease 30% (at 20℃)
- Irms: Based on Temperature increase 40℃ (at 20℃)
- Operating temperature range: -25℃ to +120℃ (Including self-temperature rise)
- Storage Temp.: -40℃ to +85℃

CHARACTERISTIC CURVE

CSM0840D Series





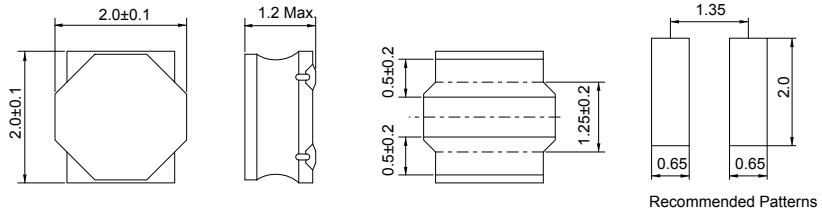
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMV2012D



unit: mm

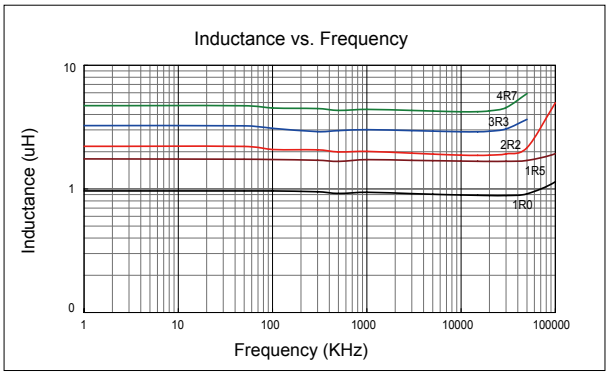
ELECTRICAL SPECIFICATION

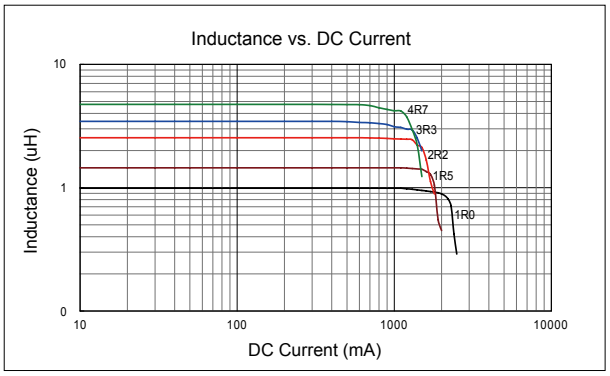
Part Number	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)			
				Saturation Current Idc1 (Typ.)	Temperature Rise Current Idc2 (Typ.)	Saturation Current Idc1 (Max.)	Temperature Rise Current Idc2 (Max.)
CSMV2012D-1R0N-LRH	1.0	±30%	0.073	2350	1830	2200	1650
CSMV2012D-1R5N-LRH	1.5	±30%	0.100	1950	1550	1800	1400
CSMV2012D-2R2M-LRH	2.2	±20%	0.129	1700	1350	1600	1200
CSMV2012D-3R3M-LRH	3.3	±20%	0.227	1350	1040	1250	900
CSMV2012D-4R7M-LRH	4.7	±20%	0.325	1150	850	1100	750

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller.
- MSL: Level 1

CHARACTERISTIC CURVE

CSMV2012D Series



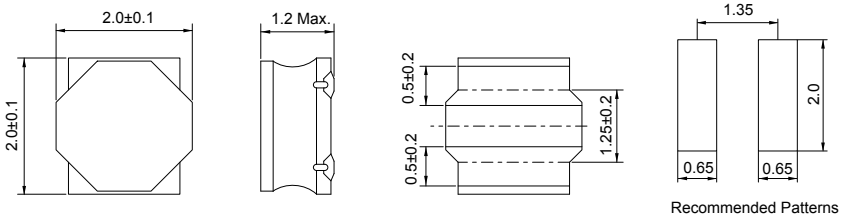


CSMS2012D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS2012D



Recommended Patterns

unit: mm

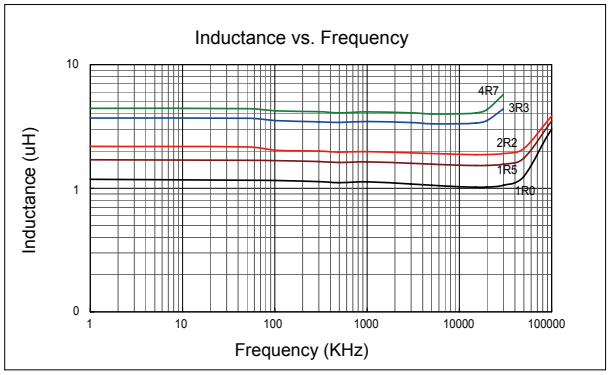
ELECTRICAL SPECIFICATION

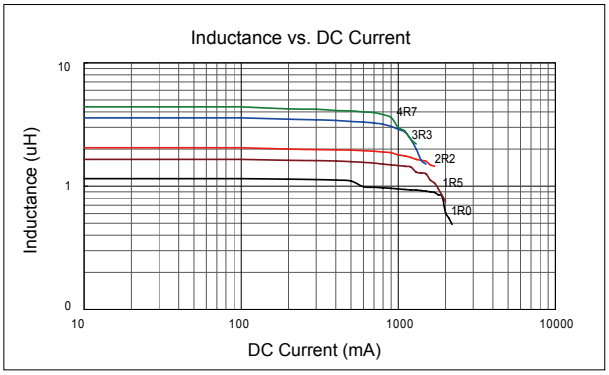
Part Number	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)			
				Saturation Current Idc1 (Typ.)	Temperature Rise Current Idc2 (Typ.)	Saturation Current Idc1 (Max.)	Temperature Rise Current Idc2 (Max.)
CSMS2012D-1R0N-LRH	1.0	±30%	0.070	2050	1850	1900	1700
CSMS2012D-1R5N-LRH	1.5	±30%	0.090	1800	1650	1650	1500
CSMS2012D-2R2M-LRH	2.2	±20%	0.107	1500	1500	1350	1370
CSMS2012D-3R3M-LRH	3.3	±20%	0.190	1150	1100	1000	1020
CSMS2012D-4R7M-LRH	4.7	±20%	0.241	1050	1000	900	910

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS2012D Series





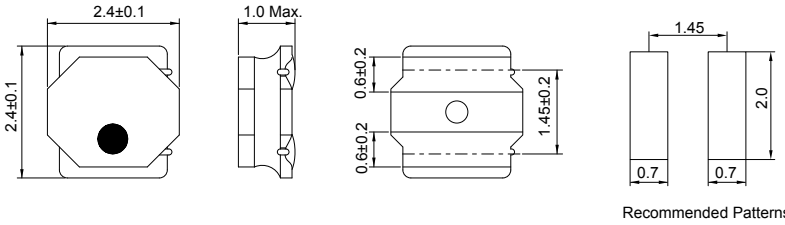
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMH2410D



unit: mm

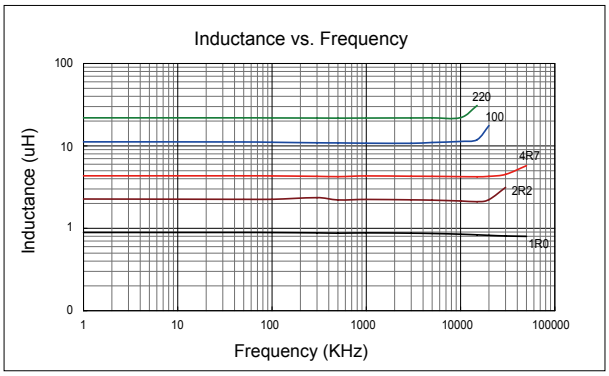
ELECTRICAL SPECIFICATION

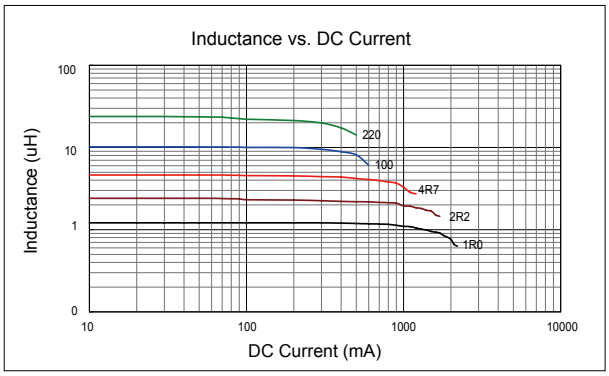
Part Number	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
				Saturation Current Idc1	Temperature Rise Current Idc2	
CSMH2410D-R68N-LRH	0.68	±30%	0.06	2200	1570	120
CSMH2410D-1R0N-LRH	1.00	±30%	0.07	1800	1410	106
CSMH2410D-1R5M-LRH	1.50	±20%	0.11	1550	1160	94
CSMH2410D-2R2M-LRH	2.20	±20%	0.15	1290	970	77
CSMH2410D-3R3M-LRH	3.30	±20%	0.22	1000	770	56
CSMH2410D-4R7M-LRH	4.70	±20%	0.29	880	670	50
CSMH2410D-6R8M-LRH	6.80	±20%	0.41	750	570	43
CSMH2410D-100M-LRH	10.0	±20%	0.69	550	450	32
CSMH2410D-150M-LRH	15.0	±20%	1.02	470	370	27
CSMH2410D-220M-LRH	22.0	±20%	1.47	390	300	22

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMH2410D Series



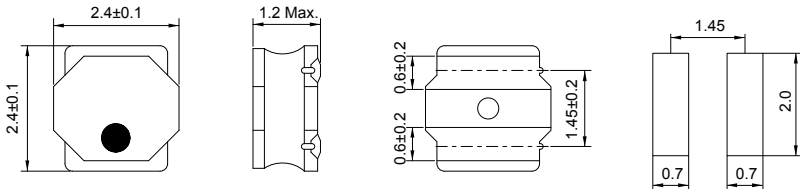


CSMH2412D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMH2412D



Recommended Patterns

unit: mm

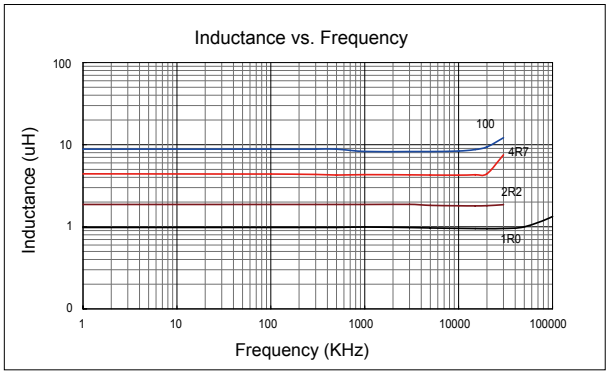
ELECTRICAL SPECIFICATION

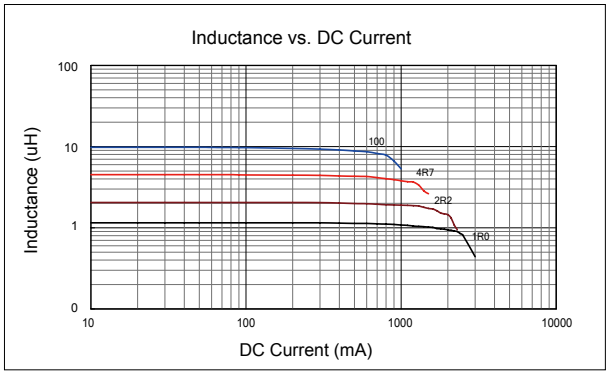
Part Number	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
				Saturation Current Idc1	Temperature Rise Current Idc2	
CSMH2412D-R47N-LRH	0.47	±30%	0.050	2900	2100	180
CSMH2412D-1R0N-LRH	1.00	±30%	0.077	2350	1300	101
CSMH2412D-1R5N-LRH	1.50	±30%	0.100	2100	1150	89
CSMH2412D-2R2M-LRH	2.20	±20%	0.140	1700	1000	72
CSMH2412D-3R3M-LRH	3.30	±20%	0.225	1400	750	56
CSMH2412D-4R7M-LRH	4.70	±20%	0.300	1150	650	45
CSMH2412D-6R8M-LRH	6.80	±20%	0.420	950	550	34
CSMH2412D-100M-LRH	10.0	±20%	0.600	810	450	29

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMH2412D Series





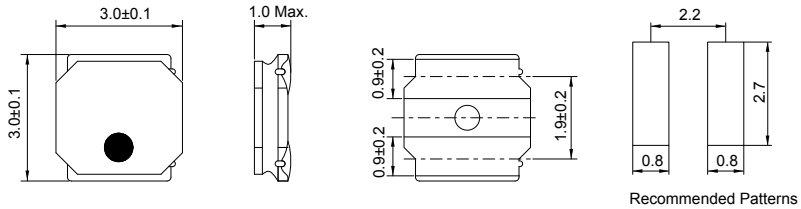
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMH0310D



unit: mm

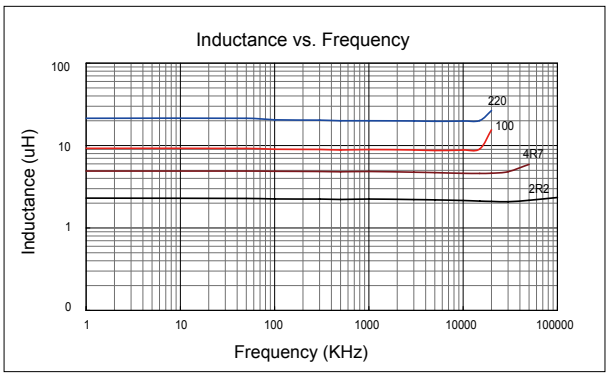
ELECTRICAL SPECIFICATION

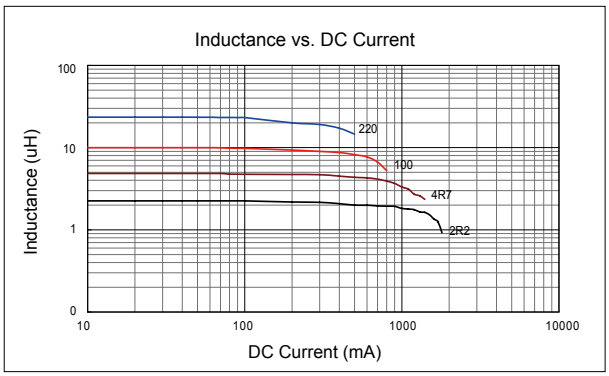
Part Number	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
				Saturation Current Idc1	Temperature Rise Current Idc2	
CSMH0310D-1R2N-LRH	1.20	±30%	0.065	1700	1480	120
CSMH0310D-1R5N-LRH	1.50	±30%	0.075	1440	1370	99
CSMH0310D-2R2M-LRH	2.20	±20%	0.083	1300	1300	86
CSMH0310D-3R3M-LRH	3.30	±20%	0.130	1000	1030	64
CSMH0310D-4R7M-LRH	4.70	±20%	0.170	850	900	50
CSMH0310D-6R8M-LRH	6.80	±20%	0.250	700	745	44
CSMH0310D-100M-LRH	10.0	±20%	0.350	600	620	34
CSMH0310D-150M-LRH	15.0	±20%	0.550	450	480	25
CSMH0310D-220M-LRH	22.0	±20%	0.770	380	410	22

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMH0310D Series



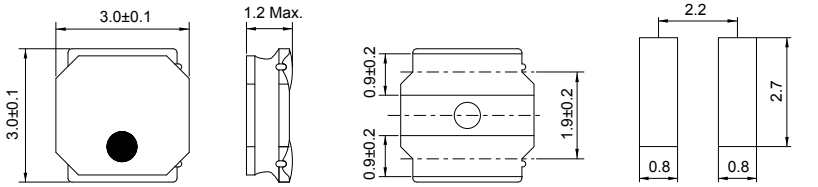


CSMH0312D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMH0312D



unit: mm

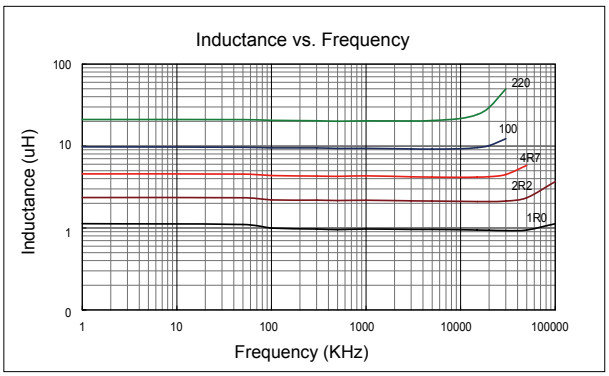
ELECTRICAL SPECIFICATION

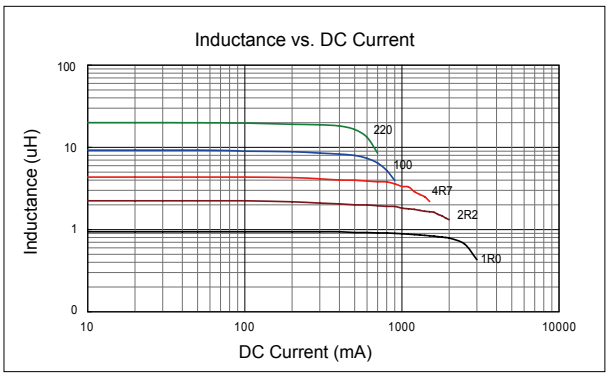
Part Number	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
				Saturation Current Idc1	Temperature Rise Current Idc2	
CSMH0312D-1R0N-LRH	1.00	±30%	0.048	2200	1710	111
CSMH0312D-1R5N-LRH	1.50	±30%	0.055	1700	1600	95
CSMH0312D-2R2M-LRH	2.20	±20%	0.075	1500	1370	78
CSMH0312D-3R3M-LRH	3.30	±20%	0.100	1200	1210	61
CSMH0312D-4R7M-LRH	4.70	±20%	0.130	1000	1060	50
CSMH0312D-6R8M-LRH	6.80	±20%	0.190	850	890	43
CSMH0312D-100M-LRH	10.0	±20%	0.270	730	720	32
CSMH0312D-150M-LRH	15.0	±20%	0.450	530	570	26
CSMH0312D-220M-LRH	22.0	±20%	0.630	500	500	22

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMH0312D Series





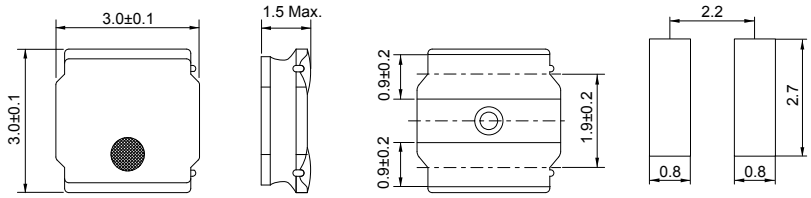
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0315D



Recommended Patterns

unit: mm

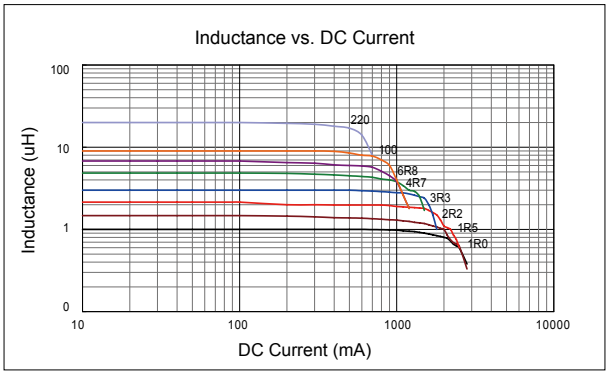
ELECTRICAL SPECIFICATION

Part Number	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
				Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0315D-1R0N-LRH	1.0	±30%	0.030	2100	2100	100
CSMS0315D-1R5N-LRH	1.5	±30%	0.038	1800	1820	87
CSMS0315D-2R2M-LRH	2.2	±20%	0.058	1480	1500	64
CSMS0315D-3R3M-LRH	3.3	±20%	0.078	1210	1230	49
CSMS0315D-4R7M-LRH	4.7	±20%	0.120	1020	1040	40
CSMS0315D-6R8M-LRH	6.8	±20%	0.160	870	880	36
CSMS0315D-100M-LRH	10	±20%	0.220	700	710	28
CSMS0315D-220M-LRH	22	±20%	0.520	470	470	20

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0315D Series

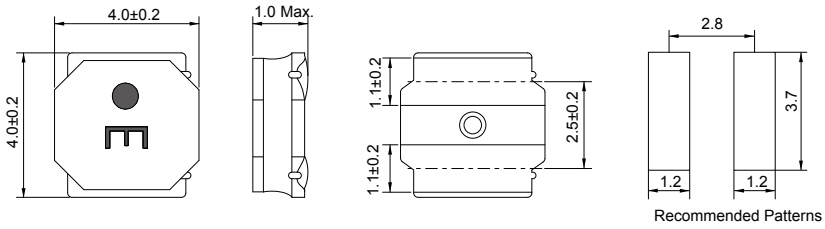


CSMS0410D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0410D



unit: mm

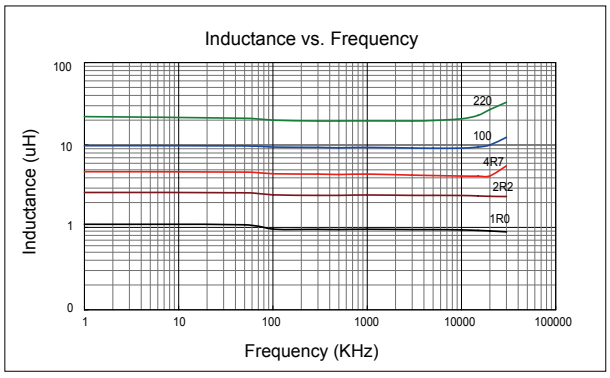
ELECTRICAL SPECIFICATION

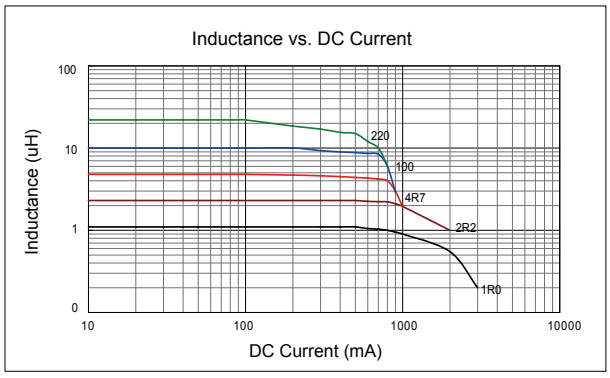
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0410D-1R0N-LRH	A	1.0	±30%	0.056	2000	1900	116
CSMS0410D-2R2M-LRH	C	2.2	±20%	0.085	1200	1500	73
CSMS0410D-3R3M-LRH	E	3.3	±20%	0.100	1100	1400	58
CSMS0410D-4R7M-LRH	H	4.7	±20%	0.140	950	1200	47
CSMS0410D-6R8M-LRH	I	6.8	±20%	0.200	800	1000	38
CSMS0410D-100M-LRH	K	10	±20%	0.300	620	750	31
CSMS0410D-150M-LRH	M	15	±20%	0.430	540	600	24
CSMS0410D-220M-LRH	N	22	±20%	0.570	450	500	19

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0410D Series





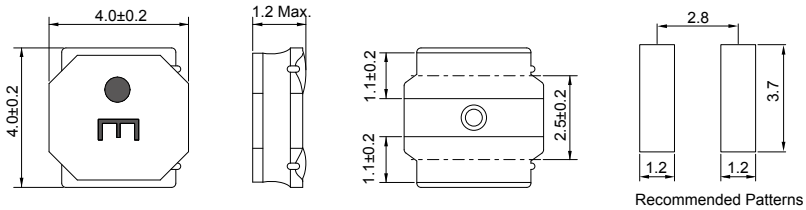
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0412D



unit: mm

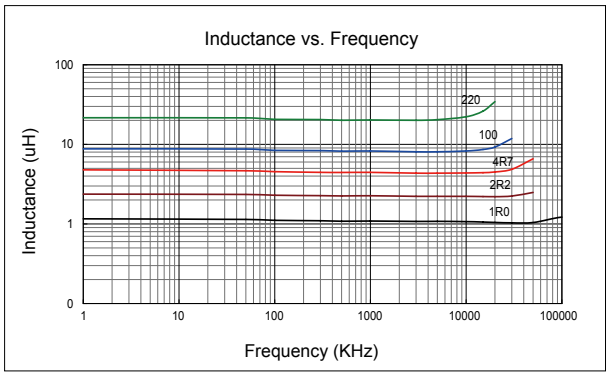
ELECTRICAL SPECIFICATION

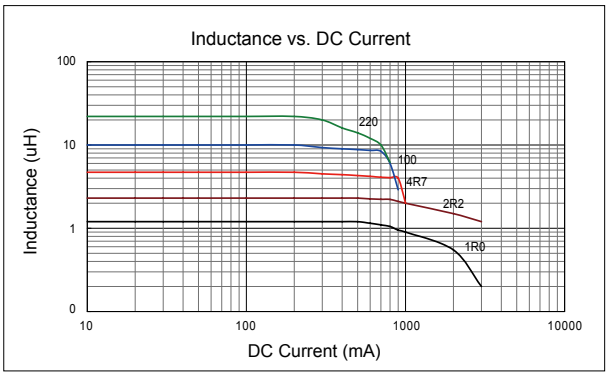
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0412D-1R0N-LRH	A	1.0	±30%	0.042	2800	2200	100
CSMS0412D-2R2M-LRH	C	2.2	±20%	0.060	1650	1900	70
CSMS0412D-3R3M-LRH	E	3.3	±20%	0.070	1400	1700	60
CSMS0412D-4R7M-LRH	H	4.7	±20%	0.095	1200	1500	45
CSMS0412D-6R8M-LRH	I	6.8	±20%	0.125	900	1300	35
CSMS0412D-100M-LRH	K	10	±20%	0.170	800	1100	30
CSMS0412D-150M-LRH	M	15	±20%	0.260	650	750	24
CSMS0412D-220M-LRH	N	22	±20%	0.400	500	620	18

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0412D Series



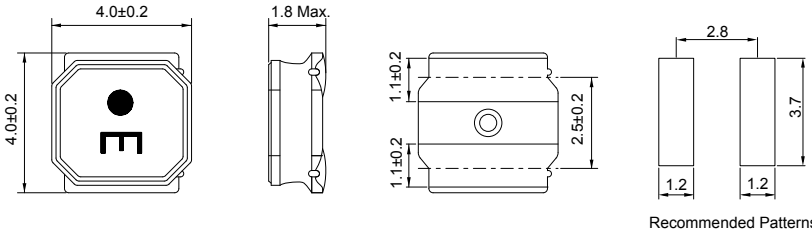


CSMS0418D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0418D



Recommended Patterns

unit: mm

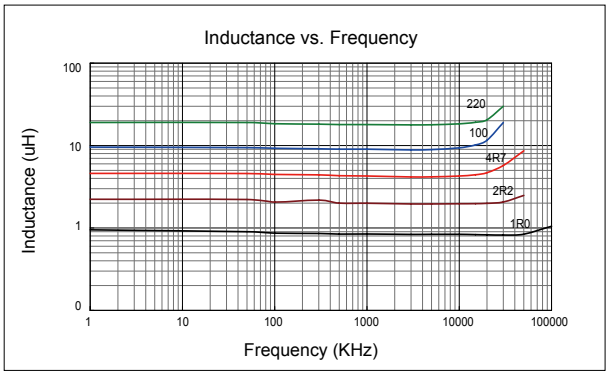
ELECTRICAL SPECIFICATION

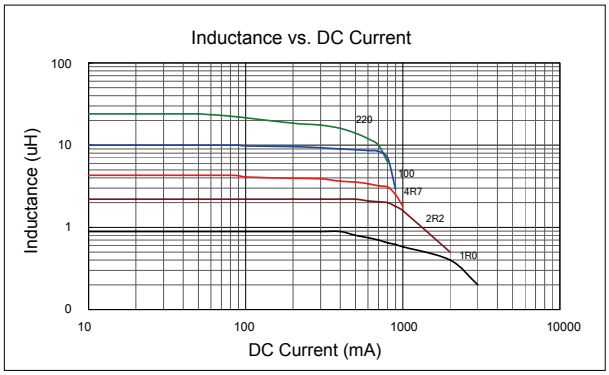
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0418D-1R0N-LRH	A	1.0	±30%	0.027	4000	3200	90
CSMS0418D-1R5N-LRH	B	1.5	±30%	0.037	3300	2400	75
CSMS0418D-2R2M-LRH	C	2.2	±20%	0.042	3000	2200	60
CSMS0418D-3R3M-LRH	E	3.3	±20%	0.055	2300	2000	45
CSMS0418D-4R7M-LRH	H	4.7	±20%	0.070	2000	1700	35
CSMS0418D-6R8M-LRH	I	6.8	±20%	0.098	1600	1450	30
CSMS0418D-100M-LRH	K	10	±20%	0.150	1300	1200	25
CSMS0418D-150M-LRH	M	15	±20%	0.210	1100	850	18
CSMS0418D-220M-LRH	N	22	±20%	0.290	900	720	15
CSMS0418D-330M-LRH	P	33	±20%	0.460	700	550	12
CSMS0418D-470M-LRH	S	47	±20%	0.650	600	440	10
CSMS0418D-680M-LRH	T	68	±20%	1.000	520	320	8.3
CSMS0418D-101M-LRH	V	100	±20%	1.450	420	280	6.5
CSMS0418D-151M-LRH	W	150	±20%	2.300	340	220	5.5
CSMS0418D-221M-LRH	X	220	±20%	3.800	275	170	4.0

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0418D Series





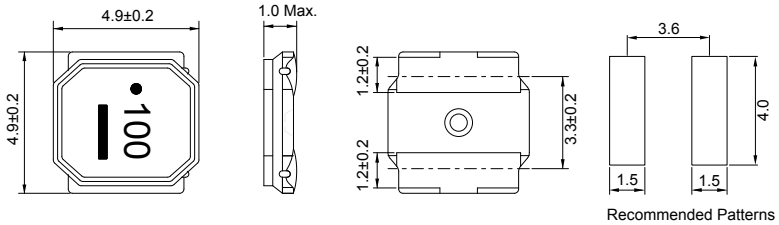
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0510D



unit: mm

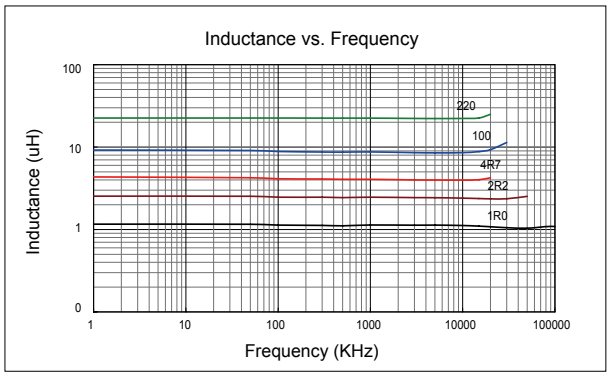
ELECTRICAL SPECIFICATION

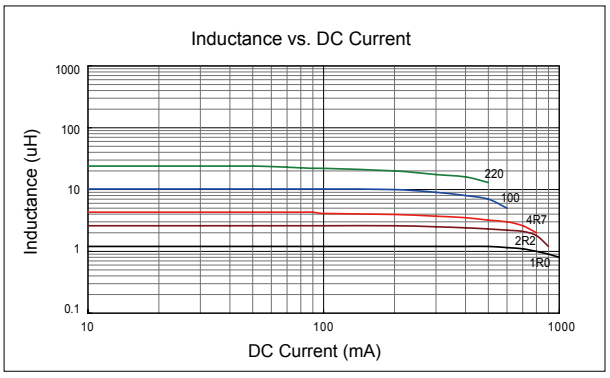
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0510D-1R0N-LRH	1R0	1.0	±30%	0.070	2350	1750	95
CSMS0510D-2R2N-LRH	2R2	2.2	±30%	0.105	1500	1400	65
CSMS0510D-3R3M-LRH	3R3	3.3	±20%	0.125	1400	1250	42
CSMS0510D-4R7M-LRH	4R7	4.7	±20%	0.145	1200	1150	37
CSMS0510D-6R8M-LRH	6R8	6.8	±20%	0.185	1000	1000	33
CSMS0510D-100M-LRH	100	10	±20%	0.250	850	900	23
CSMS0510D-150M-LRH	150	15	±20%	0.400	680	650	19
CSMS0510D-220M-LRH	220	22	±20%	0.600	550	450	15

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0510D Series



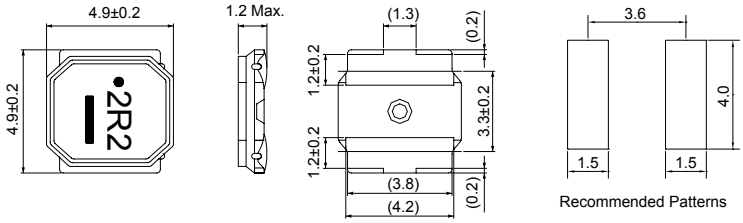


CSMS0512D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0512D



unit: mm

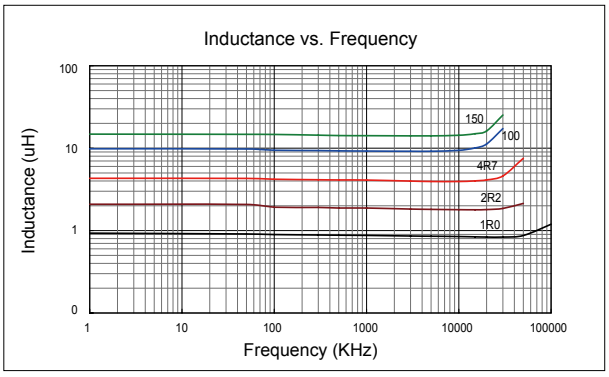
ELECTRICAL SPECIFICATION

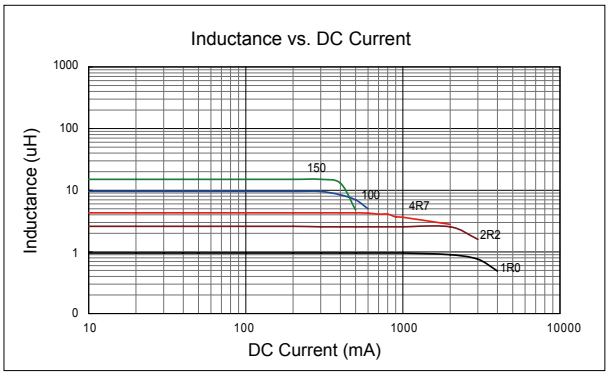
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0512D-1R0N-LRH	1R0	1.0	±30%	0.053	4500	2300	100
CSMS0512D-1R5N-LRH	1R5	1.5	±30%	0.070	3800	2200	86
CSMS0512D-2R2M-LRH	2R2	2.2	±20%	0.085	3100	2000	70
CSMS0512D-3R3M-LRH	3R3	3.3	±20%	0.160	2400	1450	48
CSMS0512D-4R7M-LRH	4R7	4.7	±20%	0.180	2200	1400	40
CSMS0512D-6R8M-LRH	6R8	6.8	±20%	0.260	1700	1100	36
CSMS0512D-100M-LRH	100	10	±20%	0.420	1400	850	26
CSMS0512D-150M-LRH	150	15	±20%	0.670	1200	640	22

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0512D Series





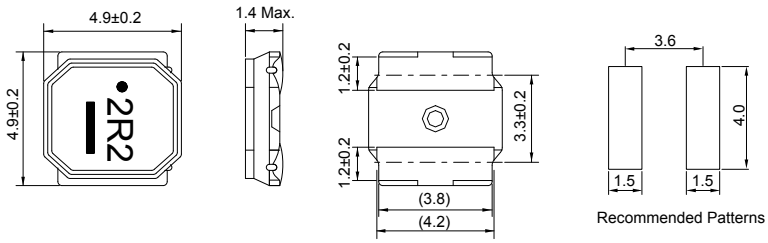
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0514D



unit: mm

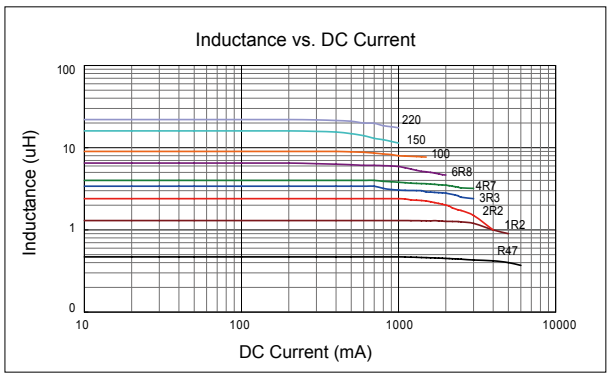
ELECTRICAL SPECIFICATION

Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0514D-R47N-LRH	R47	0.47	±30%	0.025	5800	3300	185
CSMS0514D-1R2N-LRH	1R2	1.2	±30%	0.045	3800	2400	86
CSMS0514D-2R2N-LRH	2R2	2.2	±30%	0.065	2800	2000	56
CSMS0514D-3R3N-LRH	3R3	3.3	±30%	0.080	2350	1700	48
CSMS0514D-4R7M-LRH	4R7	4.7	±30%	0.100	2050	1400	41
CSMS0514D-6R8M-LRH	6R8	6.8	±20%	0.150	1600	1200	33
CSMS0514D-100M-LRH	100	10	±20%	0.200	1400	1050	27
CSMS0514D-150M-LRH	150	15	±20%	0.320	1100	650	20
CSMS0514D-220M-LRH	220	22	±20%	0.450	900	550	16

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0514D Series

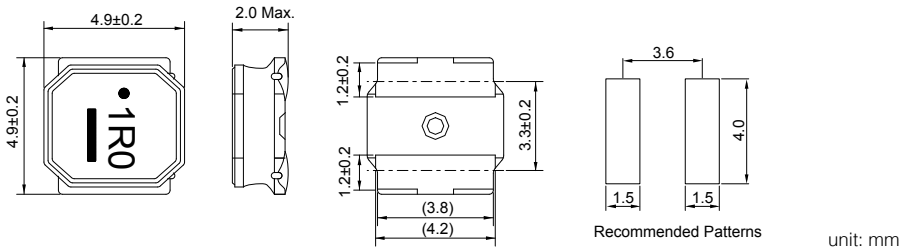


CSMS0520D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0520D



unit: mm

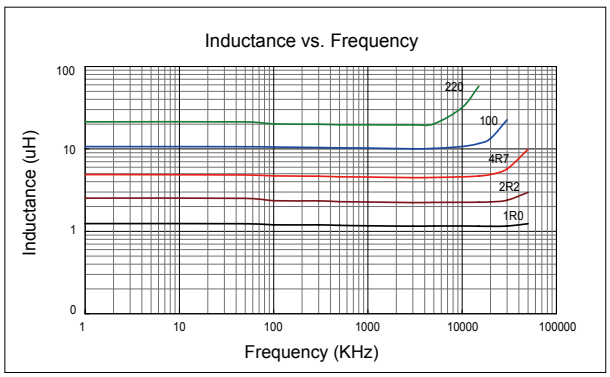
ELECTRICAL SPECIFICATION

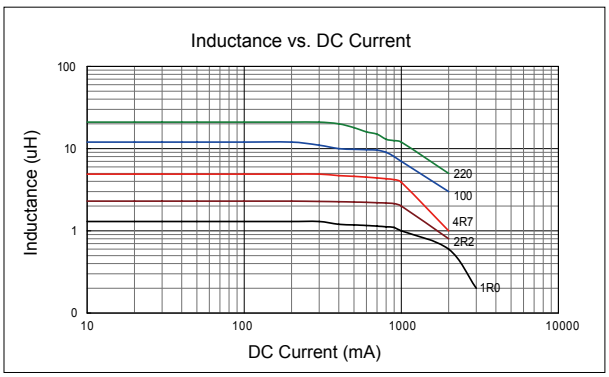
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0520D-1R0N-LRH	1R0	1.0	±30%	0.021	4000	3600	81
CSMS0520D-1R5N-LRH	1R5	1.5	±30%	0.026	3350	3200	68
CSMS0520D-2R2N-LRH	2R2	2.2	±30%	0.035	2900	2900	57
CSMS0520D-3R3N-LRH	3R3	3.3	±30%	0.048	2400	2400	46
CSMS0520D-4R7M-LRH	4R7	4.7	±20%	0.060	2000	2000	37
CSMS0520D-6R8M-LRH	6R8	6.8	±20%	0.090	1600	1650	30
CSMS0520D-100M-LRH	100	10	±20%	0.120	1300	1450	24
CSMS0520D-150M-LRH	150	15	±20%	0.165	1100	1200	20
CSMS0520D-220M-LRH	220	22	±20%	0.260	900	1000	17

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0520D Series





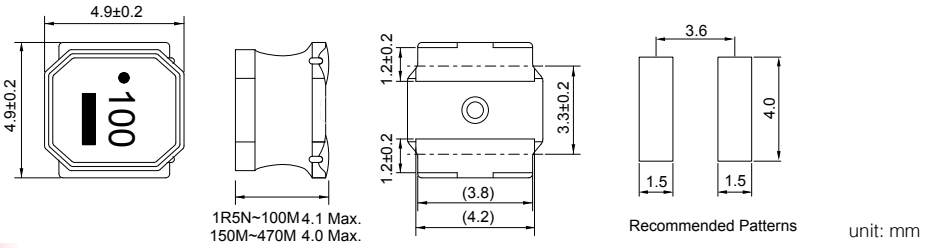
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0540D



unit: mm

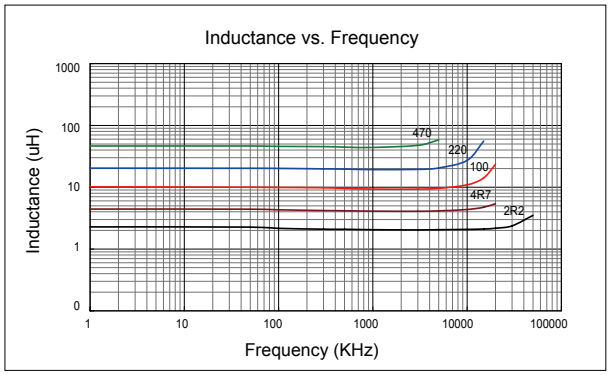
ELECTRICAL SPECIFICATION

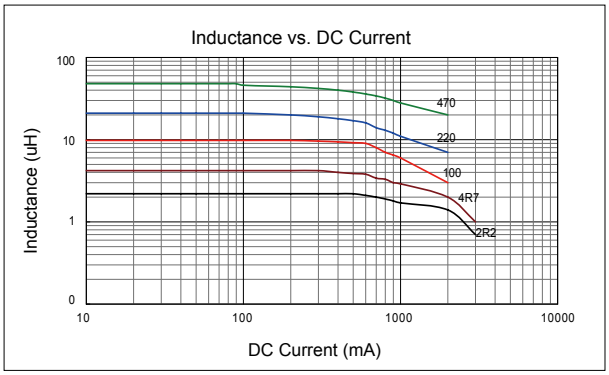
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±30% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0540D-1R5N-LRH	1R5	1.5	±30%	0.017	6400	4500	60
CSMS0540D-2R2N-LRH	2R2	2.2	±30%	0.022	5000	3700	42
CSMS0540D-3R3N-LRH	3R3	3.3	±30%	0.027	4000	3300	32
CSMS0540D-4R7N-LRH	4R7	4.7	±30%	0.029	3300	3100	28
CSMS0540D-6R8M-LRH	6R8	6.8	±20%	0.049	2800	2400	21
CSMS0540D-100M-LRH	100	10	±20%	0.056	2300	2100	18
CSMS0540D-150M-LRH	150	15	±20%	0.080	2000	1800	13
CSMS0540D-220M-LRH	220	22	±20%	0.126	1500	1400	9
CSMS0540D-330M-LRH	330	33	±20%	0.180	1300	1200	7
CSMS0540D-470M-LRH	470	47	±20%	0.310	1100	900	6

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0540D Series



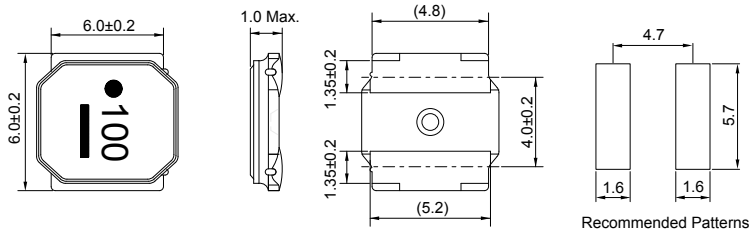


CSMS0610D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0610D



unit: mm

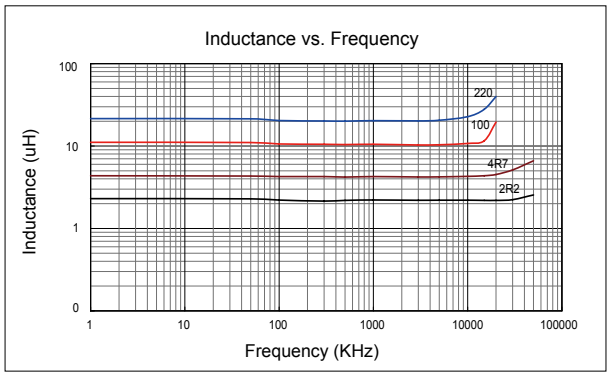
ELECTRICAL SPECIFICATION

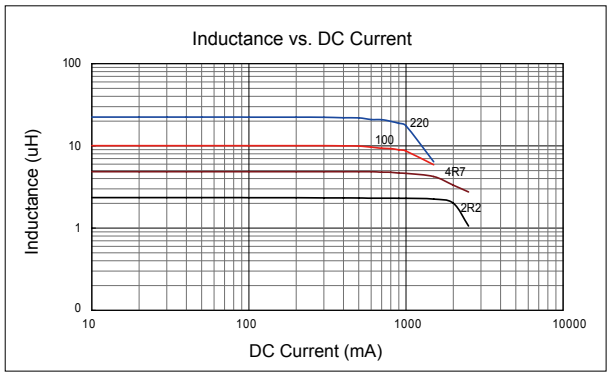
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0610D-1R5M-LRH	1R5	1.5	±20%	0.090	2400	1900	77
CSMS0610D-2R2M-LRH	2R2	2.2	±20%	0.110	1900	1700	56
CSMS0610D-3R3M-LRH	3R3	3.3	±20%	0.135	1600	1500	42
CSMS0610D-4R7M-LRH	4R7	4.7	±20%	0.165	1300	1400	36
CSMS0610D-6R8M-LRH	6R8	6.8	±20%	0.220	1200	1200	30
CSMS0610D-100M-LRH	100	10	±20%	0.270	1000	1100	25
CSMS0610D-220M-LRH	220	22	±20%	0.580	650	700	12

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0610D Series

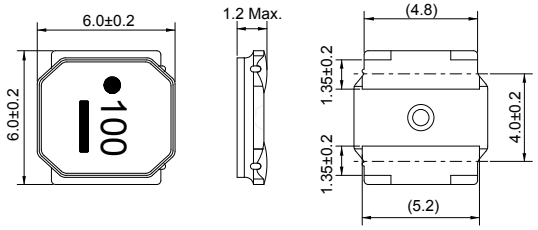




■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0612D



unit: mm

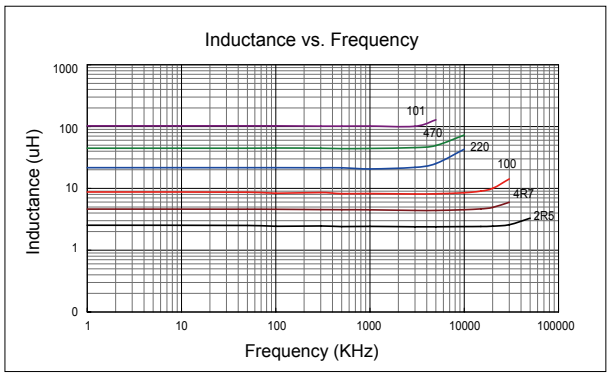
ELECTRICAL SPECIFICATION

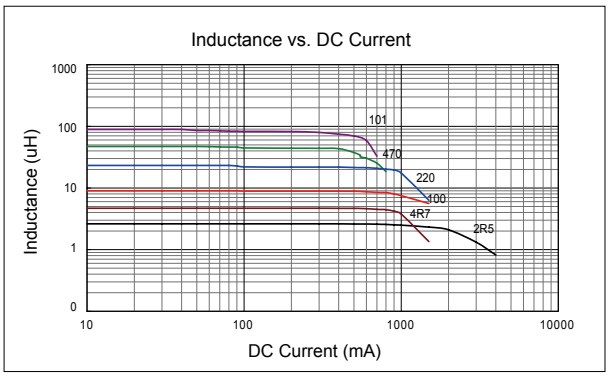
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0612D-2R5N-LRH	2R5	2.5	±30%	0.090	2100	1800	45
CSMS0612D-3R3N-LRH	3R3	3.3	±30%	0.105	1800	1700	42
CSMS0612D-4R7M-LRH	4R7	4.7	±20%	0.125	1600	1550	36
CSMS0612D-5R3M-LRH	5R3	5.3	±20%	0.125	1500	1550	34
CSMS0612D-6R8M-LRH	6R8	6.8	±20%	0.165	1300	1350	30
CSMS0612D-100M-LRH	100	10	±20%	0.200	1000	1200	22
CSMS0612D-150M-LRH	150	15	±20%	0.295	800	800	18
CSMS0612D-220M-LRH	220	22	±20%	0.465	760	650	12
CSMS0612D-330M-LRH	330	33	±20%	0.580	590	550	8
CSMS0612D-470M-LRH	470	47	±20%	0.965	520	460	6
CSMS0612D-680M-LRH	680	68	±20%	1.160	440	410	3
CSMS0612D-101M-LRH	101	100	±20%	1.670	350	320	1

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0612D Series



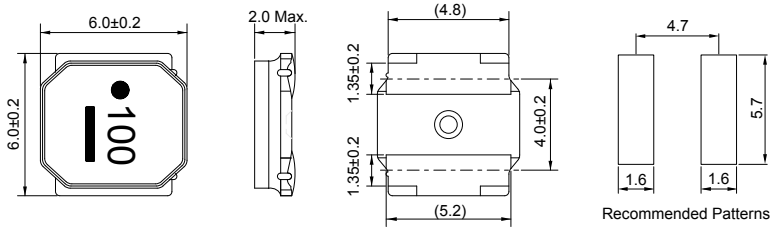


CSMS0620D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0620D



unit: mm

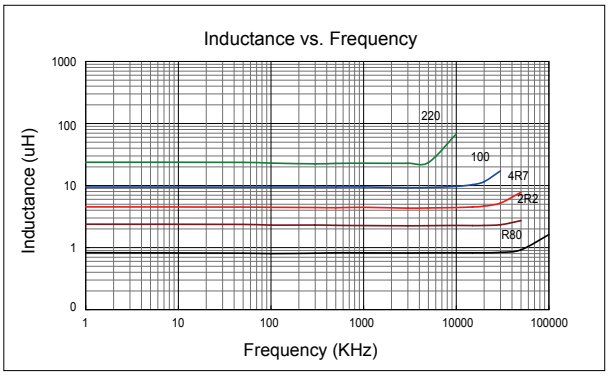
ELECTRICAL SPECIFICATION

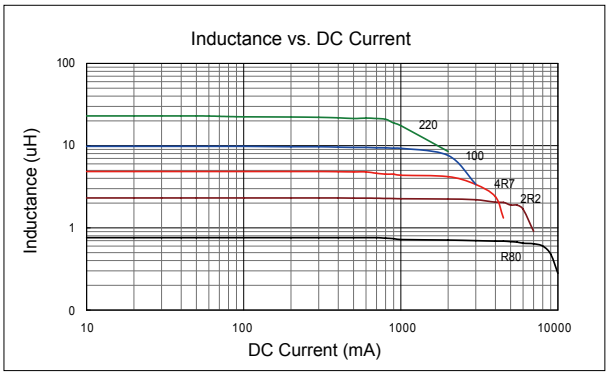
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0620D-R80N-LRH	0R8	0.8	±30%	0.020	6400	4100	110
CSMS0620D-1R5N-LRH	1R5	1.5	±30%	0.026	4300	3600	93
CSMS0620D-2R2N-LRH	2R2	2.2	±30%	0.034	3200	2900	73
CSMS0620D-3R3N-LRH	3R3	3.3	±30%	0.040	2800	2750	55
CSMS0620D-4R7N-LRH	4R7	4.7	±30%	0.058	2400	2150	43
CSMS0620D-6R8N-LRH	6R8	6.8	±30%	0.085	2000	1800	30
CSMS0620D-100M-LRH	100	10	±20%	0.125	1900	1500	18
CSMS0620D-220M-LRH	220	22	±20%	0.290	1250	950	11

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0620D Series





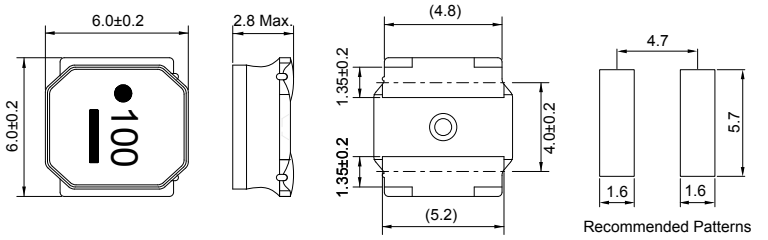
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0628D



unit: mm

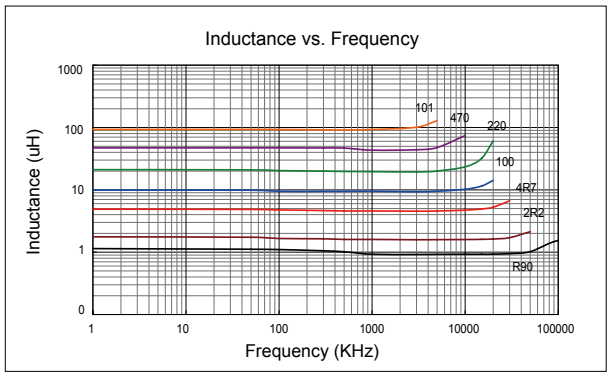
ELECTRICAL SPECIFICATION

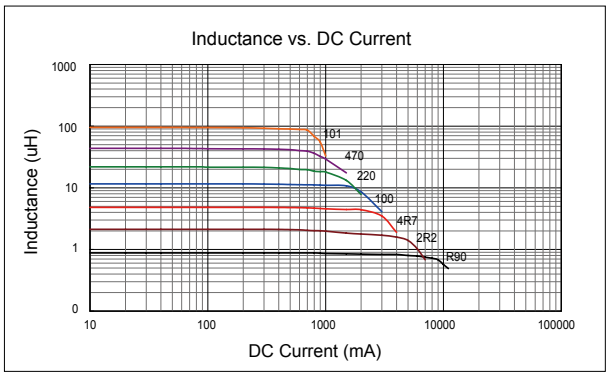
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±30% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0628D-R90N-LRH	0R9	0.9	±30%	0.013	6700	4600	90
CSMS0628D-1R5N-LRH	1R5	1.5	±30%	0.016	5100	4200	78
CSMS0628D-2R2N-LRH	2R2	2.2	±30%	0.020	4200	3700	68
CSMS0628D-3R0N-LRH	3R0	3.0	±30%	0.023	3600	3400	55
CSMS0628D-4R7M-LRH	4R7	4.7	±20%	0.031	2700	3000	39
CSMS0628D-6R0M-LRH	6R0	6.0	±20%	0.040	2500	2500	30
CSMS0628D-100M-LRH	100	10	±20%	0.065	1900	1900	20
CSMS0628D-150M-LRH	150	15	±20%	0.095	1600	1800	17
CSMS0628D-220M-LRH	220	22	±20%	0.135	1300	1400	12
CSMS0628D-330M-LRH	330	33	±20%	0.220	1100	1100	10
CSMS0628D-470M-LRH	470	47	±20%	0.300	1000	920	8
CSMS0628D-680M-LRH	680	68	±20%	0.420	800	770	5
CSMS0628D-101M-LRH	101	100	±20%	0.600	650	660	3

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0628D Series



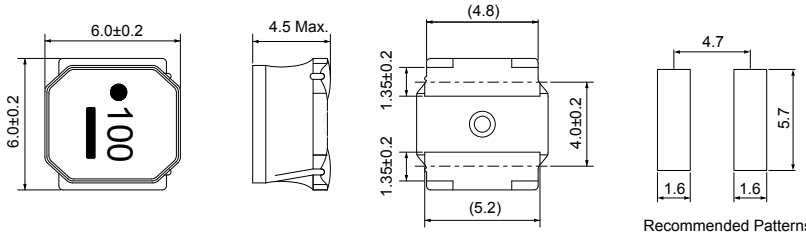


CSMS0645D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0645D



unit: mm

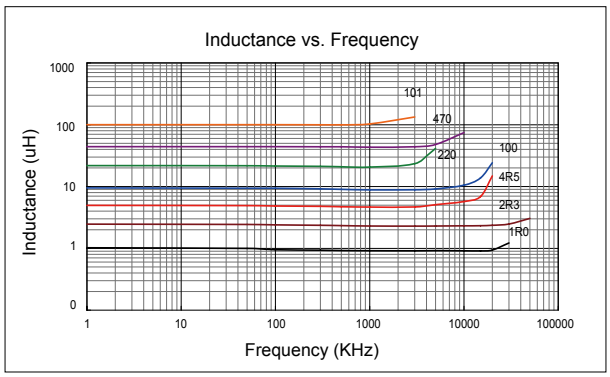
ELECTRICAL SPECIFICATION

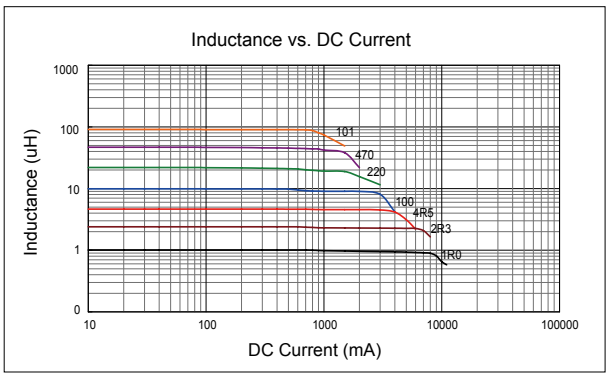
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±30% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0645D-1R0N-LRH	1R0	1.0	±30%	0.014	9800	4500	110
CSMS0645D-1R3N-LRH	1R3	1.3	±30%	0.016	8200	4200	95
CSMS0645D-1R8N-LRH	1R8	1.8	±30%	0.019	7200	3900	80
CSMS0645D-2R3N-LRH	2R3	2.3	±30%	0.022	6400	3600	60
CSMS0645D-3R0N-LRH	3R0	3.0	±30%	0.024	5600	3300	45
CSMS0645D-4R5M-LRH	4R5	4.5	±20%	0.030	4400	3100	25
CSMS0645D-6R3M-LRH	6R3	6.3	±20%	0.036	3600	3000	15
CSMS0645D-100M-LRH	100	10	±20%	0.046	3100	2400	12
CSMS0645D-150M-LRH	150	15	±20%	0.070	2500	1900	10
CSMS0645D-220M-LRH	220	22	±20%	0.107	2000	1600	7
CSMS0645D-330M-LRH	330	33	±20%	0.141	1650	1400	6
CSMS0645D-470M-LRH	470	47	±20%	0.211	1400	1150	5
CSMS0645D-680M-LRH	680	68	±20%	0.304	1100	950	4
CSMS0645D-101M-LRH	101	100	±20%	0.466	900	750	3

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0645D Series

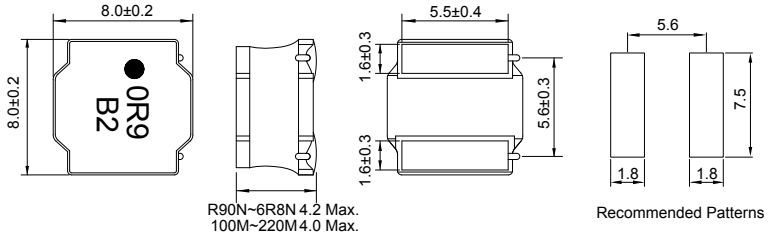




■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSMS0840D



unit: mm

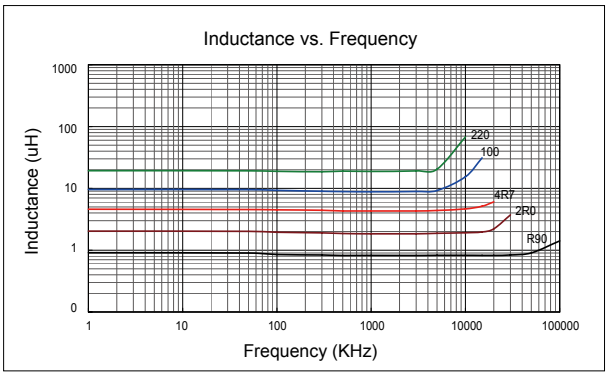
ELECTRICAL SPECIFICATION

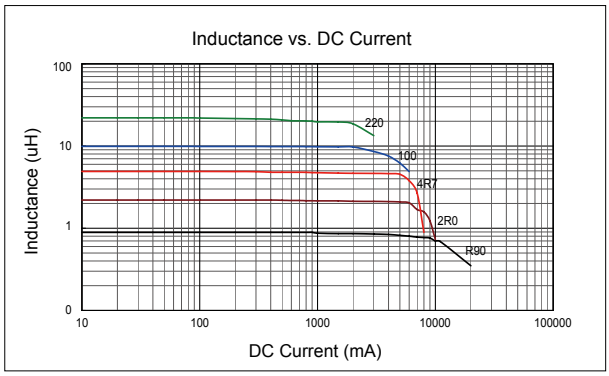
Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±30% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
CSMS0840D-R90N-LRH	0R9	0.9	±30%	0.006	13000	7800	85
CSMS0840D-1R4N-LRH	1R4	1.4	±30%	0.007	10000	7000	63
CSMS0840D-2R0N-LRH	2R0	2.0	±30%	0.009	8100	6300	50
CSMS0840D-3R6N-LRH	3R6	3.6	±30%	0.015	6400	4900	34
CSMS0840D-4R7N-LRH	4R7	4.7	±30%	0.018	5400	4100	30
CSMS0840D-6R8N-LRH	6R8	6.8	±30%	0.025	4400	3700	24
CSMS0840D-100M-LRH	100	10	±20%	0.034	3800	3100	22
CSMS0840D-150M-LRH	150	15	±20%	0.050	2900	2400	16
CSMS0840D-220M-LRH	220	22	±20%	0.066	2400	2200	13

- Operating temperature Range: -25℃ to +125℃ (Including self-temperature rise)
- Storage Temp. Range: -40℃ to +85℃
- Inductance measured using the HP4285A and Chroma1320 & 3302
- DCR measured using Chroma16502
- SRF measured using the HP4291B
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.(at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.(at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller
- MSL: Level 1

CHARACTERISTIC CURVE

CSMS0840D Series





SMD

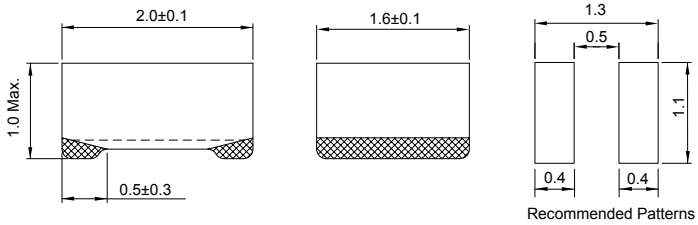
Leaded

CSCA2016D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSCA2016D



unit: mm

PART NUMBER KEY

CSCA □□□□ D - □□□ □ - □□□

(1) (2) (3) (4) (5) (6)

(A) (B)

(1) Product Symbol: Wire Wound Chip Power Inductors
(2) Dimensions: Length (A) × Width (B)
(3) Terminal Type
(4) Inductance
(5) Tolerance
(6) Internal code

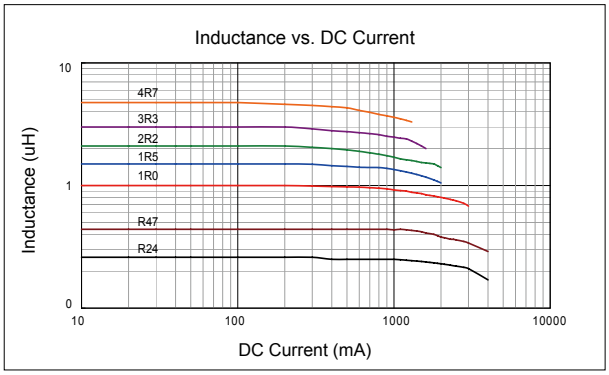
ELECTRICAL SPECIFICATION

Part Number	Inductance (μH)	Inductance Tolerance	DCR (Ω) Max.	Rated Current (mA) Max.		Test Freq. (MHz)
				Saturation Current Idc1	Temperature Rise Current Idc2	
CSCA2016D-R24M-LRH	0.24	±20%	0.042	4200	3000	2
CSCA2016D-R47M-LRH	0.47	±20%	0.046	2800	2800	2
CSCA2016D-1R0M-LRH	1.0	±20%	0.075	2200	2200	2
CSCA2016D-1R5M-LRH	1.5	±20%	0.130	1600	1650	2
CSCA2016D-2R2M-LRH	2.2	±20%	0.160	1500	1500	2
CSCA2016D-3R3M-LRH	3.3	±20%	0.255	1150	1200	2
CSCA2016D-4R7M-LRH	4.7	±20%	0.380	1000	950	2

- Inductance tolerance: M=±20%
- Operating Temperature Range: -40℃ to +105℃
- Storage Temperature Range: -40℃ to +85℃
- Inductance using the HP4285A
- DCR measured using the 16502 milli-ohm meter
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value. (at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise. (at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller.
- MSL: Level 1

CHARACTERISTIC CURVE

CSCA2016D Series



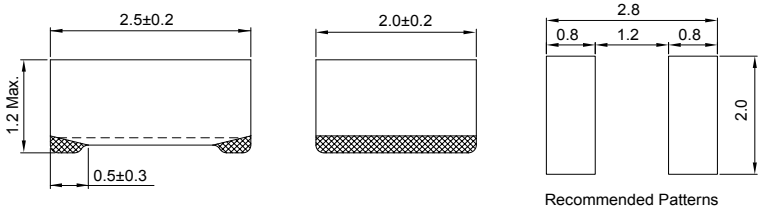
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSCA2520D



Recommended Patterns

unit: mm

PART NUMBER KEY

CSCA □□□□ D - □□□ □ - □□□

(1) (2) (3) (4) (5) (6)

(A) (B)

(1) Product Symbol: Wire Wound Chip Power Inductors
(2) Dimensions: Length (A) × Width (B)
(3) Terminal Type
(4) Inductance
(5) Tolerance
(6) Internal code

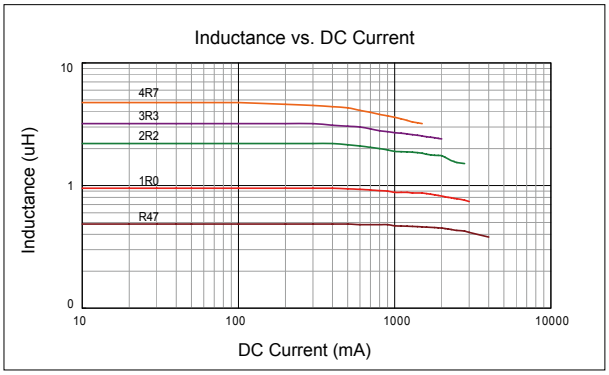
ELECTRICAL SPECIFICATION

Part Number	Inductance (μH)	Inductance Tolerance	DCR (Ω) Max.	Rated Current (mA) Max.		Test Freq. (MHz)
				Saturation Current Idc1	Temperature Rise Current Idc2	
CSCA2520D-R47M-LRH	0.47	±20%	0.039	4000	3400	2
CSCA2520D-R68M-LRH	0.68	±20%	0.048	3000	3000	2
CSCA2520D-1R0M-LRH	1.0	±20%	0.059	2700	2700	2
CSCA2520D-2R2M-LRH	2.2	±20%	0.117	1900	1900	2
CSCA2520D-3R3M-LRH	3.3	±20%	0.156	1600	1700	2
CSCA2520D-4R7M-LRH	4.7	±20%	0.260	1300	1300	2

- Inductance tolerance: M=±20%
- Operating Temperature Range: -40℃ to +105℃
- Storage Temperature Range: -40℃ to +85℃
- Inductance using the HP4285A
- DCR measured using the 16502 milli-ohm meter
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value. (at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise. (at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller.
- MSL: Level 1

CHARACTERISTIC CURVE

CSCA2520D Series

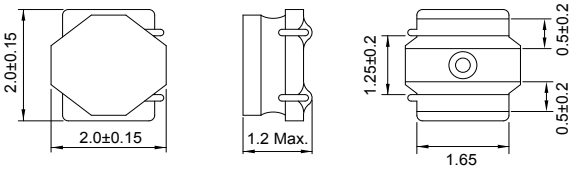


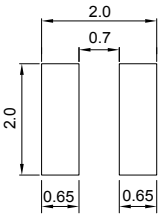
CSCD2012D Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSCD2012D





Recommended Patterns

unit: mm

PART NUMBER KEY

CSCD □□□□ D - □□□ □ - □□□

(1) (2) (3) (4) (5) (6)

(A) (B)

(1) Product Symbol: Wire Wound Chip Power Inductors
(2) Dimensions: Length (A) × Width (B)
(3) Terminal Type
(4) Inductance
(5) Tolerance
(6) Internal code

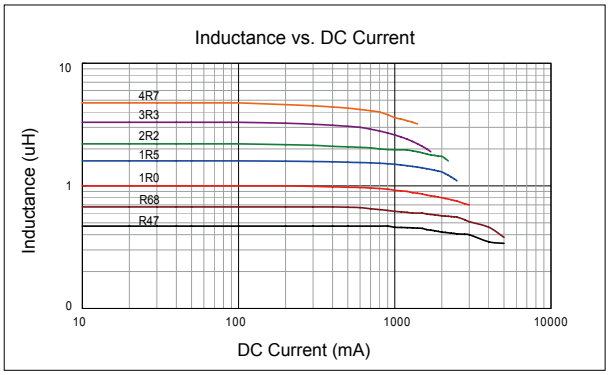
ELECTRICAL SPECIFICATION

Part Number	Inductance (μH)	Inductance Tolerance	DCR (Ω) Max.	Rated Current (mA) Max.		Test Freq. (MHz)
				Saturation Current Idc1	Temperature Rise Current Idc2	
CSCD2012D-R47M-LRH	0.47	±20%	0.046	4200	2300	1
CSCD2012D-R68M-LRH	0.68	±20%	0.058	3500	2000	1
CSCD2012D-1R0M-LRH	1.0	±20%	0.064	2550	1900	1
CSCD2012D-1R5M-LRH	1.5	±20%	0.086	2000	1650	1
CSCD2012D-2R2M-LRH	2.2	±20%	0.109	1750	1450	1
CSCD2012D-3R3M-LRH	3.3	±20%	0.178	1350	1150	1
CSCD2012D-4R7M-LRH	4.7	±20%	0.242	1150	950	1

- Inductance tolerance: M=±20%
- Operating Temperature Range: -40℃ to +105℃
- Storage Temperature Range: -40℃ to +85℃
- Inductance using the HP4285A
- DCR measured using the 16502 milli-ohm meter
- Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value. (at Ta: 20℃)
- Temperature rise current Idc2: The value of current causes a 40℃ temperature rise. (at Ta: 20℃)
- Rated Current: Either Idc1 or Idc2 whichever is smaller.
- MSL: Level 1

CHARACTERISTIC CURVE

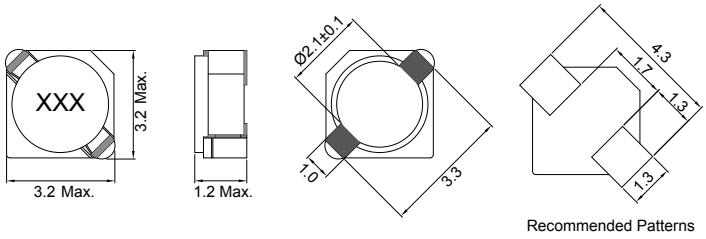
CSCD2012D Series



■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0211P



unit: mm

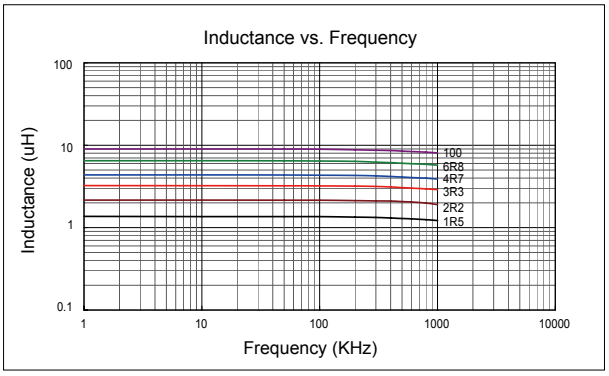
ELECTRICAL SPECIFICATION

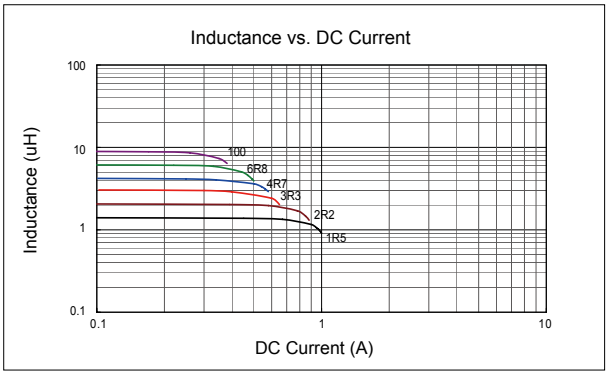
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (mA)	Isat (mA)
CSS0211P-1R5N-LRH	1R5	1.5	100	68	1480	900
CSS0211P-2R2N-LRH	2R2	2.2	100	98	1270	780
CSS0211P-3R3N-LRH	3R3	3.3	100	123	1020	600
CSS0211P-4R7N-LRH	4R7	4.7	100	170	880	500
CSS0211P-6R8N-LRH	6R8	6.8	100	260	800	440
CSS0211P-100N-LRH	100	10.0	100	400	650	350

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0211P Series



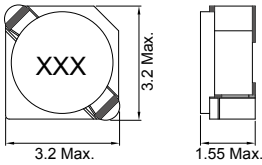


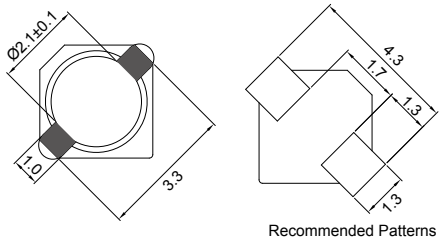
CSS0214P Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0214P





Recommended Patterns

unit: mm

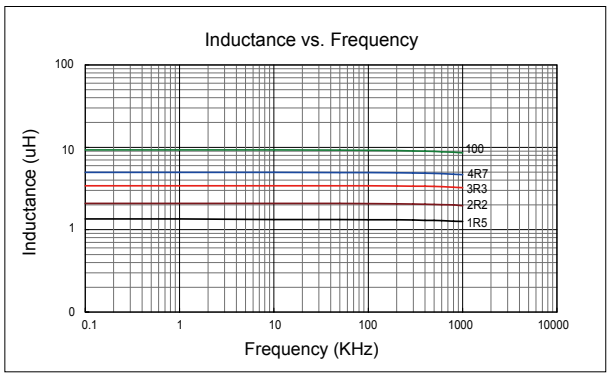
ELECTRICAL SPECIFICATION

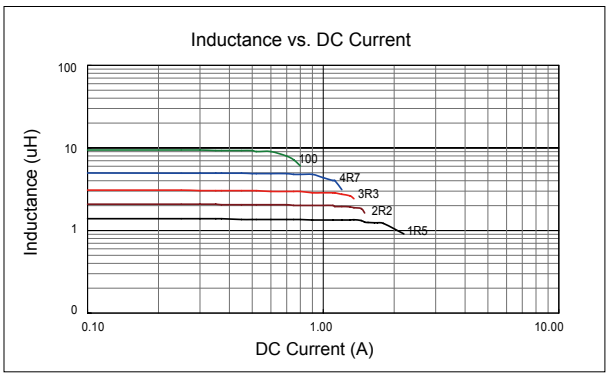
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (mA)	Isat (mA)
CSS0214P-1R5N-LRH	1R5	1.5	100	63	2000	1800
CSS0214P-1R8N-LRH	1R8	1.8	100	75	1800	1650
CSS0214P-2R2N-LRH	2R2	2.2	100	94	1600	1500
CSS0214P-2R7N-LRH	2R7	2.7	100	106	1400	1350
CSS0214P-3R3N-LRH	3R3	3.3	100	125	1240	1200
CSS0214P-3R9N-LRH	3R9	3.9	100	138	1120	1100
CSS0214P-4R7N-LRH	4R7	4.7	100	169	1000	1000
CSS0214P-5R6N-LRH	5R6	5.6	100	188	980	950
CSS0214P-6R8N-LRH	6R8	6.8	100	213	920	850
CSS0214P-8R2N-LRH	8R2	8.2	100	281	800	800
CSS0214P-100N-LRH	100	10.0	100	294	760	700
CSS0214P-120N-LRH	120	12.0	100	394	640	620

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0214P Series

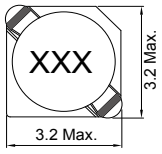


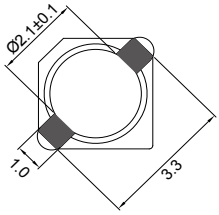


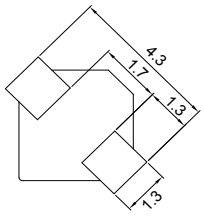
■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0218P







Recommended Patterns

unit: mm

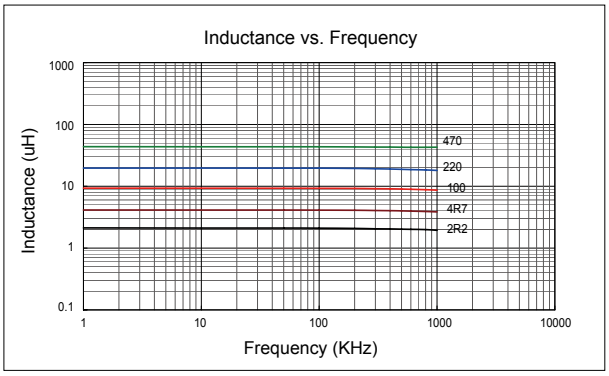
ELECTRICAL SPECIFICATION

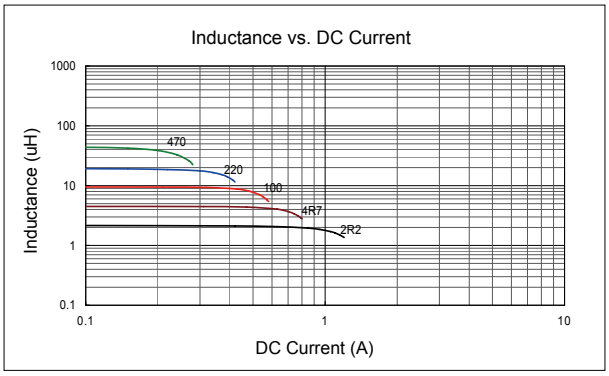
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (mA)	Isat (mA)
CSS0218P-2R2N-LRH	2R2	2.2	100	41	2300	850
CSS0218P-3R3N-LRH	3R3	3.3	100	54	2100	750
CSS0218P-4R7N-LRH	4R7	4.7	100	78	1650	630
CSS0218P-6R8N-LRH	6R8	6.8	100	106	1320	520
CSS0218P-100N-LRH	100	10.0	100	180	1000	430
CSS0218P-150N-LRH	150	15.0	100	220	800	350
CSS0218P-220N-LRH	220	22.0	100	320	680	300
CSS0218P-330N-LRH	330	33.0	100	460	560	240
CSS0218P-470N-LRH	470	47.0	100	660	480	200

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0218P Series



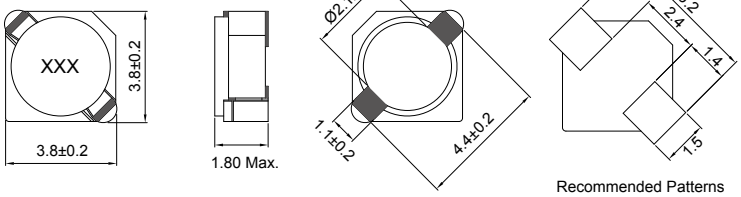


CSS0316P Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0316P



Recommended Patterns

unit: mm

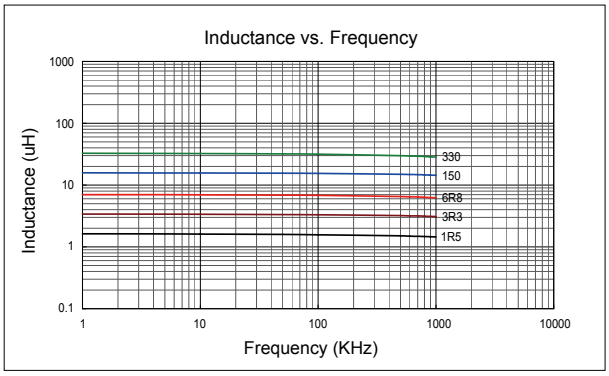
ELECTRICAL SPECIFICATION

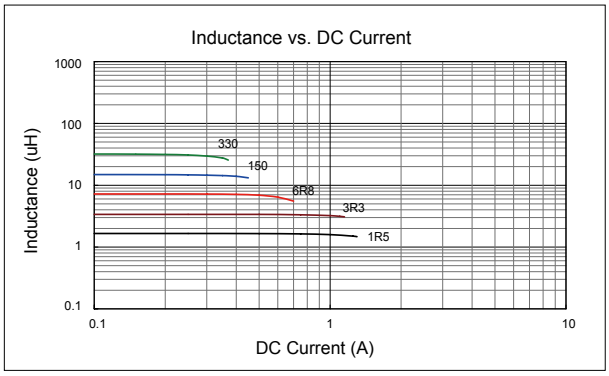
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (mA)
CSS0316P-1R5N-LRH	1R5	1.5	100	52	1550
CSS0316P-2R2N-LRH	2R2	2.2	100	72	1200
CSS0316P-3R3N-LRH	3R3	3.3	100	85	1100
CSS0316P-4R7N-LRH	4R7	4.7	100	105	900
CSS0316P-6R8N-LRH	6R8	6.8	100	170	730
CSS0316P-100N-LRH	100	10.0	100	210	550
CSS0316P-150N-LRH	150	15.0	100	295	450
CSS0316P-220N-LRH	220	22.0	100	430	400
CSS0316P-330N-LRH	330	33.0	100	675	320

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0316P Series





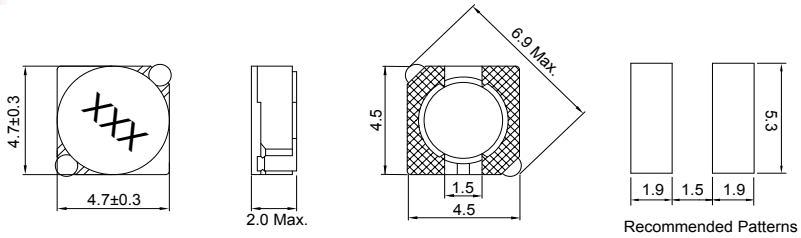
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0418P



unit: mm

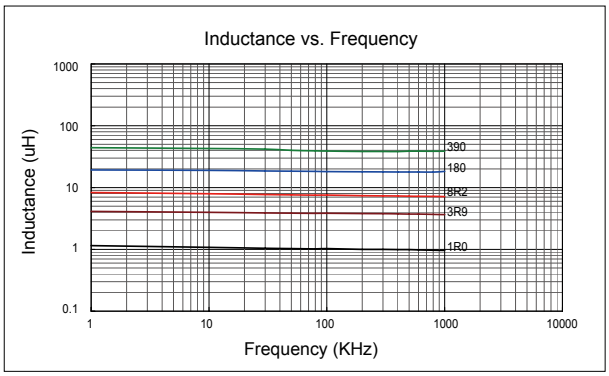
ELECTRICAL SPECIFICATION

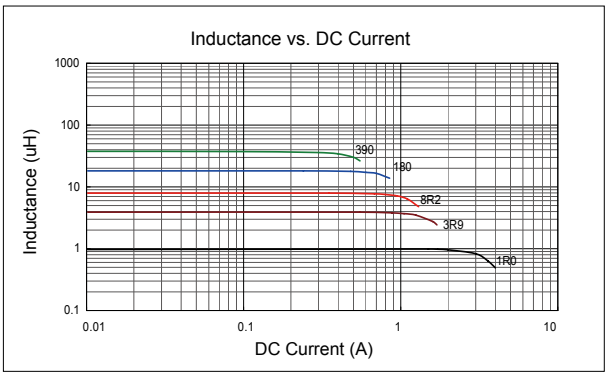
Part Number	Marking	Inductance (μH)	Test Freq.	DCR (mΩ) Max.	Rated Current (A)
CSS0418P-1R0N-LRH	1R0	1.0	7.96 MHz	45	1.72
CSS0418P-2R2N-LRH	2R2	2.2	7.96 MHz	75	1.32
CSS0418P-2R7N-LRH	2R7	2.7	7.96 MHz	105	1.28
CSS0418P-3R3N-LRH	3R3	3.3	7.96 MHz	110	1.04
CSS0418P-3R9N-LRH	3R9	3.9	7.96 MHz	155	0.88
CSS0418P-4R7N-LRH	4R7	4.7	7.96 MHz	162	0.84
CSS0418P-5R6N-LRH	5R6	5.6	7.96 MHz	170	0.80
CSS0418P-6R8N-LRH	6R8	6.8	7.96 MHz	200	0.76
CSS0418P-8R2N-LRH	8R2	8.2	7.96 MHz	245	0.68
CSS0418P-100N-LRH	100	10	100 KHz	200	0.61
CSS0418P-120N-LRH	120	12	100 KHz	210	0.56
CSS0418P-150N-LRH	150	15	100 KHz	240	0.50
CSS0418P-180N-LRH	180	18	100 KHz	338	0.48
CSS0418P-220N-LRH	220	22	100 KHz	397	0.41
CSS0418P-270N-LRH	270	27	100 KHz	441	0.35
CSS0418P-330N-LRH	330	33	100 KHz	694	0.32
CSS0418P-390N-LRH	390	39	100 KHz	709	0.30

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0418P Series



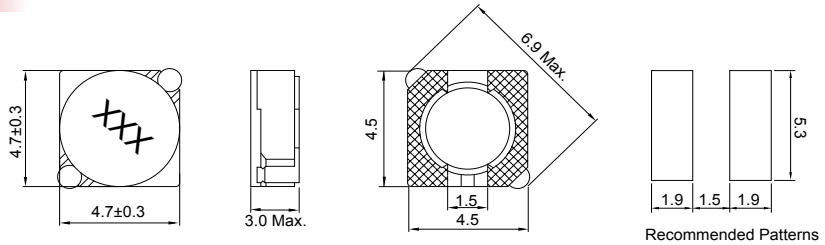


CSS0428P Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0428P



unit: mm

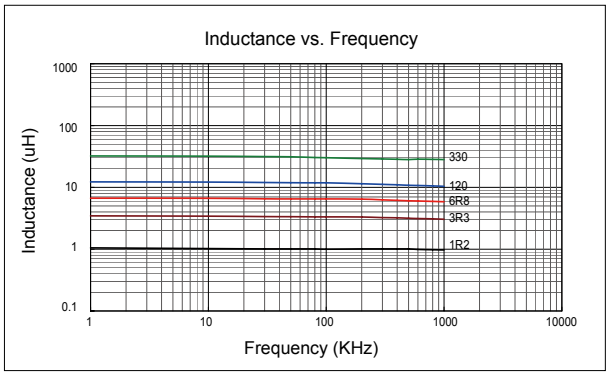
ELECTRICAL SPECIFICATION

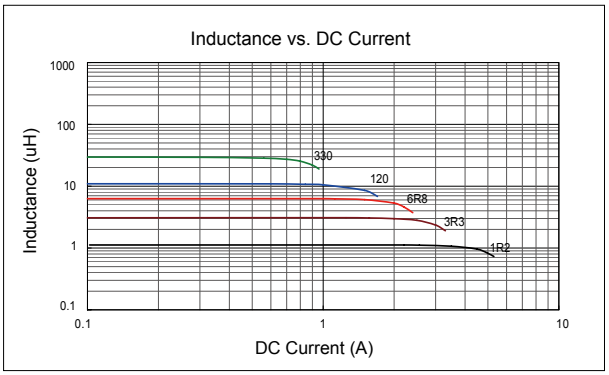
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (A)
CSS0428P-1R2N-LRH	1R2	1.2	100	23.6	2.56
CSS0428P-1R8N-LRH	1R8	1.8	100	27.5	2.20
CSS0428P-2R2N-LRH	2R2	2.2	100	31.3	2.04
CSS0428P-2R7N-LRH	2R7	2.7	100	43.3	1.60
CSS0428P-3R3N-LRH	3R3	3.3	100	49.2	1.57
CSS0428P-3R9N-LRH	3R9	3.9	100	64.8	1.44
CSS0428P-4R7N-LRH	4R7	4.7	100	72.0	1.32
CSS0428P-5R6N-LRH	5R6	5.6	100	100.9	1.17
CSS0428P-6R8N-LRH	6R8	6.8	100	108.9	1.12
CSS0428P-8R2N-LRH	8R2	8.2	100	117.5	1.04
CSS0428P-100N-LRH	100	10	100	128.3	1.00
CSS0428P-120N-LRH	120	12	100	131.6	0.84
CSS0428P-150N-LRH	150	15	100	149.0	0.76
CSS0428P-180N-LRH	180	18	100	166.0	0.72
CSS0428P-220N-LRH	220	22	100	235.0	0.70
CSS0428P-270N-LRH	270	27	100	261.0	0.58
CSS0428P-330N-LRH	330	33	100	331.3	0.56
CSS0428P-390N-LRH	390	39	100	383.7	0.50
CSS0428P-470N-LRH	470	47	100	587.0	0.48
CSS0428P-560N-LRH	560	56	100	624.5	0.41
CSS0428P-680N-LRH	680	68	100	699.0	0.35
CSS0428P-820N-LRH	820	82	100	914.8	0.32
CSS0428P-101N-LRH	101	100	100	1020	0.29
CSS0428P-121N-LRH	121	120	100	1270	0.27
CSS0428P-151N-LRH	151	150	100	1350	0.24
CSS0428P-181N-LRH	181	180	100	1540	0.22

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0428P Series





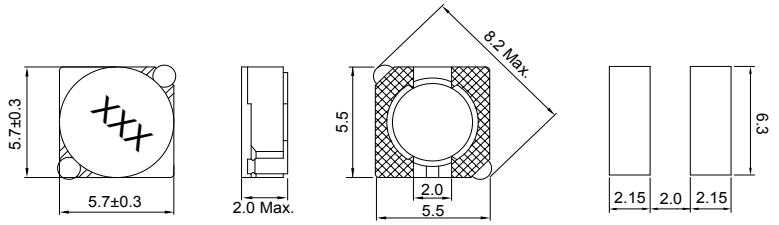
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0518P



unit: mm

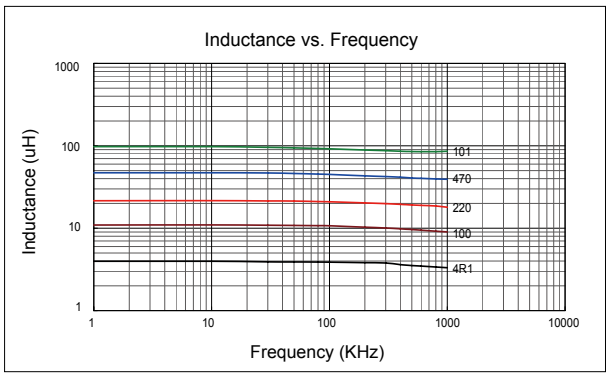
ELECTRICAL SPECIFICATION

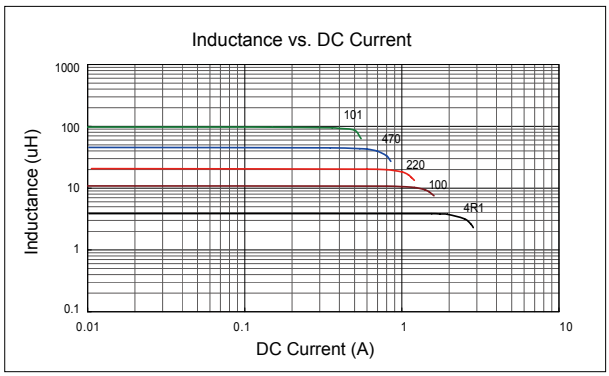
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (A)
CSS0518P-4R1N-LRH	4R1	4.1	10	57	1.95
CSS0518P-5R4N-LRH	5R4	5.4	10	76	1.60
CSS0518P-6R2N-LRH	6R2	6.2	10	96	1.40
CSS0518P-8R9N-LRH	8R9	8.9	10	116	1.25
CSS0518P-100N-LRH	100	10	10	124	1.20
CSS0518P-120N-LRH	120	12	10	153	1.10
CSS0518P-150N-LRH	150	15	10	196	0.97
CSS0518P-180N-LRH	180	18	10	210	0.85
CSS0518P-220N-LRH	220	22	10	290	0.80
CSS0518P-270N-LRH	270	27	10	330	0.75
CSS0518P-330N-LRH	330	33	10	385	0.65
CSS0518P-390N-LRH	390	39	10	520	0.57
CSS0518P-470N-LRH	470	47	10	595	0.54
CSS0518P-560N-LRH	560	56	10	665	0.50
CSS0518P-680N-LRH	680	68	10	840	0.43
CSS0518P-820N-LRH	820	82	10	978	0.41
CSS0518P-101N-LRH	101	100	10	1200	0.36

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0518P Series



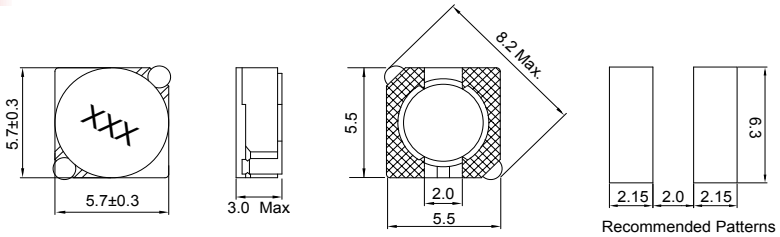


CSS0528P Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0528P



unit: mm

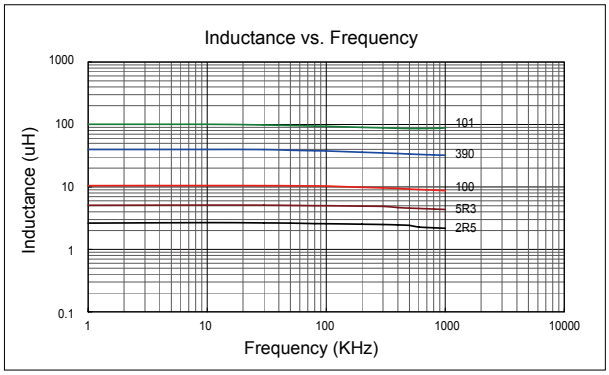
ELECTRICAL SPECIFICATION

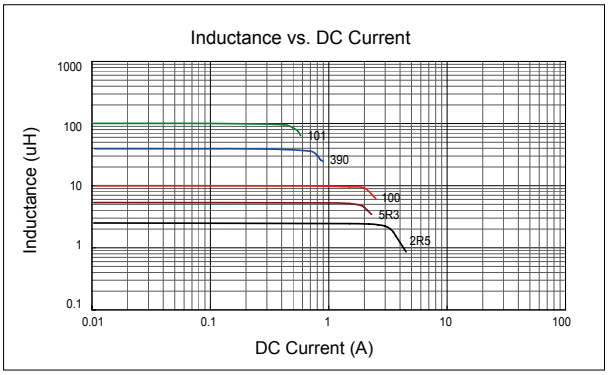
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (A)
CSS0528P-2R5N-LRH	2R5	2.5	10	18	2.60
CSS0528P-3R0N-LRH	3R0	3.0	10	24	2.40
CSS0528P-4R2N-LRH	4R2	4.2	10	31	2.20
CSS0528P-5R3N-LRH	5R3	5.3	10	38	1.90
CSS0528P-6R2N-LRH	6R2	6.2	10	45	1.80
CSS0528P-8R2N-LRH	8R2	8.2	10	53	1.60
CSS0528P-100N-LRH	100	10	10	65	1.30
CSS0528P-120N-LRH	120	12	10	76	1.20
CSS0528P-150N-LRH	150	15	10	103	1.10
CSS0528P-180N-LRH	180	18	10	110	1.00
CSS0528P-220N-LRH	220	22	10	122	0.90
CSS0528P-270N-LRH	270	27	10	175	0.85
CSS0528P-330N-LRH	330	33	10	189	0.75
CSS0528P-390N-LRH	390	39	10	212	0.70
CSS0528P-470N-LRH	470	47	10	250	0.62
CSS0528P-560N-LRH	560	56	10	305	0.58
CSS0528P-680N-LRH	680	68	10	355	0.52
CSS0528P-820N-LRH	820	82	10	463	0.46
CSS0528P-101N-LRH	101	100	10	520	0.42

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0528P Series





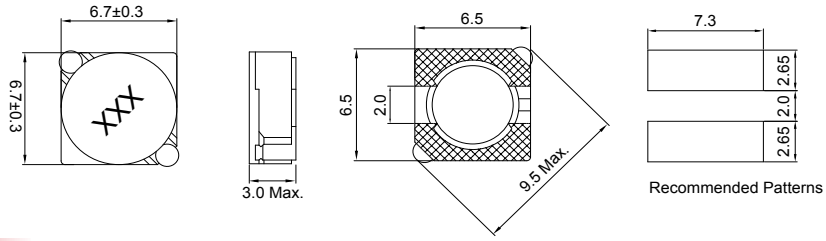
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0628P



unit: mm

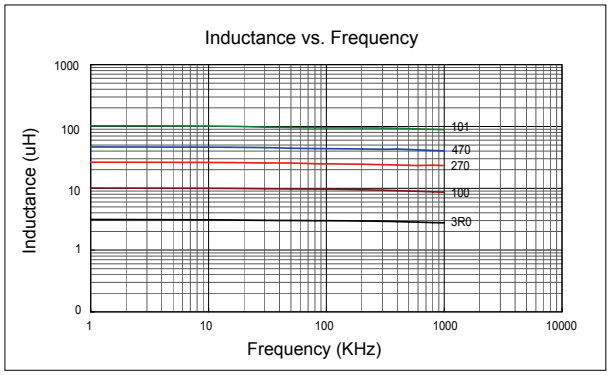
ELECTRICAL SPECIFICATION

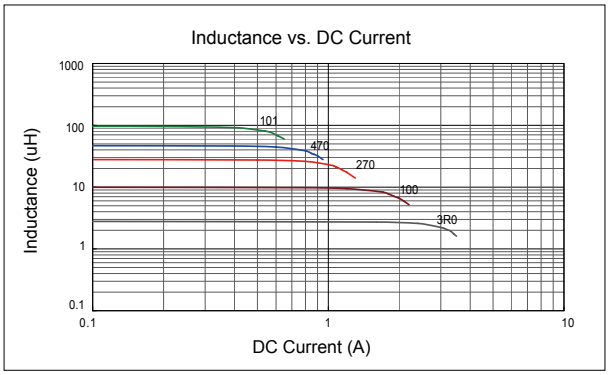
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (A)
CSS0628P-3R0N-LRH	3R0	3.0	10	24	3.00
CSS0628P-3R9N-LRH	3R9	3.9	10	27	2.60
CSS0628P-5R0N-LRH	5R0	5.0	10	31	2.40
CSS0628P-6R0N-LRH	6R0	6.0	10	35	2.25
CSS0628P-7R3N-LRH	7R3	7.3	10	54	2.10
CSS0628P-8R6N-LRH	8R6	8.6	10	58	1.85
CSS0628P-100N-LRH	100	10	10	65	1.70
CSS0628P-120N-LRH	120	12	10	70	1.55
CSS0628P-150N-LRH	150	15	10	84	1.40
CSS0628P-180N-LRH	180	18	10	95	1.32
CSS0628P-220N-LRH	220	22	10	128	1.20
CSS0628P-270N-LRH	270	27	10	142	1.05
CSS0628P-330N-LRH	330	33	10	165	0.97
CSS0628P-390N-LRH	390	39	10	210	0.86
CSS0628P-470N-LRH	470	47	10	238	0.80
CSS0628P-560N-LRH	560	56	10	277	0.73
CSS0628P-680N-LRH	680	68	10	304	0.65
CSS0628P-820N-LRH	820	82	10	390	0.60
CSS0628P-101N-LRH	101	100	10	535	0.54

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0628P Series



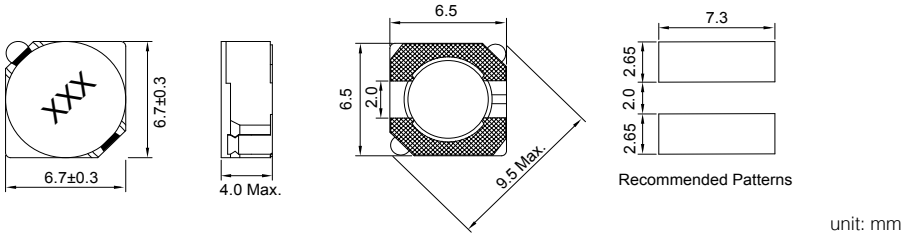


CSS0638P Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0638P



unit: mm

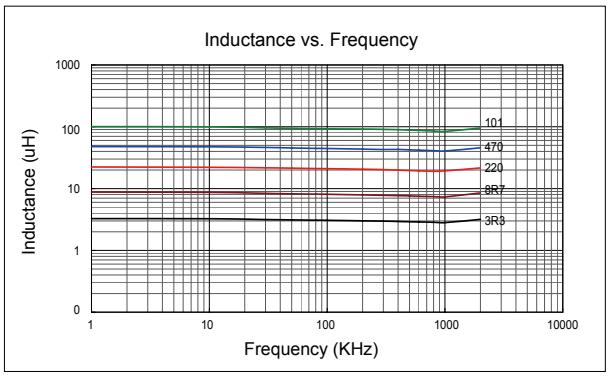
ELECTRICAL SPECIFICATION

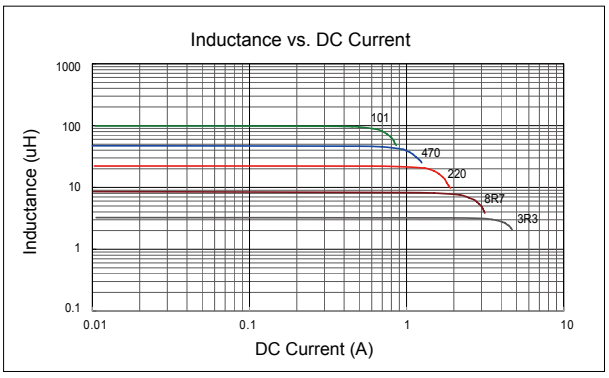
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (A)
CSS0638P-3R3N-LRH	3R3	3.3	10	20	3.50
CSS0638P-5R0N-LRH	5R0	5.0	10	24	2.90
CSS0638P-6R2N-LRH	6R2	6.2	10	27	2.50
CSS0638P-7R4N-LRH	7R4	7.4	10	31	2.30
CSS0638P-8R7N-LRH	8R7	8.7	10	34	2.20
CSS0638P-100N-LRH	100	10	10	38	2.00
CSS0638P-120N-LRH	120	12	10	53	1.70
CSS0638P-150N-LRH	150	15	10	57	1.60
CSS0638P-180N-LRH	180	18	10	92	1.50
CSS0638P-220N-LRH	220	22	10	96	1.30
CSS0638P-270N-LRH	270	27	10	109	1.20
CSS0638P-330N-LRH	330	33	10	124	1.10
CSS0638P-390N-LRH	390	39	10	138	1.00
CSS0638P-470N-LRH	470	47	10	155	0.95
CSS0638P-560N-LRH	560	56	10	202	0.85
CSS0638P-680N-LRH	680	68	10	234	0.75
CSS0638P-820N-LRH	820	82	10	324	0.70
CSS0638P-101N-LRH	101	100	10	358	0.65

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0638P Series

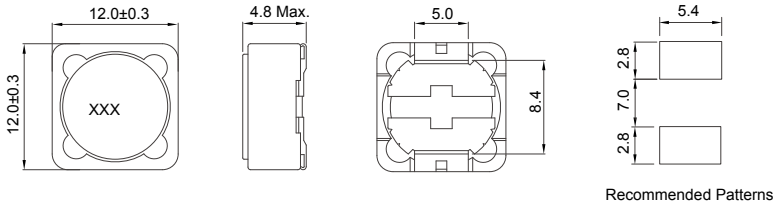




■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS124P



unit: mm

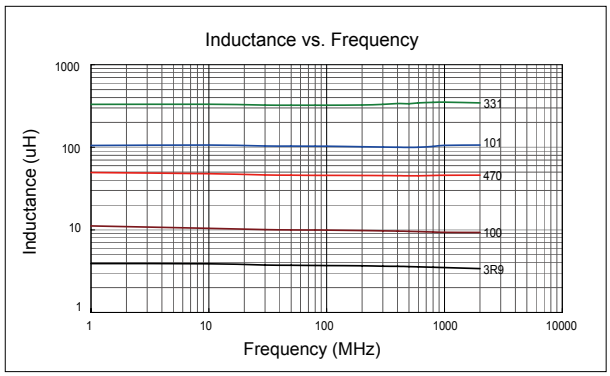
ELECTRICAL SPECIFICATION

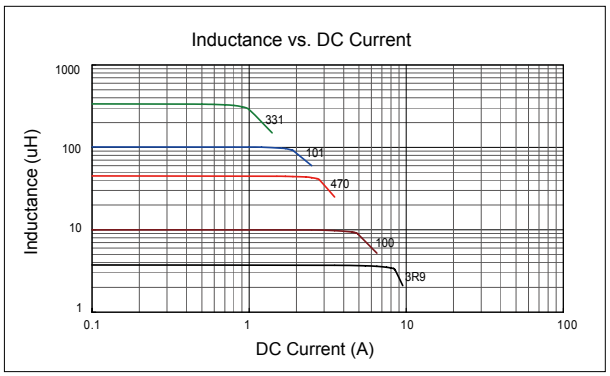
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (A)
CSS124P-3R9M-LRH	3R9	3.9	100	15	6.50
CSS124P-4R7M-LRH	4R7	4.7	100	18	5.70
CSS124P-6R8M-LRH	6R8	6.8	100	23	4.90
CSS124P-8R2M-LRH	8R2	8.2	100	26	4.60
CSS124P-100M-LRH	100	10	100	28	4.50
CSS124P-120M-LRH	120	12	100	38	4.00
CSS124P-150M-LRH	150	15	100	50	3.20
CSS124P-180M-LRH	180	18	100	57	3.10
CSS124P-220M-LRH	220	22	100	66	2.90
CSS124P-270M-LRH	270	27	100	80	2.80
CSS124P-330M-LRH	330	33	100	97	2.70
CSS124P-390M-LRH	390	39	100	132	2.10
CSS124P-470M-LRH	470	47	100	150	1.90
CSS124P-560M-LRH	560	56	100	190	1.80
CSS124P-680M-LRH	680	68	100	220	1.50
CSS124P-820M-LRH	820	82	100	260	1.30
CSS124P-101M-LRH	101	100	100	308	1.20
CSS124P-121M-LRH	121	120	100	380	1.10
CSS124P-151M-LRH	151	150	100	530	0.95
CSS124P-181M-LRH	181	180	100	620	0.85
CSS124P-221M-LRH	221	220	100	700	0.80
CSS124P-271M-LRH	271	270	100	870	0.60
CSS124P-331M-LRH	331	330	100	990	0.50

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS124P Series



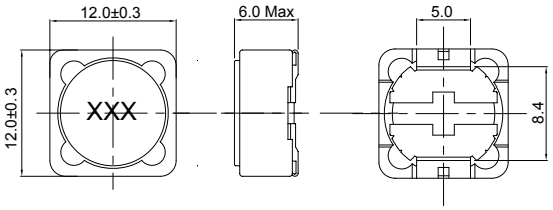


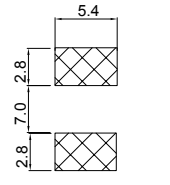
CSS125P Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS125P





Recommended Patterns

unit: mm

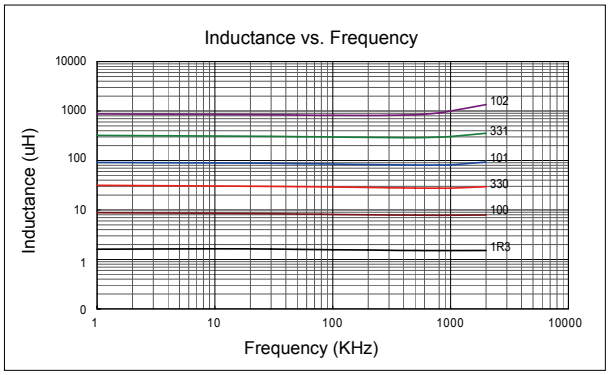
ELECTRICAL SPECIFICATION

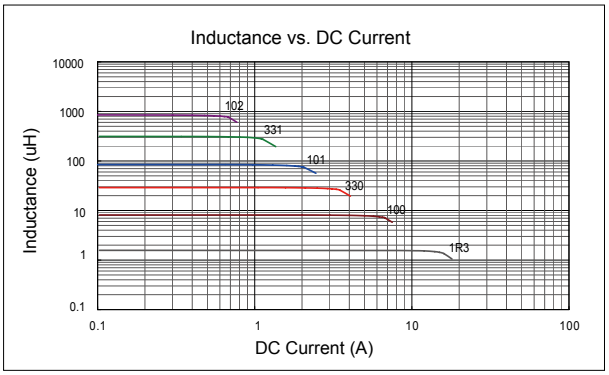
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSS125P-1R3N-LRH	1R3	1.3+30%,-20%	100	0.012	8.00
CSS125P-2R1N-LRH	2R1	2.1+30%,-20%	100	0.014	7.00
CSS125P-3R1N-LRH	3R1	3.1+30%,-20%	100	0.017	6.00
CSS125P-4R4N-LRH	4R4	4.4+30%,-20%	100	0.020	5.00
CSS125P-5R8N-LRH	5R8	5.8+30%,-20%	100	0.021	4.40
CSS125P-7R5N-LRH	7R5	7.5+30%,-20%	100	0.024	4.20
CSS125P-100M-LRH	100	10±20%	1	0.025	4.00
CSS125P-120M-LRH	120	12±20%	1	0.027	3.50
CSS125P-150M-LRH	150	15±20%	1	0.030	3.30
CSS125P-180M-LRH	180	18±20%	1	0.034	3.00
CSS125P-220M-LRH	220	22±20%	1	0.036	2.80
CSS125P-270M-LRH	270	27±20%	1	0.051	2.30
CSS125P-330M-LRH	330	33±20%	1	0.057	2.10
CSS125P-390M-LRH	390	39±20%	1	0.068	2.00
CSS125P-470M-LRH	470	47±20%	1	0.075	1.80
CSS125P-560M-LRH	560	56±20%	1	0.110	1.70
CSS125P-680M-LRH	680	68±20%	1	0.120	1.50
CSS125P-820M-LRH	820	82±20%	1	0.140	1.40
CSS125P-101M-LRH	101	100±20%	1	0.160	1.30
CSS125P-121M-LRH	121	120±20%	1	0.170	1.10
CSS125P-151M-LRH	151	150±20%	1	0.230	1.00
CSS125P-181M-LRH	181	180±20%	1	0.290	0.90
CSS125P-221M-LRH	221	220±20%	1	0.400	0.80
CSS125P-271M-LRH	271	270±20%	1	0.460	0.75
CSS125P-331M-LRH	331	330±20%	1	0.510	0.68
CSS125P-391M-LRH	391	390±20%	1	0.690	0.65
CSS125P-471M-LRH	471	470±20%	1	0.770	0.58
CSS125P-561M-LRH	561	560±20%	1	0.860	0.54
CSS125P-681M-LRH	681	680±20%	1	1.200	0.48
CSS125P-821M-LRH	821	820±20%	1	1.340	0.43
CSS125P-102M-LRH	102	1000±20%	1	1.530	0.40

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS125P Series





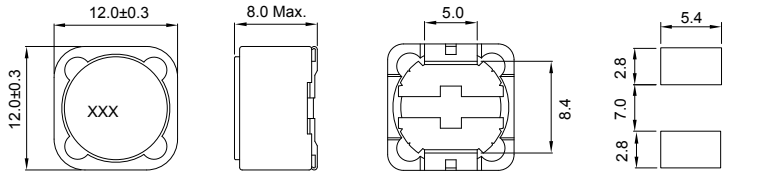
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS127P



unit: mm

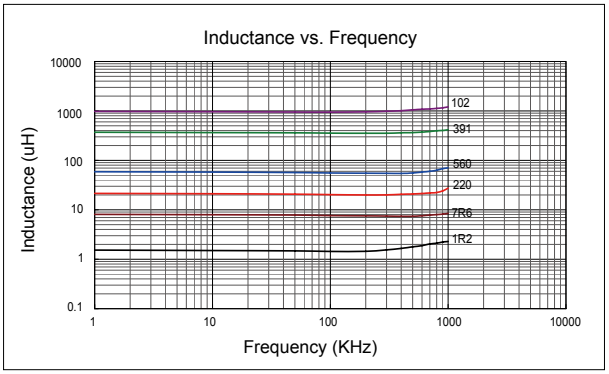
ELECTRICAL SPECIFICATION

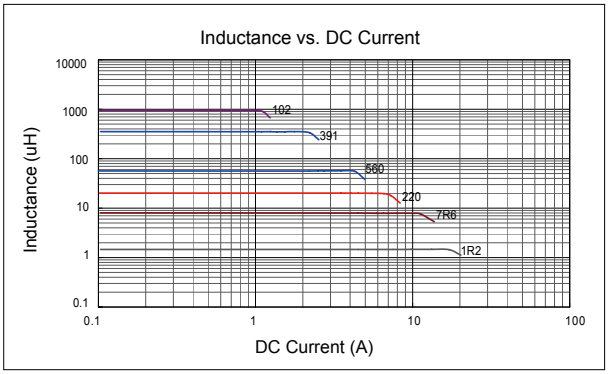
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSS127P-1R2N-LRH	1R2	1.2+40%-20%	100	0.0070	9.80
CSS127P-2R4N-LRH	2R4	2.4+40%-20%	100	0.0115	8.00
CSS127P-3R5N-LRH	3R5	3.5+40%-20%	100	0.0135	7.50
CSS127P-4R7N-LRH	4R7	4.7+40%-20%	100	0.0158	6.80
CSS127P-6R1N-LRH	6R1	6.1+40%-20%	100	0.0176	6.60
CSS127P-7R6N-LRH	7R6	7.6+40%-20%	100	0.0200	5.90
CSS127P-100M-LRH	100	10±20%	1	0.0216	5.40
CSS127P-120M-LRH	120	12±20%	1	0.0243	4.90
CSS127P-150M-LRH	150	15±20%	1	0.0270	4.50
CSS127P-180M-LRH	180	18±20%	1	0.0392	3.90
CSS127P-220M-LRH	220	22±20%	1	0.0432	3.60
CSS127P-270M-LRH	270	27±20%	1	0.0459	3.40
CSS127P-330M-LRH	330	33±20%	1	0.0648	3.00
CSS127P-390M-LRH	390	39±20%	1	0.0729	2.75
CSS127P-470M-LRH	470	47±20%	1	0.1000	2.50
CSS127P-560M-LRH	560	56±20%	1	0.11	2.35
CSS127P-680M-LRH	680	68±20%	1	0.14	2.10
CSS127P-820M-LRH	820	82±20%	1	0.16	1.95
CSS127P-101M-LRH	101	100±20%	1	0.22	1.70
CSS127P-121M-LRH	121	120±20%	1	0.25	1.60
CSS127P-151M-LRH	151	150±20%	1	0.28	1.42
CSS127P-181M-LRH	181	180±20%	1	0.35	1.30
CSS127P-221M-LRH	221	220±20%	1	0.39	1.16
CSS127P-271M-LRH	271	270±20%	1	0.56	1.06
CSS127P-331M-LRH	331	330±20%	1	0.64	0.95
CSS127P-391M-LRH	391	390±20%	1	0.70	0.88
CSS127P-471M-LRH	471	470±20%	1	0.98	0.79
CSS127P-561M-LRH	561	560±20%	1	1.07	0.73
CSS127P-681M-LRH	681	680±20%	1	1.46	0.67
CSS127P-821M-LRH	821	820±20%	1	1.64	0.60
CSS127P-102M-LRH	102	1000±20%	1	1.82	0.55

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS127P Series



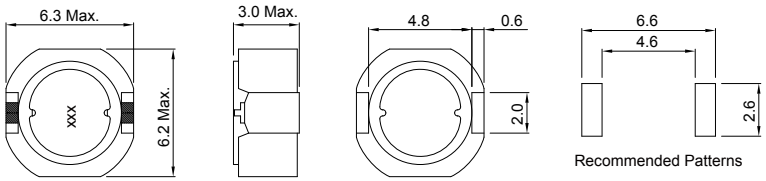


CSS0630G Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS0630G



unit: mm

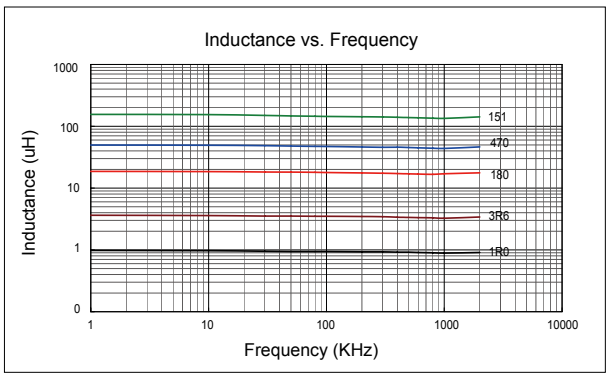
ELECTRICAL SPECIFICATION

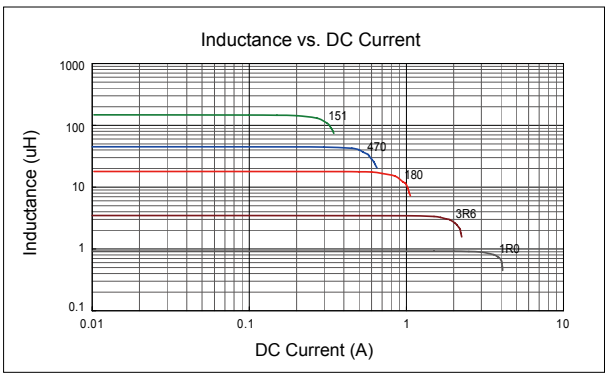
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)	Isat (A)
CSS0630G-1R0M-LRH	1R0	1.0	100	0.014	3.59	4.03
CSS0630G-1R5M-LRH	1R5	1.5	100	0.016	2.93	3.63
CSS0630G-2R2M-LRH	2R2	2.2	100	0.020	2.42	3.30
CSS0630G-3R6M-LRH	3R6	3.6	100	0.026	1.89	2.83
CSS0630G-4R7M-LRH	4R7	4.7	100	0.033	1.66	2.45
CSS0630G-6R2M-LRH	6R2	6.2	100	0.039	1.45	2.20
CSS0630G-100M-LRH	100	10	100	0.059	1.14	1.77
CSS0630G-120M-LRH	120	12	100	0.063	1.04	1.70
CSS0630G-150M-LRH	150	15	100	0.075	0.93	1.55
CSS0630G-180M-LRH	180	18	100	0.089	0.85	1.41
CSS0630G-220M-LRH	220	22	100	0.115	0.77	1.23
CSS0630G-270M-LRH	270	27	100	0.144	0.70	1.08
CSS0630G-330M-LRH	330	33	100	0.168	0.63	0.99
CSS0630G-390M-LRH	390	39	100	0.180	0.58	0.95
CSS0630G-470M-LRH	470	47	100	0.225	0.53	0.84
CSS0630G-560M-LRH	560	56	100	0.264	0.48	0.76
CSS0630G-680M-LRH	680	68	100	0.324	0.44	0.69
CSS0630G-820M-LRH	820	82	100	0.396	0.40	0.61
CSS0630G-101M-LRH	101	100	100	0.498	0.36	0.54
CSS0630G-151M-LRH	151	150	100	0.738	0.31	0.42

- Tolerance: N=±30%；M=±20%；L=±15%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS0630G Series





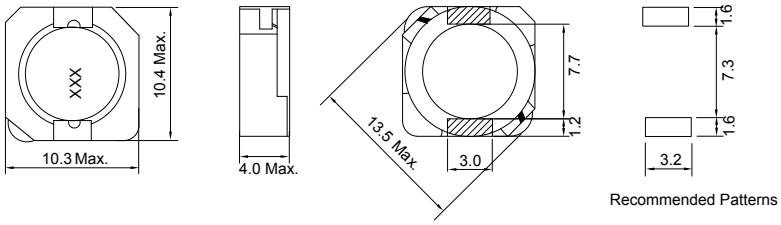
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS1038G



unit: mm

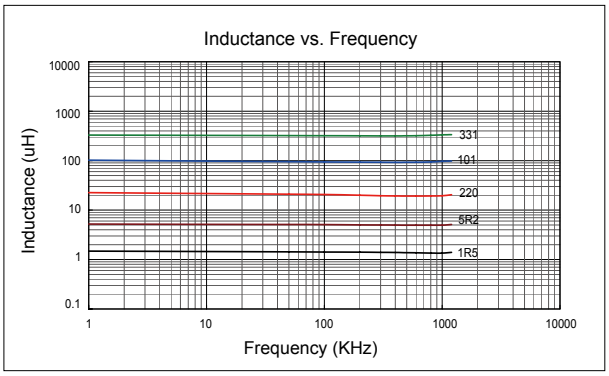
ELECTRICAL SPECIFICATION

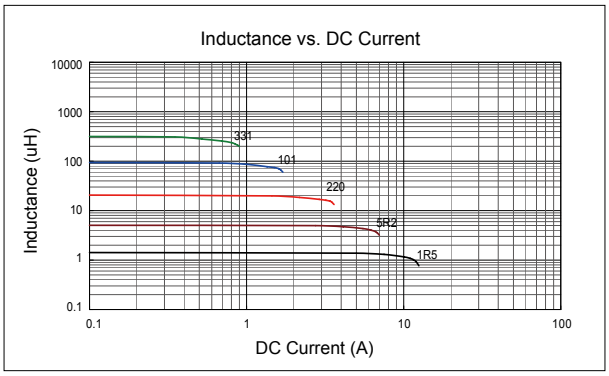
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (A)	Isat (A)
CSS1038G-1R5N-LRH	1R5	1.5	100	8.1	6.50	10.0
CSS1038G-2R5N-LRH	2R5	2.5	100	10.5	6.10	7.50
CSS1038G-3R8N-LRH	3R8	3.8	100	13.0	5.50	6.00
CSS1038G-5R2N-LRH	5R2	5.2	100	22	5.40	5.50
CSS1038G-6R8N-LRH	6R8	6.8	100	25	4.50	4.80
CSS1038G-7R0N-LRH	7R0	7.0	100	27	4.50	4.80
CSS1038G-100N-LRH	100	10	100	35	3.80	4.40
CSS1038G-150N-LRH	150	15	100	50	3.10	3.60
CSS1038G-220N-LRH	220	22	100	73	2.50	2.90
CSS1038G-330N-LRH	330	33	100	93	2.20	2.30
CSS1038G-470N-LRH	470	47	100	128	1.90	2.10
CSS1038G-680N-LRH	680	68	100	213	1.42	1.50
CSS1038G-101N-LRH	101	100	100	304	1.25	1.35
CSS1038G-151N-LRH	151	150	100	506	0.85	1.15
CSS1038G-221N-LRH	221	220	100	756	0.70	0.92
CSS1038G-331N-LRH	331	330	100	1090	0.52	0.70

- Tolerance: N=±30%；M=±20%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS1038G Series



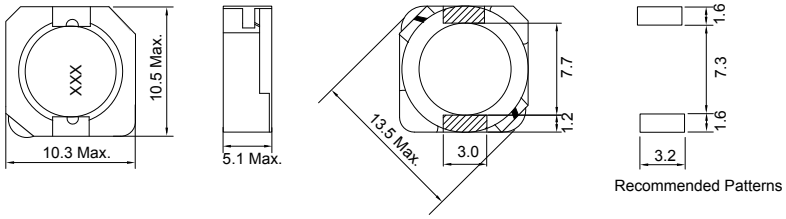


CSS1050G Series (SHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSS1050G



Recommended Patterns

unit: mm

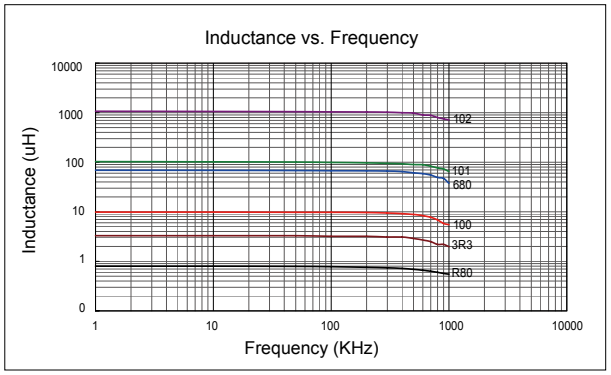
ELECTRICAL SPECIFICATION

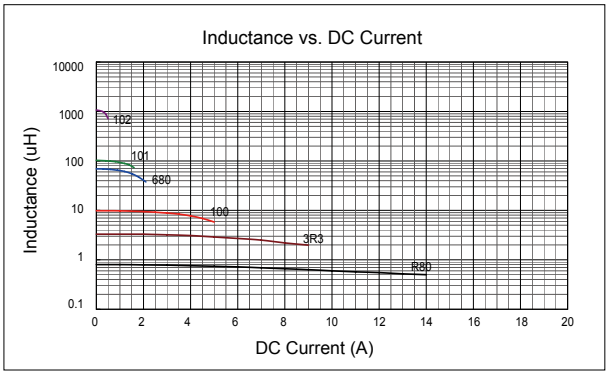
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (mΩ) Max.	Rated Current (A)	Isat (A)
CSS1050G-R80N-LRH	R80	0.80	100	4.3	9.50	13.5
CSS1050G-1R5N-LRH	1R5	1.50	100	5.8	8.30	10.5
CSS1050G-2R2N-LRH	2R2	2.20	100	7.2	7.50	9.25
CSS1050G-3R3N-LRH	3R3	3.30	100	10.4	6.50	7.80
CSS1050G-4R7N-LRH	4R7	4.70	100	12.3	6.10	6.40
CSS1050G-6R8N-LRH	6R8	6.80	100	18.0	5.40	5.40
CSS1050G-8R2N-LRH	8R2	8.20	100	20.0	5.00	4.85
CSS1050G-100N-LRH	100	10.0	100	26.0	4.50	4.45
CSS1050G-120N-LRH	120	12.0	100	33.0	3.80	4.00
CSS1050G-150N-LRH	150	15.0	100	41.0	3.40	3.60
CSS1050G-180N-LRH	180	18.0	100	46.0	3.10	3.20
CSS1050G-220N-LRH	220	22.0	100	61.0	2.90	2.95
CSS1050G-270N-LRH	270	27.0	100	69.0	2.60	2.70
CSS1050G-330N-LRH	330	33.0	100	84.0	2.50	2.40
CSS1050G-390N-LRH	390	39.0	100	106.0	2.25	2.30
CSS1050G-470N-LRH	470	47.0	100	130.0	2.00	2.00
CSS1050G-560N-LRH	560	56.0	100	149.0	1.90	1.90
CSS1050G-680N-LRH	680	68.0	100	201.0	1.60	1.65
CSS1050G-820N-LRH	820	82.0	100	227.0	1.45	1.50
CSS1050G-101N-LRH	101	100	100	253.0	1.35	1.35
CSS1050G-121N-LRH	121	120	100	303.0	1.18	1.28
CSS1050G-151N-LRH	151	150	100	370.0	1.10	1.12
CSS1050G-181N-LRH	181	180	100	419.0	1.00	1.04
CSS1050G-221N-LRH	221	220	100	500.0	0.94	0.94
CSS1050G-271N-LRH	271	270	100	672.0	0.80	0.84
CSS1050G-331N-LRH	331	330	100	812.0	0.73	0.75
CSS1050G-391N-LRH	391	390	100	953.0	0.70	0.70
CSS1050G-471N-LRH	471	470	100	1289	0.54	0.60
CSS1050G-561NLRH	561	560	100	1430	0.52	0.54
CSS1050G-681N-LRH	681	680	100	1599	0.51	0.52
CSS1050G-821N-LRH	821	820	100	1768	0.48	0.50
CSS1050G-102N-LRH	102	1000	100	1989	0.42	0.48

- Tolerance: N=±30%；M=±20%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 35% of initial value at Isat, temperature rises △ t<40℃ at rated current.
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSS1050G Series





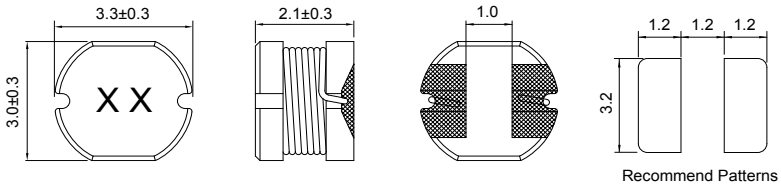
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN032D



unit: mm

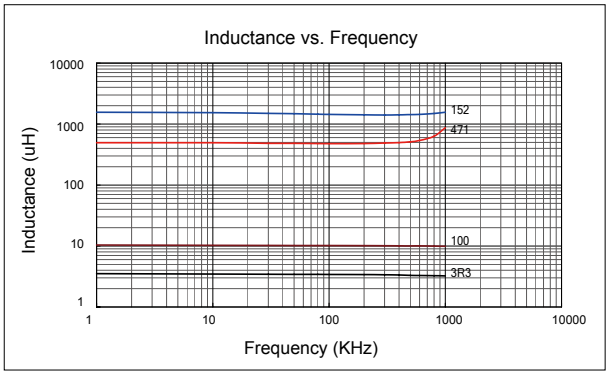
ELECTRICAL SPECIFICATION

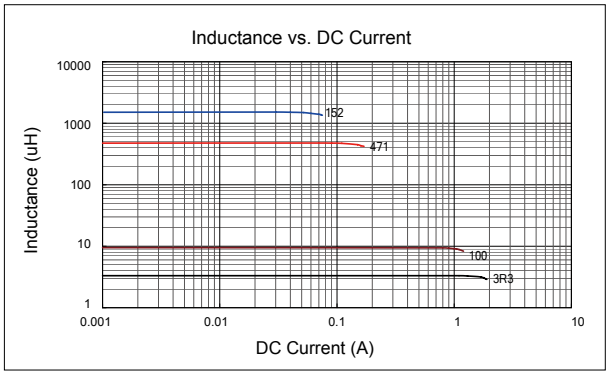
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSN032D-1R0M-LRH	BA	1.0	100	0.07	2.080
CSN032D-1R4M-LRH	BE	1.4	100	0.09	1.860
CSN032D-1R8M-LRH	BI	1.8	100	0.11	1.800
CSN032D-2R2M-LRH	CC	2.2	100	0.13	1.390
CSN032D-2R7M-LRH	CH	2.7	100	0.14	1.320
CSN032D-3R3M-LRH	DD	3.3	100	0.20	1.250
CSN032D-3R9M-LRH	DJ	3.9	100	0.21	1.200
CSN032D-4R7M-LRH	EH	4.7	100	0.33	1.030
CSN032D-5R6M-LRH	FG	5.6	100	0.35	0.910
CSN032D-6R8M-LRH	GI	6.8	100	0.38	0.850
CSN032D-8R2M-LRH	IC	8.2	100	0.43	0.820
CSN032D-100M-LRH	KA	10	100	0.50	0.740
CSN032D-120M-LRH	QA	12	100	0.65	0.640
CSN032D-150M-LRH	MA	15	100	0.82	0.600
CSN032D-180M-LRH	RA	18	100	0.90	0.540
CSN032D-220M-LRH	LA	22	100	1.14	0.500
CSN032D-270M-LRH	SA	27	100	1.39	0.430
CSN032D-330M-LRH	NA	33	100	1.55	0.400
CSN032D-390M-LRH	PA	39	100	2.15	0.370
CSN032D-470M-LRH	OA	47	100	2.44	0.360
CSN032D-560M-LRH	UA	56	100	2.68	0.310
CSN032D-680M-LRH	VA	68	100	3.05	0.300
CSN032D-820M-LRH	XA	82	100	3.48	0.280
CSN032D-221M-LRH	LB	220	100	6.30	0.200
CSN032D-471M-LRH	OB	470	100	14.00	0.090

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at rated current ,temperature rises △ t<40℃
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN032D Series



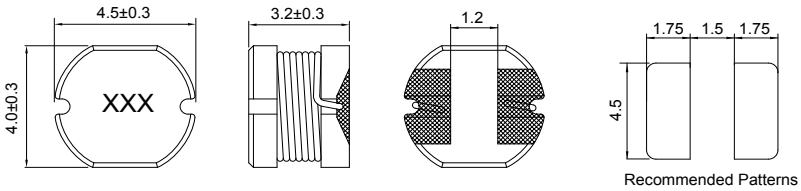


CSN043D Series (UNSHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN043D



Recommended Patterns

unit: mm

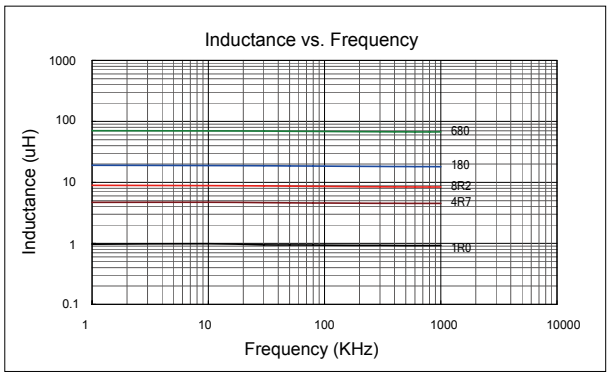
ELECTRICAL SPECIFICATION

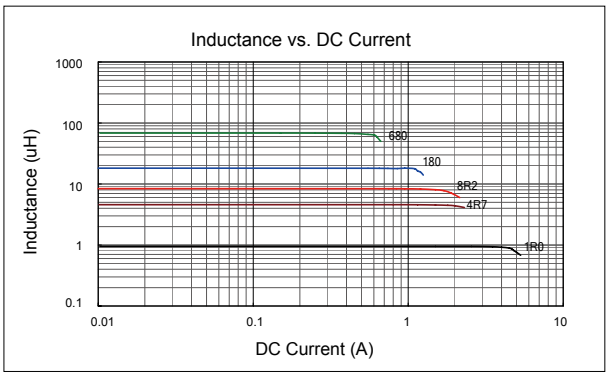
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSN043D-1R0M-LRH	1R0	1.0	100	0.0487	2.56
CSN043D-1R4M-LRH	1R4	1.4	100	0.0562	2.52
CSN043D-1R8M-LRH	1R8	1.8	100	0.0637	1.95
CSN043D-2R2M-LRH	2R2	2.2	100	0.0712	1.75
CSN043D-2R7M-LRH	2R7	2.7	100	0.0787	1.58
CSN043D-3R3M-LRH	3R3	3.3	100	0.0862	1.44
CSN043D-3R9M-LRH	3R9	3.9	100	0.0937	1.33
CSN043D-4R7M-LRH	4R7	4.7	100	0.1087	1.15
CSN043D-5R6M-LRH	5R6	5.6	100	0.1257	0.99
CSN043D-6R8M-LRH	6R8	6.8	100	0.1312	0.95
CSN043D-8R2M-LRH	8R2	8.2	100	0.1462	0.84
CSN043D-100M-LRH	100	10	100	0.182	1.04
CSN043D-120M-LRH	120	12	100	0.210	0.97
CSN043D-150M-LRH	150	15	100	0.235	0.85
CSN043D-180M-LRH	180	18	100	0.338	0.74
CSN043D-220M-LRH	220	22	100	0.378	0.68
CSN043D-270M-LRH	270	27	100	0.522	0.62
CSN043D-330K-LRH	330	33	100	0.540	0.56
CSN043D-390K-LRH	390	39	100	0.587	0.52
CSN043D-470K-LRH	470	47	100	0.844	0.44
CSN043D-560K-LRH	560	56	100	0.937	0.42
CSN043D-680K-LRH	680	68	100	1.117	0.37
CSN043D-331K-LRH	331	330	10	3.350	0.10

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at rated current ,temperature rises △ t<40℃
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN043D Series





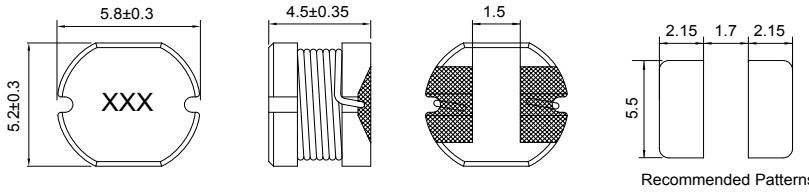
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN054D



unit: mm

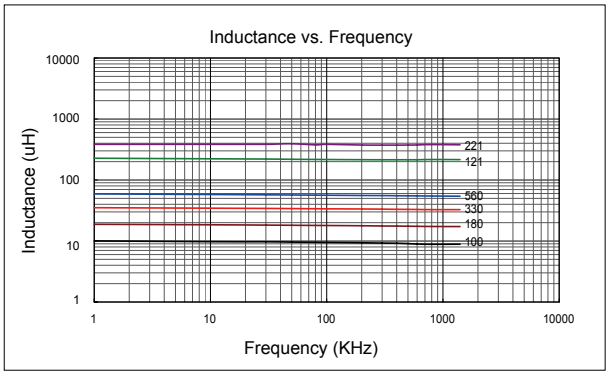
ELECTRICAL SPECIFICATION

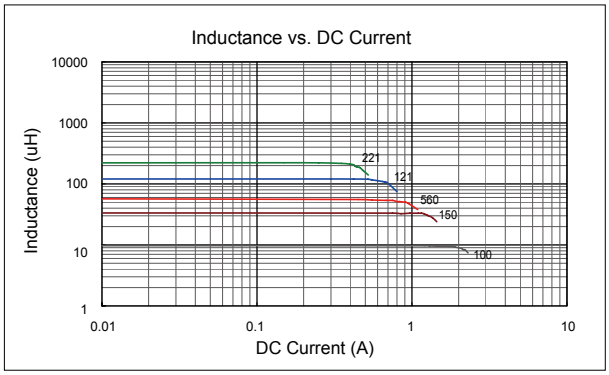
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSN054D-1R0M-LRH	1R0	1.0	100	0.015	4.00
CSN054D-1R9M-LRH	1R9	1.9	100	0.039	3.00
CSN054D-2R2M-LRH	2R2	2.2	100	0.020	4.00
CSN054D-3R3M-LRH	3R3	3.3	100	0.021	3.00
CSN054D-4R7M-LRH	4R7	4.7	100	0.028	2.00
CSN054D-6R8M-LRH	6R8	6.8	100	0.042	2.00
CSN054D-100M-LRH	100	10	100	0.10	1.44
CSN054D-120M-LRH	120	12	100	0.12	1.40
CSN054D-150M-LRH	150	15	100	0.14	1.30
CSN054D-180M-LRH	180	18	100	0.15	1.23
CSN054D-220M-LRH	220	22	100	0.18	1.11
CSN054D-270M-LRH	270	27	100	0.20	0.97
CSN054D-330L-LRH	330	33	100	0.23	0.88
CSN054D-390L-LRH	390	39	100	0.32	0.80
CSN054D-470L-LRH	470	47	100	0.37	0.72
CSN054D-560K-LRH	560	56	100	0.42	0.68
CSN054D-680K-LRH	680	68	100	0.46	0.61
CSN054D-820K-LRH	820	82	100	0.60	0.58
CSN054D-101K-LRH	101	100	10	0.70	0.52
CSN054D-121K-LRH	121	120	10	0.93	0.48
CSN054D-151K-LRH	151	150	10	1.10	0.40
CSN054D-181K-LRH	181	180	10	1.38	0.38
CSN054D-221K-LRH	221	220	10	1.57	0.35
CSN054D-271K-LRH	271	270	10	1.85	0.30

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at rated current ,temperature rises △ t<40℃
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN054D Series



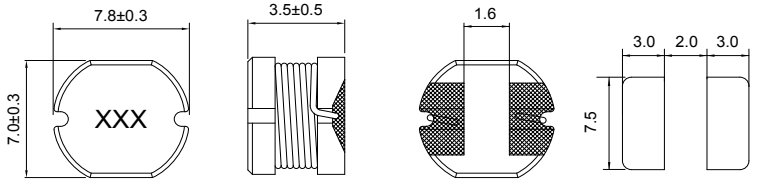


CSN073D Series (UNSHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN073D



unit: mm

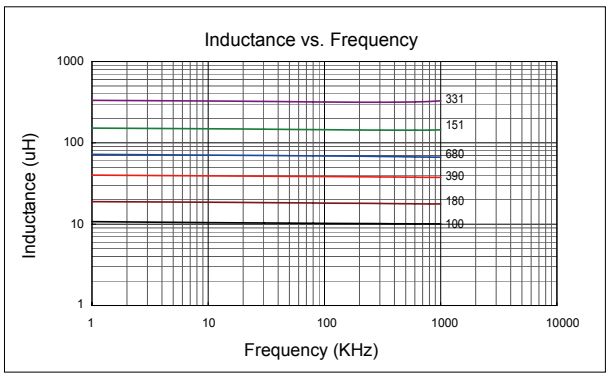
ELECTRICAL SPECIFICATION

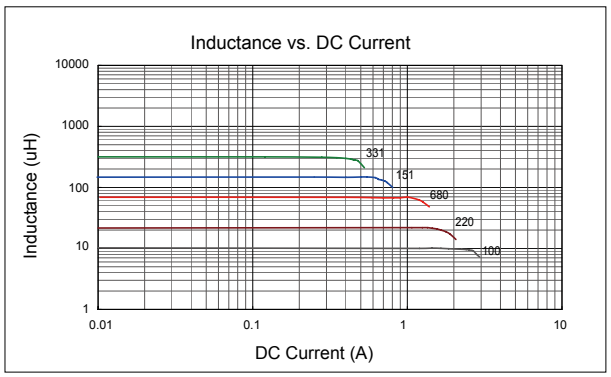
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSN073D-100M-LRH	100	10	100	0.0803	1.44
CSN073D-120M-LRH	120	12	100	0.0897	1.39
CSN073D-150M-LRH	150	15	100	0.104	1.24
CSN073D-180M-LRH	180	18	100	0.111	1.12
CSN073D-220M-LRH	220	22	100	0.129	1.07
CSN073D-270M-LRH	270	27	100	0.153	0.94
CSN073D-330M-LRH	330	33	100	0.170	0.85
CSN073D-390M-LRH	390	39	100	0.217	0.74
CSN073D-470M-LRH	470	47	100	0.252	0.68
CSN073D-560K-LRH	560	56	100	0.282	0.64
CSN073D-680K-LRH	680	68	100	0.332	0.59
CSN073D-820K-LRH	820	82	100	0.406	0.54
CSN073D-101K-LRH	101	100	10	0.481	0.51
CSN073D-121K-LRH	121	120	10	0.536	0.49
CSN073D-151K-LRH	151	150	10	0.755	0.40
CSN073D-181K-LRH	181	180	10	1.022	0.36
CSN073D-221K-LRH	221	220	10	1.200	0.31
CSN073D-271K-LRH	271	270	10	1.306	0.29
CSN073D-331K-LRH	331	330	10	1.495	0.28

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at rated current ,temperature rises △ t<40℃
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN073D Series

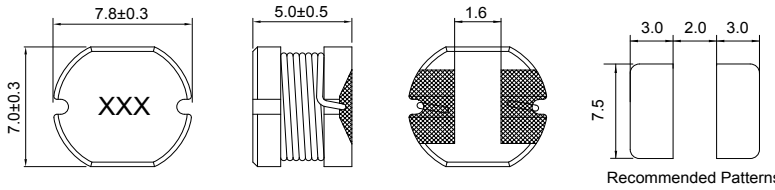




■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN075D



unit: mm

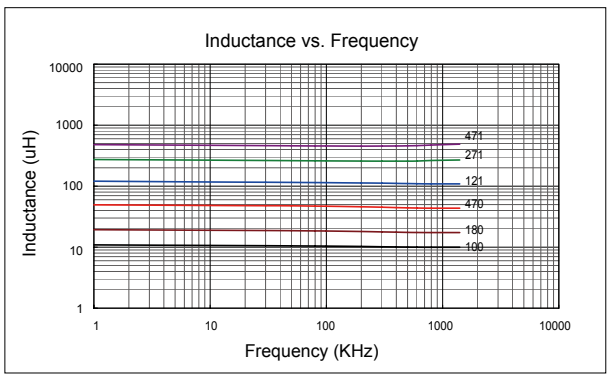
ELECTRICAL SPECIFICATION

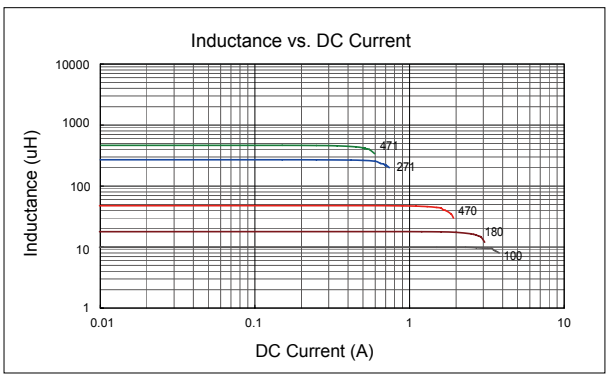
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSN075D-6R8K-LRH	6R8	6.8	100	0.058	3.00
CSN075D-8R2K-LRH	8R2	8.2	100	0.06	2.40
CSN075D-100K-LRH	100	10	100	0.07	2.30
CSN075D-120K-LRH	120	12	100	0.08	2.00
CSN075D-150K-LRH	150	15	100	0.09	1.80
CSN075D-180K-LRH	180	18	100	0.10	1.60
CSN075D-220K-LRH	220	22	100	0.11	1.50
CSN075D-270K-LRH	270	27	100	0.12	1.30
CSN075D-330K-LRH	330	33	100	0.13	1.20
CSN075D-390K-LRH	390	39	100	0.16	1.10
CSN075D-470K-LRH	470	47	100	0.18	1.10
CSN075D-560K-LRH	560	56	100	0.24	0.94
CSN075D-680K-LRH	680	68	100	0.28	0.85
CSN075D-820K-LRH	820	82	100	0.37	0.78
CSN075D-101K-LRH	101	100	10	0.43	0.72
CSN075D-121K-LRH	121	120	10	0.47	0.66
CSN075D-151K-LRH	151	150	10	0.64	0.58
CSN075D-181K-LRH	181	180	10	0.71	0.51
CSN075D-221K-LRH	221	220	10	0.96	0.49
CSN075D-271K-LRH	271	270	10	1.11	0.42
CSN075D-331K-LRH	331	330	10	1.26	0.40
CSN075D-391K-LRH	391	390	10	1.77	0.36
CSN075D-471K-LRH	471	470	10	1.96	0.34
CSN075D-302K-LRH	302	3000	1	10.0	0.12

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at rated current ,temperature rises △ t<40℃
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN075D Series



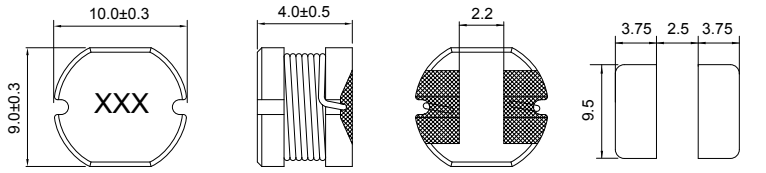


CSN104D Series (UNSHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN104D



Recommended Patterns

unit: mm

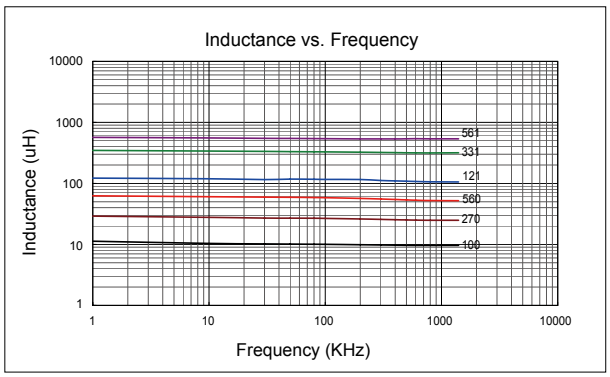
ELECTRICAL SPECIFICATION

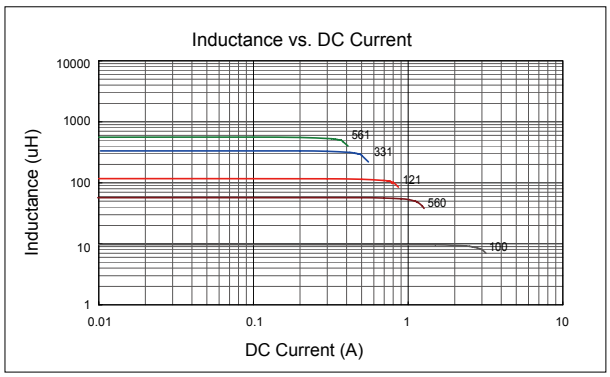
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSN104D-100M-LRH	100	10	100	0.053	2.38
CSN104D-120M-LRH	120	12	100	0.061	2.13
CSN104D-150M-LRH	150	15	100	0.070	1.87
CSN104D-180M-LRH	180	18	100	0.081	1.73
CSN104D-220M-LRH	220	22	100	0.088	1.60
CSN104D-270M-LRH	270	27	100	0.100	1.44
CSN104D-330M-LRH	330	33	100	0.120	1.26
CSN104D-390M-LRH	390	39	100	0.151	1.20
CSN104D-470M-LRH	470	47	100	0.170	1.10
CSN104D-560K-LRH	560	56	100	0.199	1.01
CSN104D-680K-LRH	680	68	100	0.223	0.91
CSN104D-820K-LRH	820	82	100	0.252	0.85
CSN104D-101K-LRH	101	100	10	0.344	0.74
CSN104D-121K-LRH	121	120	10	0.396	0.69
CSN104D-151K-LRH	151	150	10	0.544	0.61
CSN104D-181K-LRH	181	180	10	0.621	0.56
CSN104D-221K-LRH	221	220	10	0.721	0.53
CSN104D-271K-LRH	271	270	10	0.949	0.45
CSN104D-331K-LRH	331	330	10	1.100	0.42
CSN104D-391K-LRH	391	390	10	1.245	0.38
CSN104D-471K-LRH	471	470	10	1.526	0.35
CSN104D-561K-LRH	561	560	10	1.904	0.32
CSN104D-102K-LRH	102	1000	1	3.800	0.16

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at rated current ,temperature rises △ t<40℃
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN104D Series





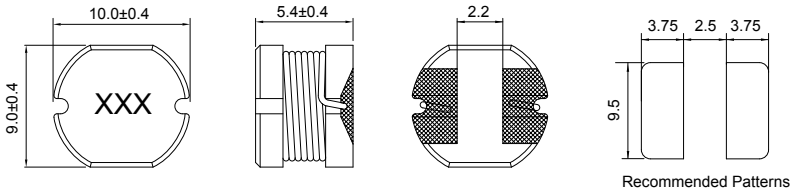
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN105D



unit: mm

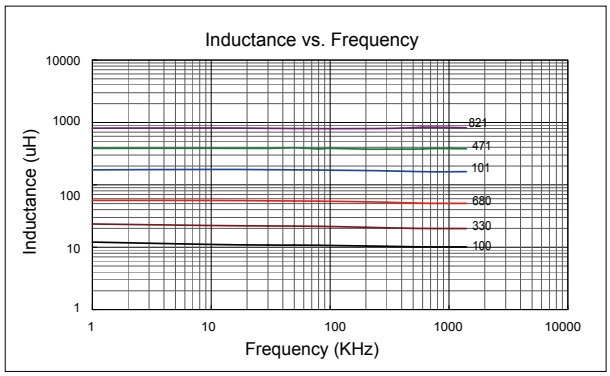
ELECTRICAL SPECIFICATION

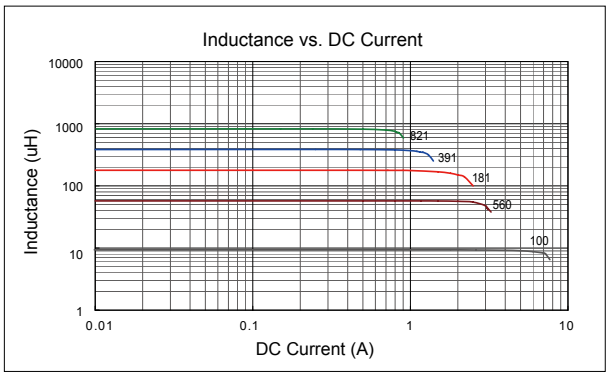
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSN105D-100M-LRH	100	10	100	0.06	2.60
CSN105D-120M-LRH	120	12	100	0.07	2.45
CSN105D-150M-LRH	150	15	100	0.08	2.27
CSN105D-180M-LRH	180	18	100	0.09	2.15
CSN105D-220M-LRH	220	22	100	0.10	1.95
CSN105D-270M-LRH	270	27	100	0.11	1.76
CSN105D-330M-LRH	330	33	100	0.12	1.50
CSN105D-390M-LRH	390	39	100	0.14	1.37
CSN105D-470K-LRH	470	47	100	0.17	1.28
CSN105D-560K-LRH	560	56	100	0.19	1.17
CSN105D-680K-LRH	680	68	100	0.22	1.11
CSN105D-820K-LRH	820	82	100	0.25	1.00
CSN105D-101K-LRH	101	100	10	0.35	0.97
CSN105D-121K-LRH	121	120	10	0.40	0.89
CSN105D-151K-LRH	151	150	10	0.47	0.78
CSN105D-181K-LRH	181	180	10	0.63	0.72
CSN105D-221K-LRH	221	220	10	0.73	0.66
CSN105D-271K-LRH	271	270	10	0.97	0.57
CSN105D-331K-LRH	331	330	10	1.15	0.52
CSN105D-391K-LRH	391	390	10	1.30	0.48
CSN105D-471K-LRH	471	470	10	1.48	0.42
CSN105D-561K-LRH	561	560	10	1.90	0.33
CSN105D-681K-LRH	681	680	10	2.25	0.28
CSN105D-821K-LRH	821	820	10	2.55	0.24

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at rated current ,temperature rises △ t<40℃
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN105D Series



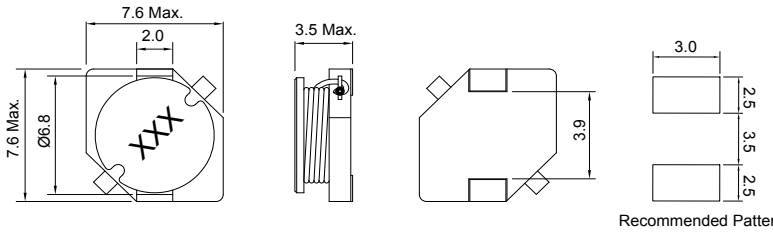


CSN073F Series (UNSHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN073F



unit: mm

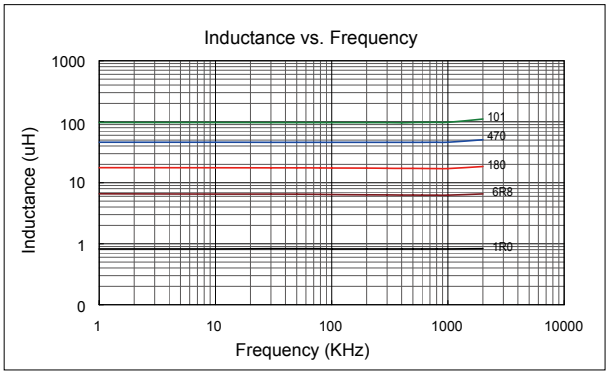
ELECTRICAL SPECIFICATION

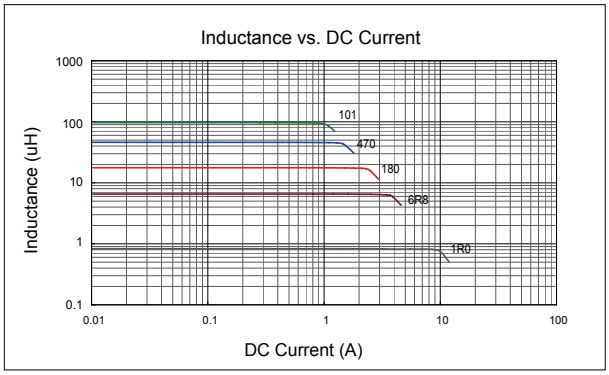
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSN073F-1R0M-LRH	102	1.0	100	0.022	2.88
CSN073F-1R5M-LRH	152	1.5	100	0.026	2.67
CSN073F-1R8M-LRH	182	1.8	100	0.056	2.50
CSN073F-2R2M-LRH	222	2.2	100	0.032	2.40
CSN073F-3R3M-LRH	332	3.3	100	0.041	2.08
CSN073F-4R7M-LRH	472	4.7	100	0.049	1.92
CSN073F-6R8M-LRH	682	6.8	100	0.067	1.60
CSN073F-100M-LRH	103	10.0	100	0.085	1.41
CSN073F-120M-LRH	123	12.0	100	0.100	1.28
CSN073F-150M-LRH	153	15.0	100	0.130	1.12
CSN073F-180M-LRH	183	18.0	100	0.160	1.00
CSN073F-220M-LRH	223	22.0	100	0.180	0.93
CSN073F-270M-LRH	273	27.0	100	0.240	0.80
CSN073F-330M-LRH	333	33.0	100	0.290	0.72
CSN073F-390M-LRH	393	39.0	100	0.340	0.66
CSN073F-470M-LRH	473	47.0	100	0.410	0.59
CSN073F-560M-LRH	563	56.0	100	0.480	0.55
CSN073F-680M-LRH	683	68.0	100	0.600	0.49
CSN073F-820M-LRH	823	82.0	100	0.710	0.44
CSN073F-101M-LRH	104	100.0	100	0.950	0.38

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at rated current ,temperature rises △ t<40℃
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN073F Series





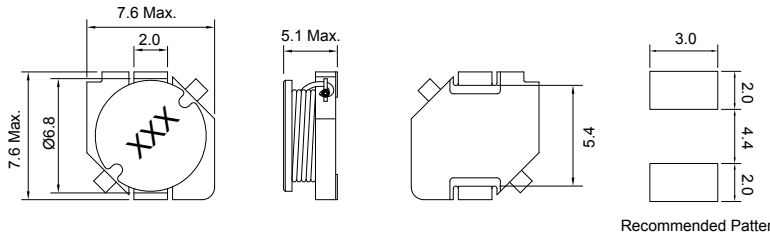
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN075F



unit: mm

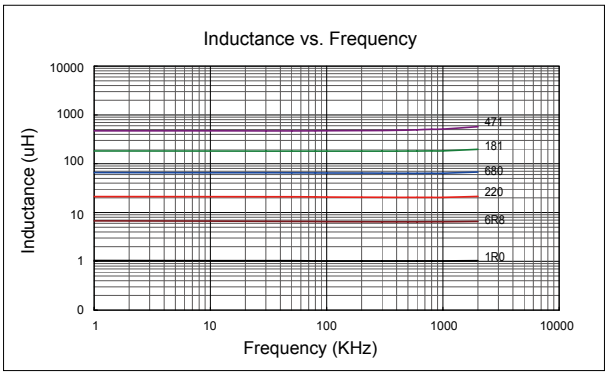
ELECTRICAL SPECIFICATION

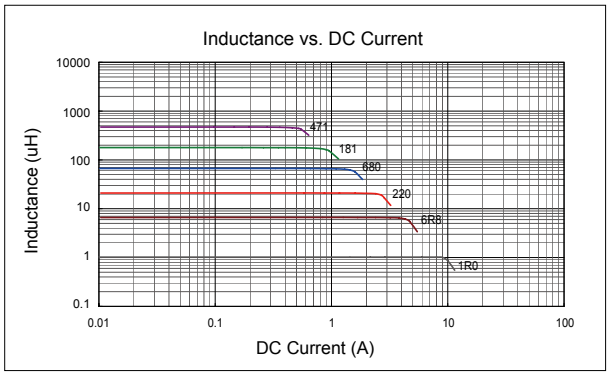
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)
CSN075F-1R0M-LRH	102	1.0	100	0.023	2.88
CSN075F-1R5M-LRH	152	1.5	100	0.028	2.56
CSN075F-2R2M-LRH	222	2.2	100	0.032	2.36
CSN075F-3R3M-LRH	332	3.3	100	0.038	2.16
CSN075F-4R7M-LRH	472	4.7	100	0.049	1.88
CSN075F-6R8M-LRH	682	6.8	100	0.060	1.68
CSN075F-100M-LRH	103	10	100	0.070	1.56
CSN075F-120M-LRH	123	12	100	0.080	1.44
CSN075F-150M-LRH	153	15	100	0.090	1.36
CSN075F-180M-LRH	183	18	100	0.100	1.28
CSN075F-220M-LRH	223	22	100	0.120	1.17
CSN075F-270M-LRH	273	27	100	0.140	1.07
CSN075F-330M-LRH	333	33	100	0.160	1.00
CSN075F-390M-LRH	393	39	100	0.190	0.91
CSN075F-470M-LRH	473	47	100	0.220	0.84
CSN075F-560M-LRH	563	56	100	0.290	0.72
CSN075F-680M-LRH	683	68	100	0.340	0.66
CSN075F-820M-LRH	823	82	100	0.460	0.58
CSN075F-101M-LRH	104	100	100	0.550	0.51
CSN075F-121K-LRH	124	120	100	0.670	0.42
CSN075F-151K-LRH	154	150	100	0.900	0.37
CSN075F-181K-LRH	184	180	100	1.050	0.35
CSN075F-221K-LRH	224	220	100	1.350	0.29
CSN075F-271K-LRH	274	270	100	1.550	0.28
CSN075F-331K-LRH	334	330	100	2.050	0.23
CSN075F-391K-LRH	394	390	100	2.300	0.215
CSN075F-471K-LRH	474	470	100	2.600	0.195

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at rated current ,temperature rises △ t<40℃
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN075F Series



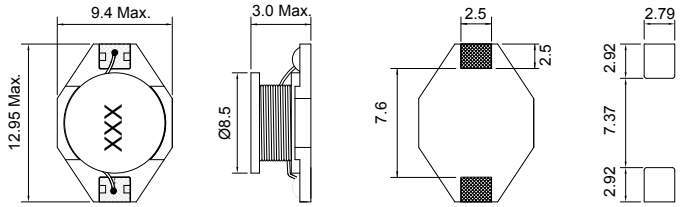


CSN082F Series (UNSHIELDED)

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN082F



Recommended Patterns

unit: mm

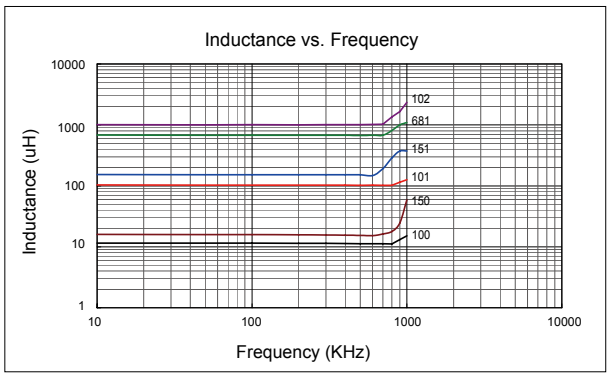
ELECTRICAL SPECIFICATION

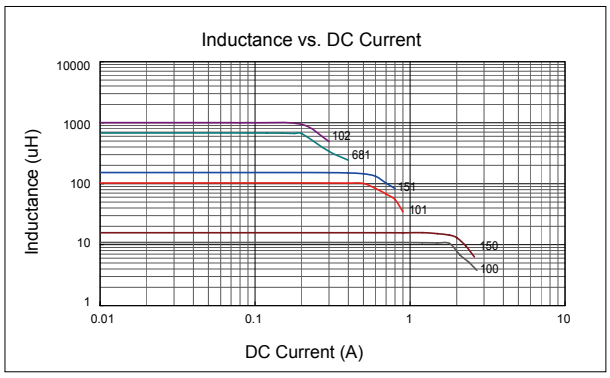
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)	Isat (A)
CSN082F-100M-LRH	103	10	100	0.11	2.0	2.4
CSN082F-150M-LRH	153	15	100	0.15	1.5	2.0
CSN082F-220M-LRH	223	22	100	0.23	1.3	1.6
CSN082F-330M-LRH	333	33	100	0.30	1.1	1.4
CSN082F-470M-LRH	473	47	100	0.39	0.8	1.0
CSN082F-680M-LRH	683	68	100	0.66	0.7	0.9
CSN082F-101M-LRH	104	100	100	0.84	0.6	0.7
CSN082F-151M-LRH	154	150	100	1.20	0.5	0.6
CSN082F-221M-LRH	224	220	100	1.90	0.4	0.5
CSN082F-331M-LRH	334	330	100	2.70	0.3	0.4
CSN082F-471M-LRH	474	470	100	4.00	0.2	0.3
CSN082F-681M-LRH	684	680	100	5.30	0.1	0.2
CSN082F-102M-LRH	105	1000	100	8.40	0.05	0.1

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at Isat, temperature rises △ t<30℃ at rated current
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN082F Series





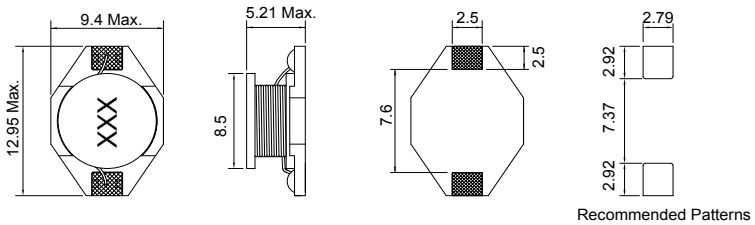
SMD

Leaded

■ SMD Wire Wound Power Inductors

MECHANICAL DIMENSIONS

CSN084F



unit: mm

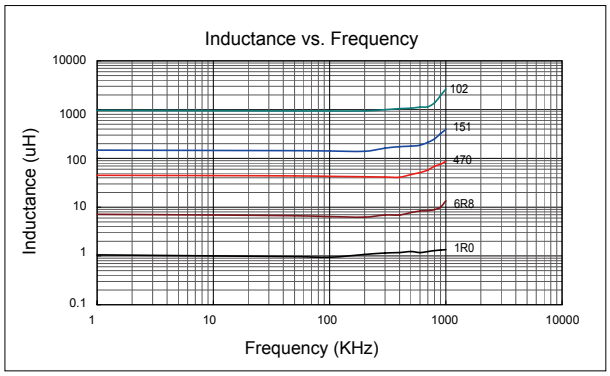
ELECTRICAL SPECIFICATION

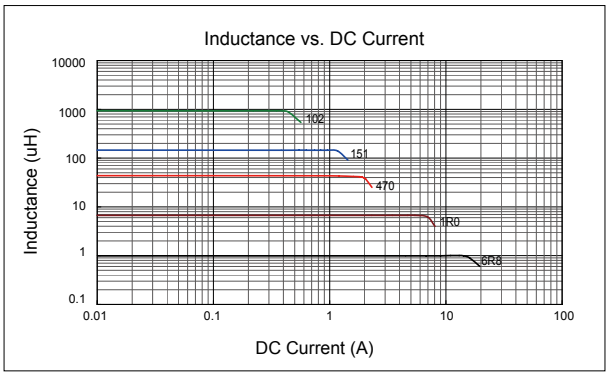
Part Number	Marking	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) Max.	Rated Current (A)	Isat (A)
CSN084F-1R0M -LRH	1R0	1.0	100	0.009	6.80	9.00
CSN084F-1R5M -LRH	1R5	1.5	100	0.010	6.40	8.00
CSN084F-2R2M -LRH	2R2	2.2	100	0.012	6.10	7.00
CSN084F-3R3M -LRH	3R3	3.3	100	0.015	5.40	6.40
CSN084F-4R7M -LRH	4R7	4.7	100	0.018	4.80	5.40
CSN084F-6R8M -LRH	6R8	6.8	100	0.027	4.40	4.60
CSN084F-100M -LRH	100	10	100	0.038	3.90	3.80
CSN084F-150M-LRH	150	15	100	0.046	3.10	3.00
CSN084F-220M-LRH	220	22	100	0.085	2.70	2.60
CSN084F-330M-LRH	330	33	100	0.100	2.10	2.00
CSN084F-470M-LRH	470	47	100	0.140	1.80	1.60
CSN084F-680M-LRH	680	68	100	0.200	1.50	1.40
CSN084F-101M-LRH	101	100	100	0.280	1.30	1.20
CSN084F-151M-LRH	151	150	100	0.400	1.00	1.00
CSN084F-221M-LRH	221	220	100	0.610	0.80	0.80
CSN084F-331M-LRH	331	330	100	1.020	0.60	0.60
CSN084F-471M-LRH	471	470	100	1.270	0.50	0.50
CSN084F-681M-LRH	681	680	100	2.020	0.40	0.40
CSN084F-102M-LRH	102	1000	100	3.000	0.30	0.30

- Tolerance: M=±20%；L=±15%；K=±10%
- Operating Temperature Range: -30℃ to +100℃ (Including self-generated heat)
- Inductance measured using the HP4284A；Chroma3302+1320
- DCR measured using the 16502 milli-ohm meter
- Inductance drop no more than 10% of initial value at Isat, temperature rises △ t<30℃ at rated current
- Storage Temperature Range: -40℃ to +85℃

CHARACTERISTIC CURVE

CSN084F Series



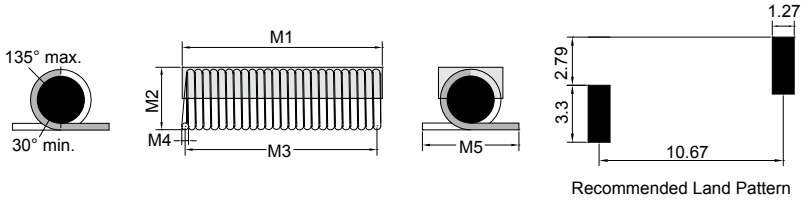


CN0312QM Series

■ SMD Wideband Chokes

MECHANICAL DIMENSIONS

CN0312QM



Recommended Land Pattern

unit: mm

Series	M1	M2	M3	M4	M5
CN0312QM-1R2KH	11.8 MAX.	3.554 MAX.	10.67±0.381	0.7 MAX.	4.826±0.76
CN0312QM-3R2KH	11.8 MAX.	3.554 MAX.	10.67±0.381	0.5 MAX.	4.826±0.76

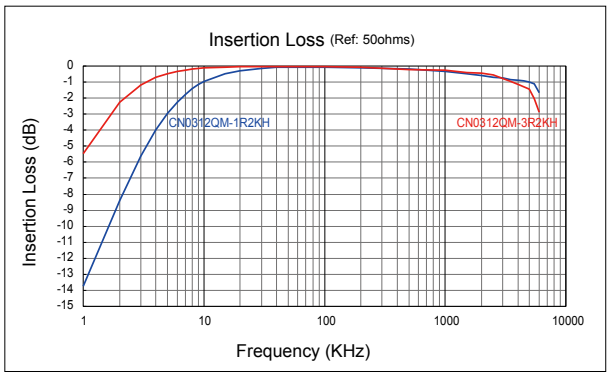
ELECTRICAL SPECIFICATION

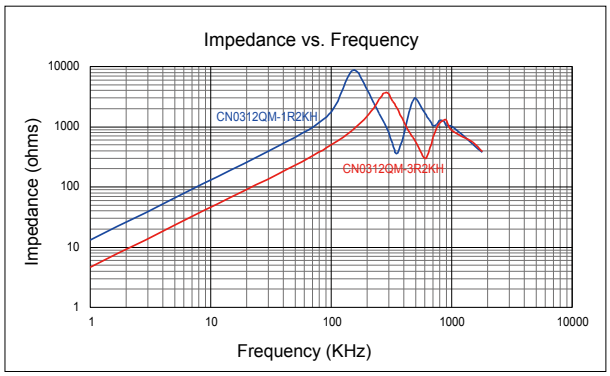
Part Number	Inductance (μH)	Tolerance	Test Freq. (KHz) 0.1Vrms	DCR (mΩ) Max.	SRF (MHz) TYP.
CN0312QM-1R2KH	1.15	K	100	15	235
CN0312QM-3R2KH	3.25	K	100	49	150

- 1.inductance measured using the CHROMA 3302
- DCR measured using the ZENTECH 502A
- SRF measured using the AGILENT 8753E
- Operating temperature range:-25℃ ~+125℃
- Tolerance: K=10%

CHARACTERISTIC CURVE

CN0312QM Series



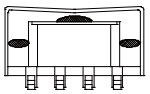
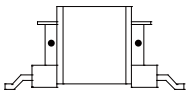
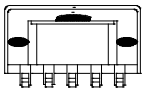
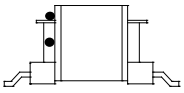
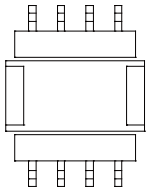
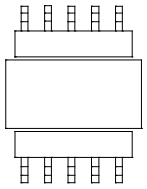


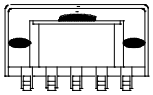
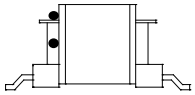
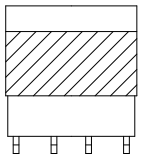
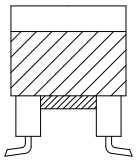
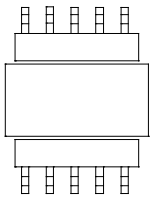
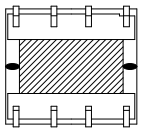
SMD

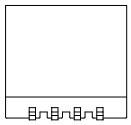
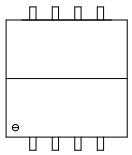
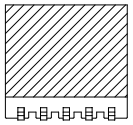
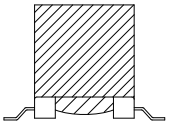
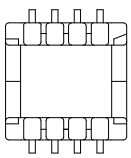
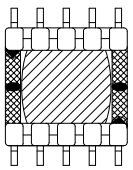
Leaded

■ SMD Switch Mode Transformers

TRANSFORMER

TWR09xx		TWR11xx	
POWER: 2.8W	 	**POWER:** 3.8W	 
FREQ.: 50K~300KHz		**FREQ.:** 50K~300KHz	
SIZE: 10×11.5×6mm	 	**SIZE:** 12×13×6.5mm	 
Pin number: 4×2		**Pin number:** 5×2	
CORE TYPE ER9.5		**CORE TYPE** ER11.5	

TWR15xx		TIA09xx	
POWER: 8W	 	**POWER:** 3.5W	 
FREQ.: 50K~500KHz		**FREQ.:** 20K~500KHz	
SIZE: 15.5×17×8.0mm	 	**SIZE:** 10.6×9.65×11.3mm	 
Pin number: 5×2		**Pin number:** 4×2	
CORE TYPE ER14.5		**CORE TYPE** EP7	

TIA11xx		TIA13xx	
POWER: 7.5W	 	**POWER:** 15W	 
FREQ.: 20K~500KHz		**FREQ.:** 20K~500KHz	
SIZE: 13×14.7×11.5mm	 	**SIZE:** 13.5×18×12.3mm	 
Pin number: 4×2		**Pin number:** 5×2	
CORE TYPE EP10		**CORE TYPE** EP13	

SMD

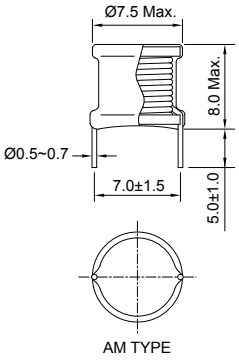
Leaded

CP0808AI/M Series

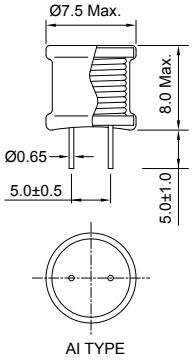
■ Wire Wound Choke Coils

MECHANICAL DIMENSIONS

CP0808AI/M



AM TYPE



AI TYPE

unit: mm

ELECTRICAL SPECIFICATION

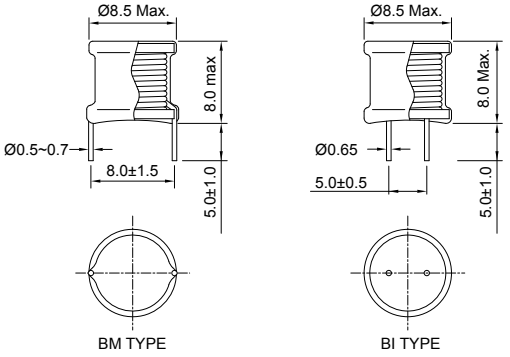
Part Number	Inductance @1KHz (μH)	Q Min.	Test Freq. (KHz)	SRF (MHz) Min.	DCR (Ω) Max.	Rated Current (Amps.) Max.
CP0808AM-1R0MH	1.0	20	7.90	70	0.007	6.60
CP0808AM-1R5MH	1.5	20	7.90	60	0.010	5.40
CP0808AM-2R2MH	2.2	20	7.90	45	0.015	4.50
CP0808AM-3R3MH	3.3	20	7.90	35	0.020	3.60
CP0808AM-4R7MH	4.7	20	7.90	30	0.025	3.10
CP0808AM-6R8MH	6.8	20	7.90	25	0.030	2.50
CP0808AI-100KH	10	20	2.50	20	0.045	2.10
CP0808AI-120KH	12	20	2.50	17	0.050	1.90
CP0808AI-150KH	15	20	2.50	15	0.065	1.70
CP0808AI-180KH	18	20	2.50	13	0.08	1.50
CP0808AI-220KH	22	20	2.50	12	0.10	1.40
CP0808AI-270KH	27	20	2.50	10	0.12	1.20
CP0808AI-330KH	33	20	2.50	9.2	0.14	1.10
CP0808AI-390KH	39	20	2.50	8.5	0.17	1.00
CP0808AI-470KH	47	20	2.50	7.5	0.21	0.95
CP0808AI-560KH	56	20	2.50	7.0	0.24	0.80
CP0808AI-680KH	68	20	2.50	6.5	0.28	0.75
CP0808AI-820KH	82	20	2.50	5.5	0.31	0.70
CP0808AI-101KH	100	20	0.79	5.0	0.35	0.65
CP0808AI-121KH	120	20	0.79	4.5	0.45	0.60
CP0808AI-151KH	150	20	0.79	4.0	0.56	0.53
CP0808AI-181KH	180	20	0.79	3.5	0.65	0.48
CP0808AI-221KH	220	20	0.79	3.2	0.72	0.44
CP0808AI-271KH	270	20	0.79	2.8	0.86	0.40
CP0808AI-331KH	330	20	0.79	2.5	1.10	0.36
CP0808AI-391KH	390	20	0.79	2.2	1.50	0.33
CP0808AI-471KH	470	20	0.79	2.0	1.70	0.30
CP0808AI-561KH	560	20	0.79	1.8	2.00	0.27
CP0808AI-681KH	680	20	0.79	1.7	2.50	0.25
CP0808AI-821KH	820	20	0.79	1.5	3.00	0.22
CP0808AI-102KH	1000	50	0.25	1.3	4.50	0.20

- Tolerance: M±20%；L=±15%；K=±10%
- Test Equipment:
  L: HP 4285A LCR meter or equivalent.
  Q: HP 4285A at specified freq. or equivalent.
  RDC: CHROMA-16502 or equivalent.
  SRF: HP4291B or equivalent.
- Operating temperature: -40℃ to +85℃ (Including self-temperature rise)
- Temperature rise 25℃ Max.
- Ambient temperature: 60℃ Max.

■ Wire Wound Choke Coils

MECHANICAL DIMENSIONS

CP0908BI/M



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance @1KHz (μH)	Q Min.	Test Freq. (KHz)	SRF (MHz) Min.	DCR (Ω) Max.	Rated Current (Amps.) Max.
CP0908BM-1R0MH	1.0	20	7.90	68	0.005	7.50
CP0908BM-1R5MH	1.5	20	7.90	56	0.008	6.60
CP0908BM-2R2MH	2.2	20	7.90	45	0.010	5.40
CP0908BM-3R3MH	3.3	20	7.90	38	0.013	4.50
CP0908BM-4R7MH	4.7	20	7.90	30	0.017	3.70
CP0908BM-6R8MH	6.8	20	7.90	24	0.022	3.10
CP0908BM-100KH	10	20	2.50	19	0.03	2.50
CP0908BM-120KH	12	20	2.50	17	0.04	2.20
CP0908BM-150KH	15	20	2.50	15	0.05	2.00
CP0908BI-180KH	18	20	2.50	13	0.06	1.80
CP0908BI-220KH	22	20	2.50	12	0.07	1.60
CP0908BI-270KH	27	20	2.50	11	0.08	1.40
CP0908BI-330KH	33	20	2.50	10	0.10	1.30
CP0908BI-390KH	39	20	2.50	9.0	0.12	1.20
CP0908BI-470KH	47	20	2.50	8.0	0.14	1.10
CP0908BI-560KH	56	20	2.50	7.0	0.16	0.96
CP0908BI-680KH	68	20	2.50	6.5	0.18	0.91
CP0908BI-820KH	82	20	2.50	6.0	0.20	0.83
CP0908BI-101KH	100	15	0.79	5.5	0.25	0.75
CP0908BI-121KH	120	15	0.79	5.0	0.33	0.68
CP0908BI-151KH	150	15	0.79	4.5	0.40	0.61
CP0908BI-181KH	180	15	0.79	4.0	0.50	0.55
CP0908BI-221KH	220	15	0.79	3.5	0.60	0.50
CP0908BI-271KH	270	15	0.79	3.2	0.70	0.45
CP0908BI-331KH	330	15	0.79	2.8	0.80	0.41
CP0908BI-391KH	390	15	0.79	2.5	0.90	0.37
CP0908BI-471KH	470	15	0.79	2.3	1.0	0.34
CP0908BI-561KH	560	15	0.79	2.1	1.3	0.31
CP0908BI-681KH	680	15	0.79	1.9	1.5	0.28
CP0908BI-821KH	820	15	0.79	1.7	2.0	0.25
CP0908BI-102KH	1000	30	0.25	1.5	2.5	0.23
CP0908BI-122KH	1200	30	0.25	1.3	3.0	0.20
CP0908BI-152KH	1500	30	0.25	1.2	3.5	0.18

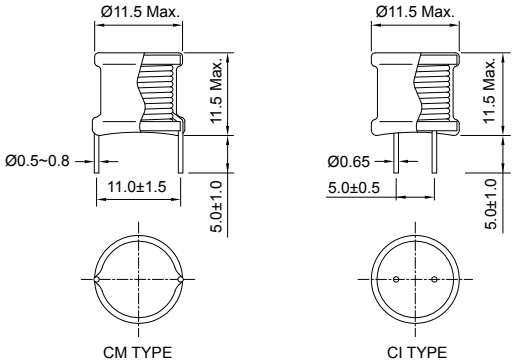
- Tolerance: M±20%；L=±15%；K=±10%
- Test Equipment:
  L: HP 4285A LCR meter or equivalent.
  Q: HP 4285A at specified freq. or equivalent.
  RDC: CHROMA-16502 or equivalent.
  SRF: HP4291B or equivalent.
- Operating temperature: -40℃ to +85℃ (Including self-temperature rise)
- Temperature rise 25℃ Max.
- Ambient temperature: 60℃ Max.

CP1212CI/M Series

■ Wire Wound Choke Coils

MECHANICAL DIMENSIONS

CP1212CI/M



unit: mm

ELECTRICAL SPECIFICATION

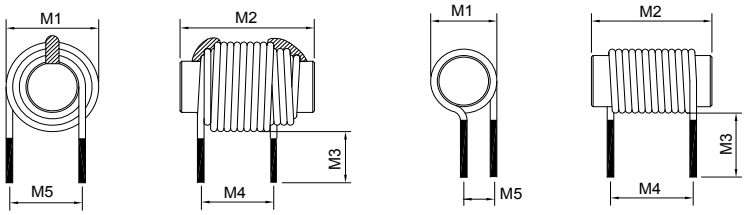
Part Number	Inductance @1KHz (μH)	Q Min.	Test Freq. (KHz)	SRF (MHz) Min.	DCR (Ω) Max.	Rated Current (Amps.) Max.
CP1212CM-1R0MH	1.0	20	7.90	85.0	0.004	10.0
CP1212CM-1R5MH	1.5	20	7.90	64.0	0.005	8.30
CP1212CM-2R2MH	2.2	20	7.90	48.0	0.006	6.90
CP1212CM-3R3MH	3.3	20	7.90	36.0	0.008	5.60
CP1212CM-4R7MH	4.7	20	7.90	28.0	0.009	4.70
CP1212CM-6R8MH	6.8	20	7.90	22.0	0.012	3.90
CP1212CM-100KH	10	20	2.50	16.0	0.016	3.20
CP1212CM-120KH	12	20	2.50	14.0	0.018	2.90
CP1212CM-150KH	15	20	2.50	12.0	0.020	2.60
CP1212CM-180KH	18	20	2.50	11.0	0.025	2.40
CP1212CM-220KH	22	20	2.50	10.0	0.030	2.20
CP1212CM-270KH	27	20	2.50	9.0	0.040	2.00
CP1212CM-330KH	33	20	2.50	8.0	0.050	1.80
CP1212CM-390KH	39	20	2.50	7.0	0.060	1.65
CP1212CM-470KH	47	20	2.50	6.0	0.070	1.50
CP1212CM-560KH	56	20	2.50	5.5	0.080	1.35
CP1212CM-680KH	68	20	2.50	5.0	0.10	1.20
CP1212CI-820KH	82	20	2.50	4.5	0.12	1.10
CP1212CI-101KH	100	20	0.79	4.0	0.14	1.00
CP1212CI-121KH	120	20	0.79	3.5	0.18	0.90
CP1212CI-151KH	150	20	0.79	3.0	0.22	0.82
CP1212CI-181KH	180	20	0.79	2.8	0.25	0.75
CP1212CI-221KH	220	20	0.79	2.5	0.31	0.68
CP1212CI-271KH	270	20	0.79	2.2	0.36	0.61
CP1212CI-331KH	330	20	0.79	2.0	0.42	0.55
CP1212CI-391KH	390	20	0.79	1.8	0.48	0.50
CP1212CI-471KH	470	15	0.79	1.6	0.52	0.46
CP1212CI-561KH	560	15	0.79	1.4	0.65	0.42
CP1212CI-681KH	680	15	0.79	1.3	0.80	0.38
CP1212CI-821KH	820	15	0.79	1.2	1.00	0.34
CP1212CI-102KH	1000	20	0.25	1.0	1.50	0.31
CP1212CI-122KH	1200	20	0.25	0.90	1.80	0.28
CP1212CI-152KH	1500	20	0.25	0.85	2.00	0.25
CP1212CI-182KH	1800	20	0.25	0.80	2.50	0.23
CP1212CI-222KH	2200	20	0.25	0.75	3.00	0.21
CP1212CI-272KH	2700	20	0.25	0.70	3.50	0.19
CP1212CI-332KH	3300	20	0.25	0.65	4.00	0.17
CP1212CI-392KH	3900	20	0.25	0.60	5.00	0.15
CP1212CI-472KH	4700	20	0.25	0.55	6.00	0.14
CP1212CI-562KH	5600	20	0.25	0.50	7.50	0.13
CP1212CI-682KH	6800	20	0.25	0.45	9.50	0.12
CP1212CI-822KH	8200	20	0.25	0.40	11.0	0.11
CP1212CI-103KH	10000	50	0.079	0.35	12.0	0.10
CP1212CI-123KH	12000	50	0.079	0.30	13.5	0.09
CP1212CI-153KH	15000	50	0.079	0.25	15.0	0.08

- Tolerance: M±20% ; L=±15% ; K=±10%
- Test Equipment:
  L: HP 4285A LCR meter or equivalent.
  Q: HP 4285A at specified freq. or equivalent.
  RDC: CHROMA-16502 or equivalent.
  SRF: HP4291B or equivalent.
- Operating temperature: -40℃ to +85℃ (Including self-temperature rise)
- Temperature rise 25℃ Max.
- Ambient temperature: 60℃ Max.

■ Wire Wound Line Choke

MECHANICAL DIMENSIONS

COxxxxQM



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (μH)	Test Freq.	DCR (Ω) Max.	M1 Max.	M2 Ref.	M3 Ref.	M4 Ref.	M5 Ref.
CO1011QM-1R8☐H△	1.80	1 KHz	0.10	9.65	11.43	19.05	7.37	7.37
CO1011QM-2R9☐H△	2.90	1 KHz	0.10	9.65	11.43	19.05	8.64	7.37
CO1011QM-3R8☐H△	3.80	1 KHz	0.06	9.65	11.43	6.35	8.64	7.11
CO1011QM-4R3☐H△	4.25	1 KHz	0.12	9.65	11.43	6.35	10.16	7.11
CO1319QM-5R0☐H△	5.00	1 KHz	0.50	12.70	19.05	19.05	11.43	8.64
CO1017QM-6R8☐H△	6.80	1 KHz	0.10	9.65	16.51	6.35	8.64	7.11
CO1017QM-100☐H△	10.0	1 KHz	0.10	9.65	16.51	6.35	11.94	7.11
CO1017QM-110☐H△	11.0	1 KHz	0.06	9.65	16.51	19.05	10.16	7.11
CO1019QM-130☐H△	13.0	1 KHz	0.10	9.65	19.05	19.05	11.43	7.11
CO1017QM-140☐H△	14.0	1 KHz	0.10	9.65	16.51	6.35	12.70	7.11
CO1019QM-170☐H△	17.0	1 KHz	0.10	9.65	19.05	19.05	11.94	7.11
CO1020QM-200☐H△	20.0	1 KHz	0.10	9.65	20.06	19.05	17.78	7.11

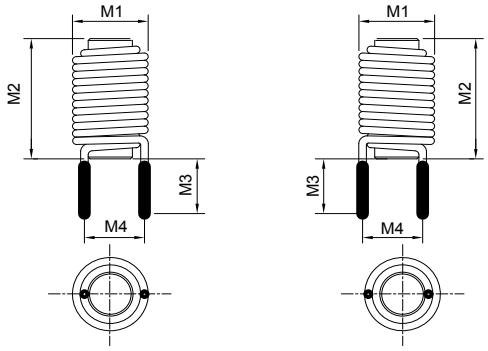
- ☐ Tolerance: K=±10%；L=±15%；M=±20%
- Test condition: 1KHz / 1 V
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Storage Temperature Range: -40℃ to +85℃
- Operating Temperature Range: -40℃ to +105℃ (Including self-generated heat)
- △ : Internal Code

CPxxxxRM Series

■ Wire Wound Line Choke

MECHANICAL DIMENSIONS

CPxxxxRM



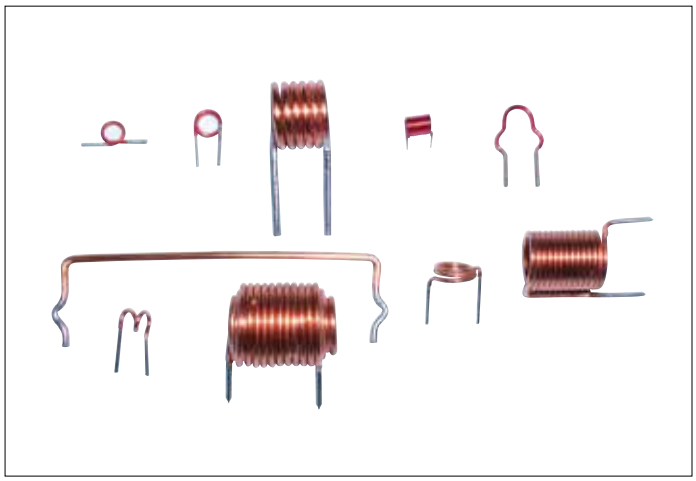
unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (μH)	Test Freq.	DCR (mΩ) Max.	M1 Max.	M2 Ref.	M3 Ref.	M4 Ref.
CP0610RM-R33☐H△	0.33	1 KHz	4.00	6.00	10.0	5.00	7.00
CP1016RM-R40☐H△	0.40	1 KHz	10.0	10.0	16.0	10.0	10.5
CP0920RM-R70☐H△	0.70	1 KHz	10.0	9.00	20.0	5.00	12.0
CP1120RM-1R0☐H△	1.00	1 KHz	10.0	11.0	20.0	15.0	7.50
CP0916RM-1R5☐H△	1.50	1 KHz	8.00	9.00	16.0	5.00	7.50
CP1120RM-2R2☐H△	2.20	1 KHz	13.0	11.0	20.0	15.0	7.50
CP0720RM-2R5☐H△	2.50	1 KHz	6.00	7.40	20.0	5.00	9.00
CP0819RM-3R0☐H△	3.00	1 KHz	10.0	8.00	19.0	5.00	10.0
CP1120RM-4R7☐H△	4.70	1 KHz	20.0	11.0	20.0	15.0	7.50
CP1325RM-5R3☐H△	5.30	1 KHz	5.50	13.2	24.9	3.80	10.7
CP1224RM-6R2☐H△	6.20	1 KHz	15.0	12.0	24.0	4.00	8.50
CP1225RM-100☐H△	10.0	1 KHz	25.0	12.0	25.0	4.00	8.70
CP1112RM-150☐H△	15.0	1 KHz	70.0	11.0	12.0	5.00	10.5
CP1233RM-570☐H△	57.0	1 KHz	60.0	12.0	33.0	13.0	12.5
CP1232RM-600☐H△	60.0	1 KHz	60.0	12.0	31.8	28.0	12.5

- ☐ Tolerance: K=±10%；L=±15%；M=±20%
- Test condition: 1KHz / 1 V
- Inductance measured using the HP4284A；Chroma 3302+1320
- DCR measured using the 16502 milli-ohm meter
- Storage Temperature Range: -40℃ to +85℃
- Operating Temperature Range: -40℃ to +105℃ (Including self-generated heat)
- △ : Internal Code

■ Air Wound Coil



FEATURES

- ❑ Have a large capability of production.
- ❑ Fully automated production system to enhance our commitment to quality.
- ❑ Have a wide variety of configurations.
- ❑ Stripped or tinned lead are available.
- ❑ Rapid delivery.
- ❑ With 1000 pcs of plastic bag packing.

How to order Air Wound Coil
Please Write down your requirement in the column below

Part no.	
Wdg direction	
Wire gage	
Wire type	
Turns	
Pitch (T/inch)	
Color	
Wdg type	

Dimension		Tolerance
A		
B		
C		
D		
E		
F		
G		

WIRE TYPE

- ❑ Bare wire ---------- 0
- ❑ Polyurethane wire--------1
- ❑ Tinned copper wire-------2

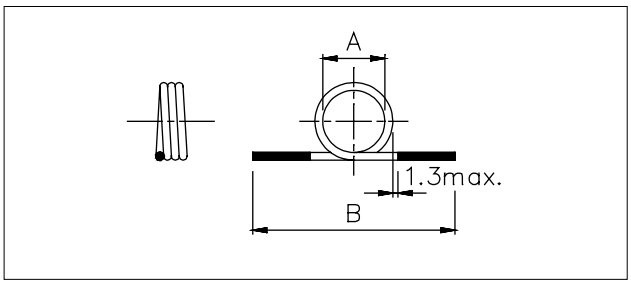
COLOR CODE

- ❑ Green----------G
- ❑ Red----------R
- ❑ Natural----------N

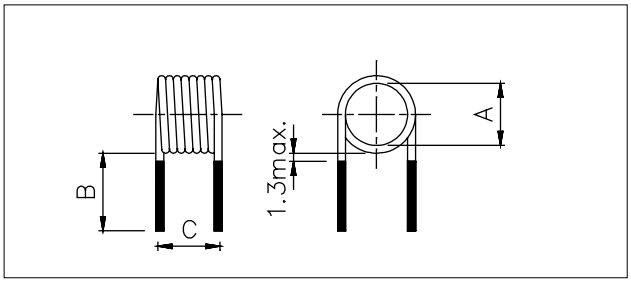
LSP Type.

■ Air Wound Coil

Type 01



Type 02



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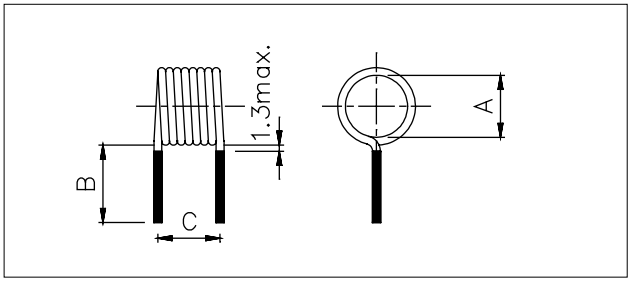

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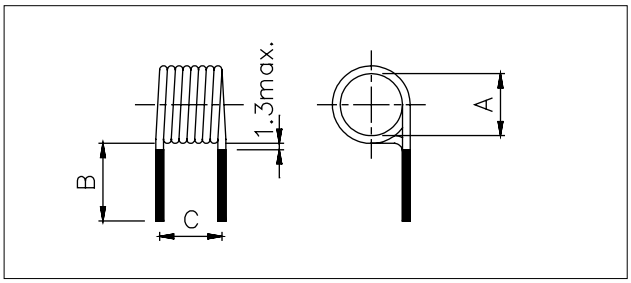

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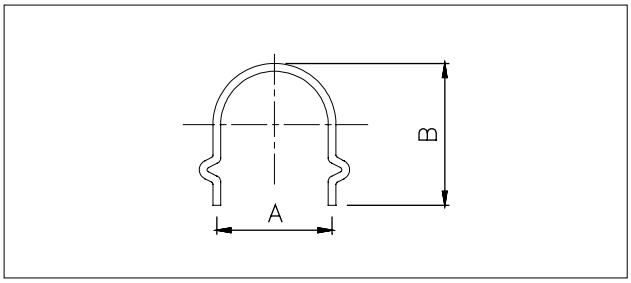

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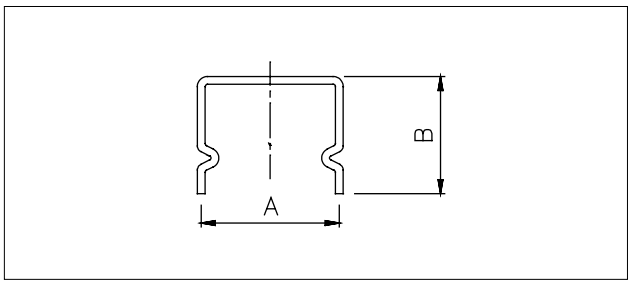

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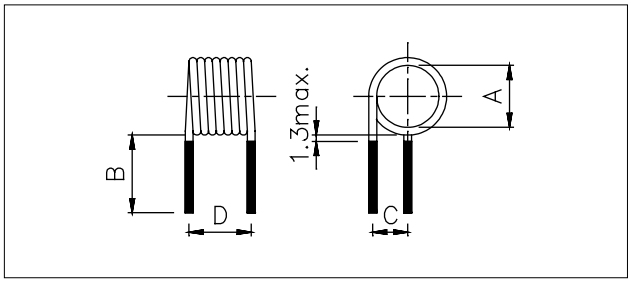

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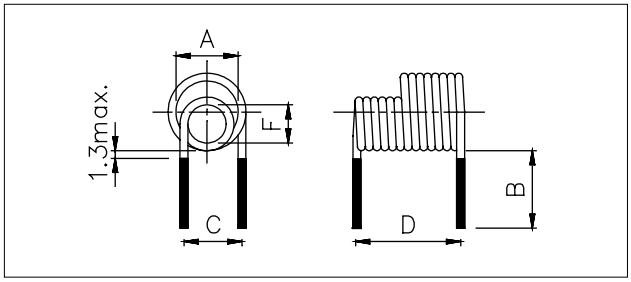

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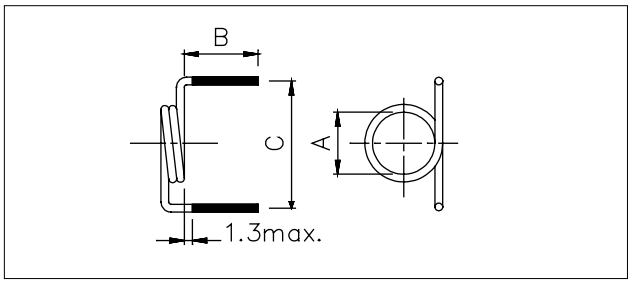

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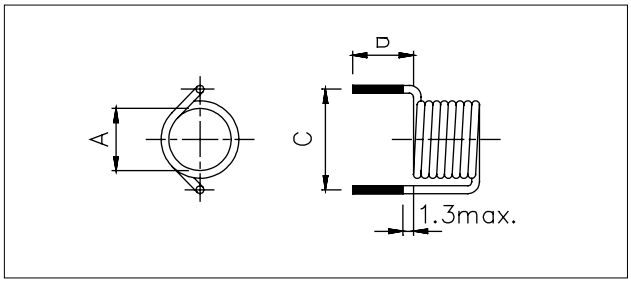
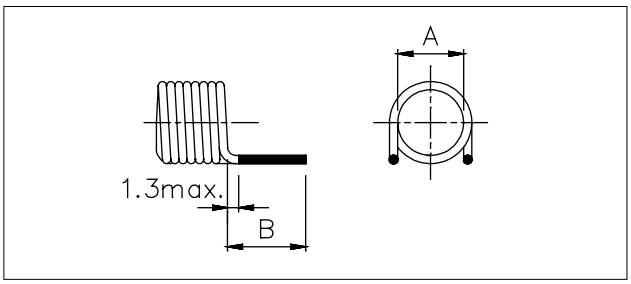


■ Air Wound Coil

Type 11



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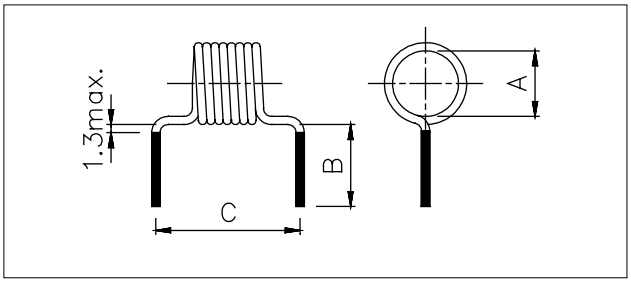

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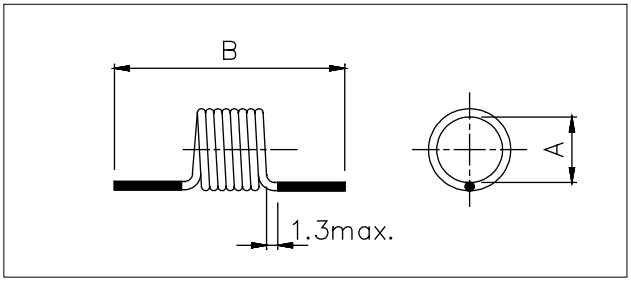

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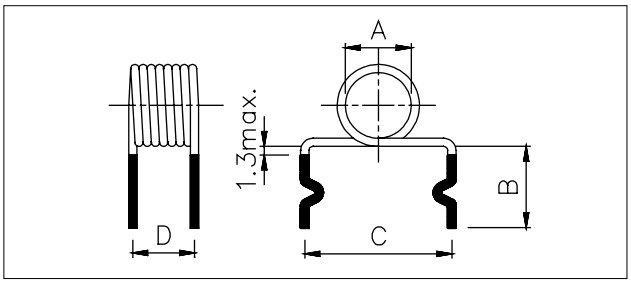

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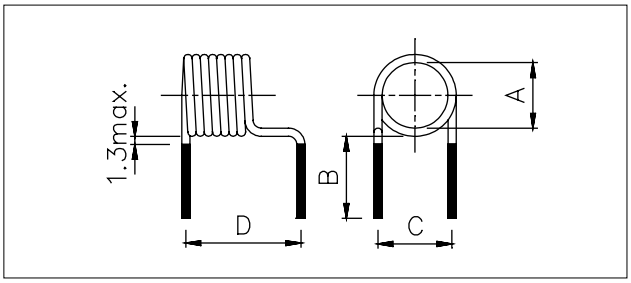

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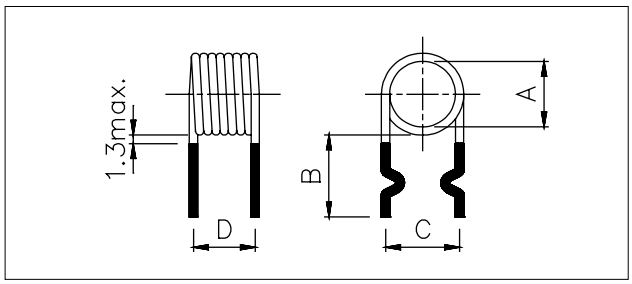

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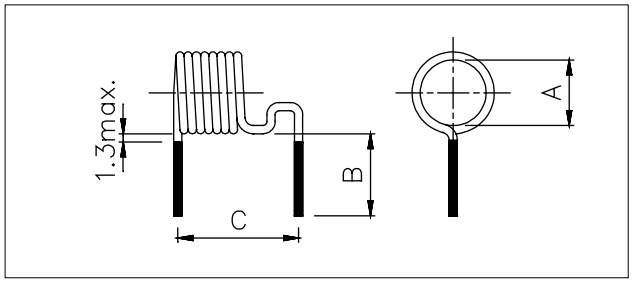

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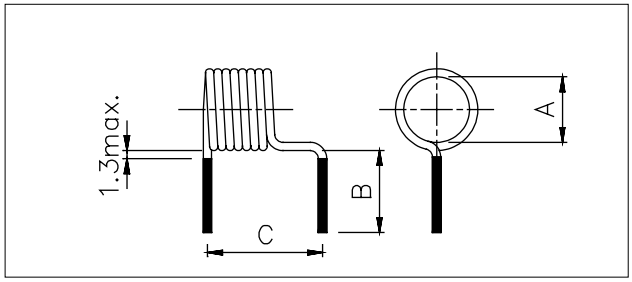

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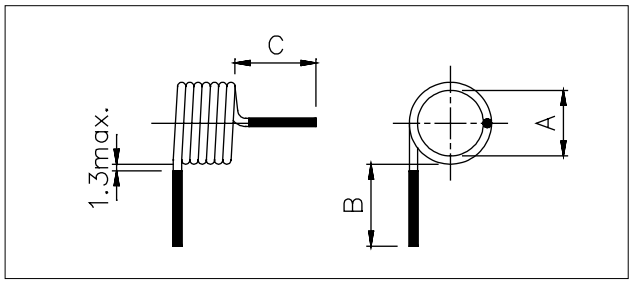

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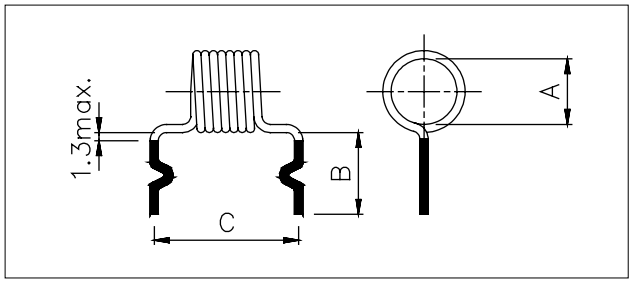
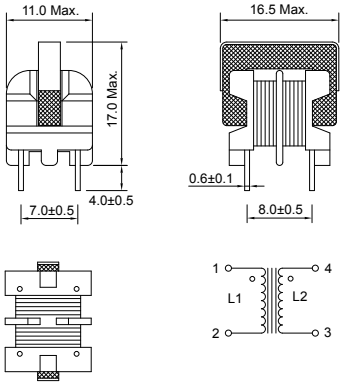


FVU0914/FHU0914 Series

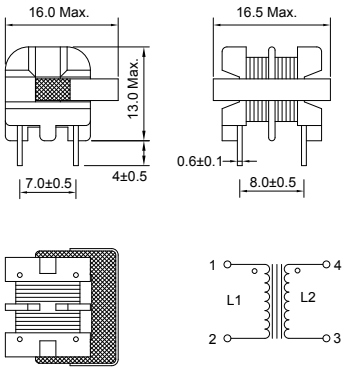
■ Wire Wound Common Mode Filter

MECHANICAL DIMENSIONS

FVU0914



FHU0914



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (mH) Min.	DCR (Ω) Max.	Rated Current (A)
F☐U0914H-201IN	2 ×0.20	0.10	2.00
F☐U0914H-471IN	2 ×0.47	0.18	1.70
F☐U0914H-701IN	2 ×0.70	0.30	1.20
F☐U0914H-102IN	2 ×1.00	0.50	1.00
F☐U0914H-202IN	2 ×2.00	1.00	0.50
F☐U0914H-562IN	2 ×5.60	2.80	0.30
F☐U0914H-103IN	2 ×10.0	3.50	0.25
F☐U0914H-223IN	2 ×22.0	6.30	0.20
F☐U0914H-403IN	2 ×40.0	8.00	0.10

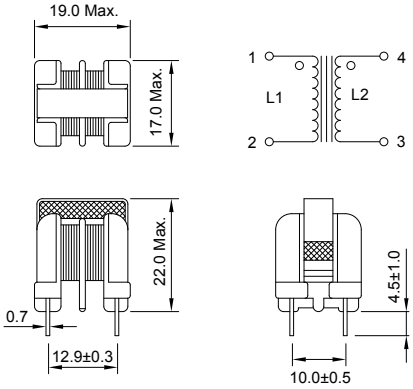
Unspecified values available on request.

- Test condition: 1KHz / 1 V
- Withstanding voltage: 1.5K Vac / 1minute
- Insulation resistance: 100M (Ω) at 500 (Vdc)
- Temperature rise: ≦ 40℃
- Operating temp.: -20℃ to +105℃
- ☐ =H: Horizontal mounting type
  V: Vertical mounting type

■ Wire Wound Common Mode Filter

MECHANICAL DIMENSIONS

FVU1016



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (mH) Min.	DCR (Ω) Max.	Rated Current (A)
FVU1016H-302IN	2 ×3.0	0.35	0.90
FVU1016H-152IN	2 ×1.5	0.15	1.00
FVU1016H-802IN	2 ×8.0	0.65	0.80
FVU1016H-203IN	2 ×20	1.80	0.50
FVU1016H-102IN	2 ×1.0	0.10	2.90

Unspecified values available on request.

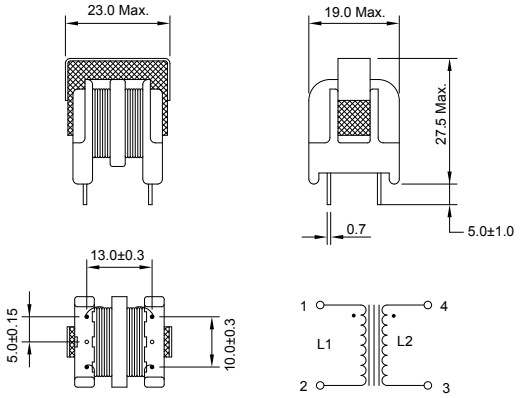
- Test condition: 1KHz / 1 V
- Withstanding voltage: 1.5K Vac / 1minute
- Insulation resistance: 100M (Ω) at 500 (Vdc)
- Temperature rise: ≦ 40℃
- Operating temp.: -20℃ to +105℃

FVU1520 Series

■ Wire Wound Common Mode Filter

MECHANICAL DIMENSIONS

FVU1520



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (mH) Min.	DCR (Ω) Max.	Rated Current (A)
FVU1520R-802IN	2 ×10.0	0.50	1.00
FVU1520R-103IN	2 ×8.00	0.40	1.20

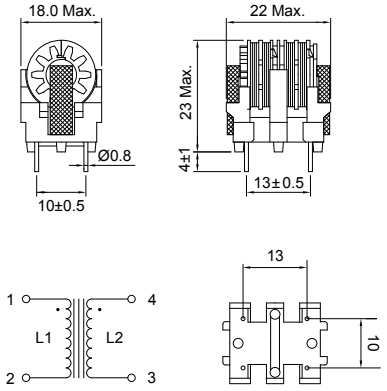
Unspecified values available on request.

- Test condition: 1KHz / 1 V
- Withstanding voltage: 1.5K Vac / 1minute
- Insulation resistance: 100M (Ω) at 500 (Vdc)
- Temperature rise: ≦ 40℃
- Operating temp.: -20℃ to +105℃

■ Wire Wound Common Mode Filter

MECHANICAL DIMENSIONS

FVX2014



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (mH) Min.	DCR (Ω) Max.	Rated Current (A)
FVX2014R-102IN	1.0	0.1	2.0
FVX2014R-152IN	1.5	0.17	1.7
FVX2014R-202IN	2.0	0.2	1.5
FVX2014R-252IN	2.5	0.3	1.3
FVX2014R-402IN	4.0	0.5	1.0
FVX2014R-682IN	6.8	0.9	0.8
FVX2014R-103IN	10	1.1	0.7
FVX2014R-123IN	12	1.5	0.6
FVX2014R-183IN	18	1.7	0.5
FVX2014R-223IN	22	2.0	0.4
FVX2014R-333IN	33	3.2	0.3

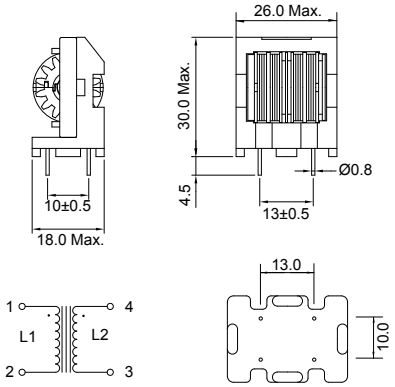
- Inductance measurement condition: 1 KHz at 25℃
- Withstanding voltage: 1.5KV, one minute between line.
- Temperature rise: 45℃ max.

FVS2424 Series

■ Wire Wound Common Mode Filter

MECHANICAL DIMENSIONS

FVS2424



unit: mm

ELECTRICAL SPECIFICATION

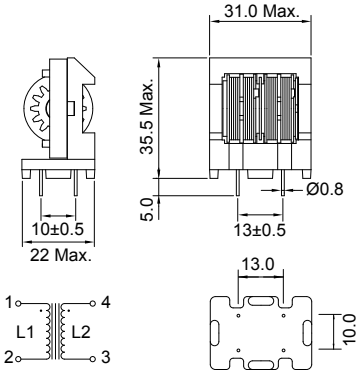
Part Number	Inductance (mH) Min.	DCR (Ω) Max.	Rated Current (A)
FVS2424R-272IN	2.7	0.15	2.0
FVS2424R-392IN	3.9	0.22	1.7
FVS2424R-682IN	6.8	0.40	1.3
FVS2424R-103IN	10	0.50	1.0
FVS2424R-203IN	20	0.90	0.8
FVS2424R-253IN	25	1.00	0.7
FVS2424R-333IN	33	1.60	0.6
FVS2424R-603IN	60	3.00	0.5
FVS2424R-803IN	80	3.80	0.4
FVS2424R-124IN	120	6.50	0.3

- Inductance measurement condition: 1 KHz at 25℃
- Withstanding voltage: 1.5KV, one minute between line.
- Temperature rise: 45℃ max.

■ Wire Wound Common Mode Filter

MECHANICAL DIMENSIONS

FVS2828



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (mH) Min.	DCR (Ω) Max.	Rated Current (A)
FVS2828R-332IN	3.3	0.12	3.0
FVS2828R-562IN	5.6	0.16	2.5
FVS2828R-802IN	8.0	0.16	2.0
FVS2828R-163IN	16	0.40	1.5
FVS2828R-393IN	39	0.65	1.0
FVS2828R-453IN	45	0.80	0.9
FVS2828R-603IN	60	1.00	0.8
FVS2828R-683IN	68	1.50	0.7
FVS2828R-963IN	96	2.00	0.6
FVS2828R-124IN	120	2.50	0.5

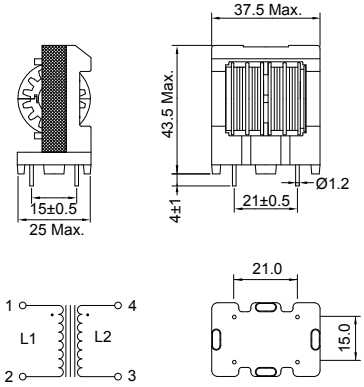
- Inductance measurement condition: 1 KHz at 25℃
- Withstanding voltage: 1.5KV, one minute between line.
- Temperature rise: 45℃ max.

FVS3535 Series

■ Wire Wound Common Mode Filter

MECHANICAL DIMENSIONS

FVS3535



unit: mm

ELECTRICAL SPECIFICATION

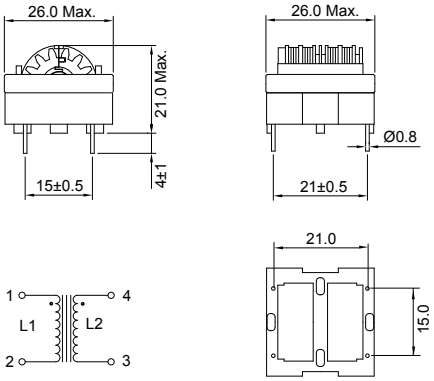
Part Number	Inductance (mH) Min.	DCR (Ω) Max.	Rated Current (A)
FVS3535R-222IN	2.2	0.06	4.5
FVS3535R-332IN	3.3	0.08	4.0
FVS3535R-562IN	5.6	0.10	3.5
FVS3535R-822IN	8.2	0.12	3.0
FVS3535R-103IN	10	0.15	2.7
FVS3535R-123IN	12	0.20	2.5
FVS3535R-173IN	17	0.28	2.0
FVS3535R-223IN	22	0.40	1.8
FVS3535R-303IN	30	0.48	1.5

- Inductance measurement condition: 1 KHz at 25℃
- Withstanding voltage: 1.5KV, one minute between line.
- Temperature rise: 45℃ max.

■ Wire Wound Common Mode Filter

MECHANICAL DIMENSIONS

FHS2424



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (mH) Min.	DCR (Ω) Max.	Rated Current (A)
FHS2424R-272IN	2.7	0.15	2.0
FHS2424R-392IN	3.9	0.22	1.7
FHS2424R-682IN	6.8	0.40	1.3
FHS2424R-103IN	10	0.50	1.0
FHS2424R-203IN	20	0.90	0.8
FHS2424R-253IN	25	1.00	0.7
FHS2424R-333IN	33	1.60	0.6
FHS2424R-603IN	60	3.00	0.5
FHS2424R-803IN	80	3.80	0.4
FHS2424R-124IN	120	6.50	0.3

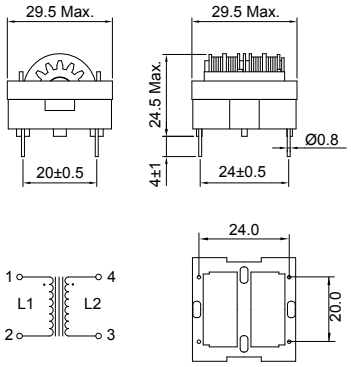
- Inductance measurement condition: 1 KHz at 25℃
- Withstanding voltage: 1.5KV, one minute between line.
- Temperature rise: 45℃ max.

FHS2828 Series

■ Wire Wound Common Mode Filter

MECHANICAL DIMENSIONS

FHS2828



unit: mm

ELECTRICAL SPECIFICATION

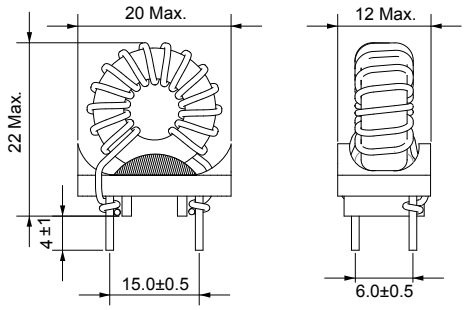
Part Number	Inductance (mH) Min.	DCR (Ω) Max.	Rated Current (A)
FHS2828R-332IN	3.3	0.12	3.0
FHS2828R-562IN	5.6	0.16	2.5
FHS2828R-802IN	8.0	0.16	2.0
FHS2828R-163IN	16	0.40	1.5
FHS2828R-393IN	39	0.65	1.0
FHS2828R-453IN	45	0.80	0.9
FHS2828R-603IN	60	1.00	0.8
FHS2828R-683IN	68	1.50	0.7
FHS2828R-963IN	96	2.00	0.6
FHS2828R-124IN	120	2.50	0.5

- Inductance measurement condition: 1 KHz at 25℃
- Withstanding voltage: 1.5KV, one minute between line.
- Temperature rise: 45℃ max.

■ Wire Wound Toroid Coil

MECHANICAL DIMENSIONS

OL2212HW



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Inductance (mH) Min.	DCR (Ω) Max.	Rated Current (A)
OL2212HW-800☐H	80	0.05	0.5
OL2212HW-100☐H	100	0.50	0.5
OL2212HW-441☐H	440	0.08	0.8
OL2212HW-102☐H	1000	0.10	0.8
OL2212HW-302☐H	3000	1.00	0.5
OL2212HW-332☐H	3300	0.25	0.5
OL2212HW-682☐H	6800	0.35	0.5

- ☐ =Tolerance: M=±20% ; N=±30%
- Test condition: 1KHz / 1 V
- Insulation resistance: Between coil & core 100M (Ω) over at 500 (Vdc)
- Withstanding voltage: Between coil & core 1.5K Vac / 1minute
- Temperature rise: ≦ 40℃
- Operating temp.: -20℃ to +105℃

APPLICATION

❑ For normal mode line filter.

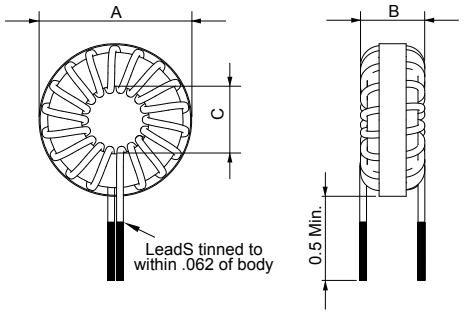
❑ For smoothing switching power supplies output.

OL Series

■ High Current Toroid Inductors

MECHANICAL DIMENSIONS

OL



unit: mm

ELECTRICAL SPECIFICATION

Part Number	L @1KHz (μH) ±15%	I dc (Amps) Max.	L min. (μH) @I dc	DCR (Ω) Max.	Dim. A Max.	Dim. B Max.	Dim. C Max.	Lead Dia. Nom.
OL1406FW-250LH☐☐	25	2.50	16	0.050	0.550	0.240	0.150	0.020
OL1808FW-350LH☐☐	35	2.50	29	0.035	0.700	0.320	0.150	0.025
OL1908FW-500LH☐☐	50	2.50	35	0.060	0.750	0.320	0.150	0.020
OL2209FW-101LH☐☐	100	2.50	70	0.080	0.850	0.360	0.200	0.020
OL2209FW-700LH☐☐	70	3.00	50	0.050	0.850	0.360	0.200	0.025
OL2209FW-400LH☐☐	40	4.00	30	0.025	0.850	0.360	0.200	0.032
OL2211FW-100LH☐☐	10	11.00	5	0.008	0.875	0.437	0.187	0.064
OL2211FW-250LH☐☐	25	5.50	12	0.014	0.875	0.437	0.187	0.040
OL2211FW-131LH☐☐	125	2.75	70	0.120	0.875	0.437	0.187	0.020
OL2211FW-281LH☐☐	275	2.00	150	0.240	0.875	0.437	0.187	0.016
OL2214FW-451LH☐☐	450	1.50	250	0.490	0.875	0.562	0.187	0.012
OL2914FW-250LH☐☐	25	9.00	15	0.012	1.125	0.562	0.312	0.064
OL2914FW-750LH☐☐	75	5.00	40	0.040	1.125	0.562	0.312	0.036
OL2914FW-401LH☐☐	400	2.25	225	0.330	1.125	0.562	0.312	0.018
OL2914FW-801LH☐☐	800	1.75	475	0.640	1.125	0.562	0.312	0.015
OL2916FW-102LH☐☐	1000	1.50	575	0.980	1.125	0.635	0.312	0.012
OL3416FW-500LH☐☐	50	9.50	25	0.012	1.350	0.625	0.375	0.064
OL3216FW-151LH☐☐	150	4.75	85	0.046	1.250	0.625	0.375	0.036
OL3216FW-701LH☐☐	700	2.25	400	0.420	1.250	0.625	0.375	0.018
OL3216FW-132LH☐☐	1250	1.75	750	0.850	1.250	0.625	0.375	0.015
OL3222FW-162LH☐☐	1600	1.50	950	1.270	1.250	0.85	0.375	0.012
OL4622FW-131LH☐☐	125	7.75	65	0.032	1.822	0.85	0.750	0.064
OL4622FW-501LH☐☐	500	4.00	275	0.150	1.822	0.85	0.750	0.032
OL4622FW-112LH☐☐	1100	2.50	650	0.330	1.822	0.85	0.750	0.025
OL4622FW-232LH☐☐	2250	1.75	1350	0.920	1.822	0.85	0.750	0.018
OL4622FW-452LH☐☐	4500	1.25	2700	2.640	1.822	0.85	0.750	0.012
OL5725FW-251LH☐☐	250	8.00	125	0.041	2.225	0.987	0.625	0.062
OL5725FW-901LH☐☐	900	3.75	500	0.175	2.225	0.987	0.625	0.032
OL5725FW-182LH☐☐	1800	2.50	1000	0.550	2.225	0.987	0.625	0.023
OL5725FW-402LH☐☐	4000	1.75	2100	1.160	2.225	0.987	0.625	0.018
OL5725FW-802LH☐☐	8000	1.00	4500	3.340	2.225	0.987	0.625	0.012

☐☐ : Internal Code

FEATURES

- ❑ Suitable for high current power supplies
- ❑ Low radiation noise
- ❑ Low core loss
- ❑ High saturate current
- ❑ Less power loss and minmum thermal effect
- ❑ Operating temperature: -55℃ to +105℃
- ❑ Storage temperature: -40℃ to +85℃

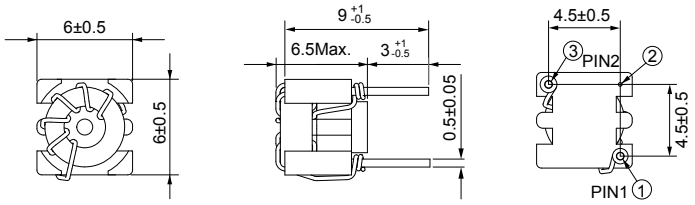
APPLICATION

- ❑ Power Supply , computers and server , EMI/RFI suppression and wide bend choke coils , DC/DC converters , I/P & O/P.
- ❑ For noise prevention of TV , audio device etc.

■ Rf Signal Choke

MECHANICAL DIMENSIONS

OI0606AH



unit: mm

ELECTRICAL SPECIFICATION

Part Number	Marking Color Dots			Inductance (nH) ±5%	Q Min.	Test Freq. (MHz)	DCR (Ω) Max.	Rated Current (mA)
	1	2	3					
OI0606AH-90NJH	BLACK	WHITE	BLACK	90	70	40	0.035	600
OI0606AH-R10JH	BROWN	BLACK	BLACK	100	70	40	0.035	600
OI0606AH-R11JH	BROWN	BROWN	BLACK	110	70	40	0.035	600
OI0606AH-R12JH	BROWN	RED	BLACK	120	70	40	0.035	600
OI0606AH-R13JH	BROWN	ORANGE	BLACK	130	70	40	0.035	600
OI0606AH-R14JH	BROWN	YELLOW	BLACK	140	70	40	0.045	600
OI0606AH-R15JH	BROWN	GREEN	BLACK	150	70	40	0.045	600
OI0606AH-R17JH	BROWN	BLUE	GREEN	165	70	40	0.045	600
OI0606AH-R18JH	BROWN	GRAY	BLACK	180	70	40	0.045	600
OI0606AH-R20JH	RED	BLACK	BLACK	200	70	40	0.045	600
OI0606AH-R22JH	RED	RED	BLACK	220	70	40	0.058	600
OI0606AH-R24JH	RED	YELLOW	BLACK	240	60	40	0.058	600
OI0606AH-R28JH	RED	GRAY	BLACK	280	60	40	0.058	600
OI0606AH-R31JH	ORANGE	BROWN	BLACK	310	60	40	0.058	600
OI0606AH-R35JH	ORANGE	GREEN	BLACK	350	60	40	0.058	600

FEATURES

- ❑ For high freq. Up to 1 GHz.
- ❑ High Q up to 150 MHz.
- ❑ Temperature stability 150 ppm/℃
- ❑ Unspecified values and stricter tolerance less than 1% are available on request
- ❑ Operating temperature:-20℃ to +125℃

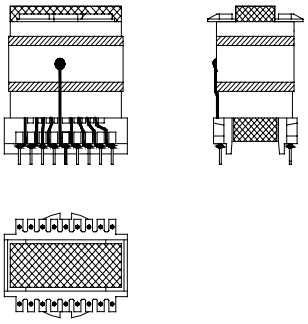
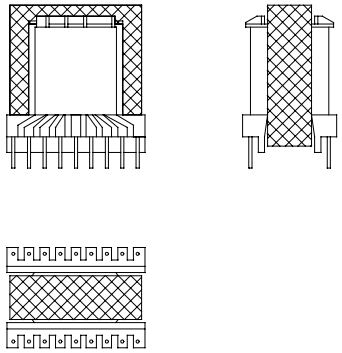
APPLICATION

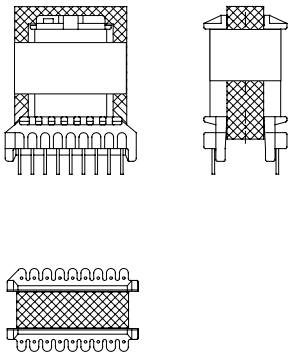
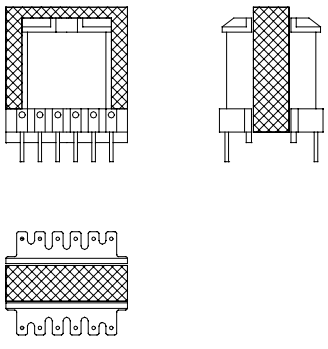
- ❑ LC filter, for CATV diplex filter.

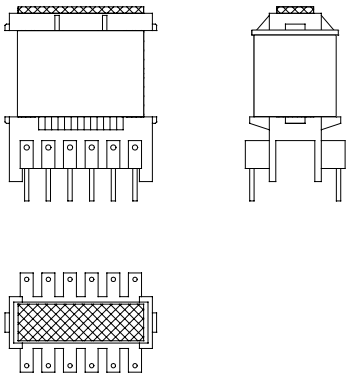
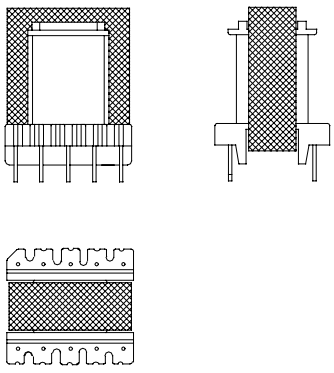
TVR/TVE Series

■ Transformers

TRANSFORMER

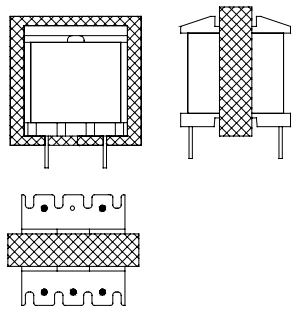
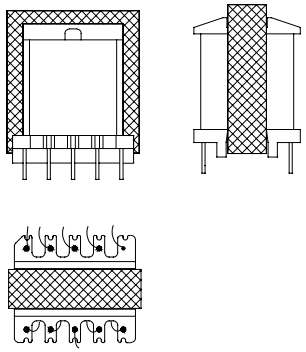
TVR49xx		TVRV42xx	
POWER: 400W		**POWER:** 350W	
FREQ.: 25K~150KHz		**FREQ.:** 25K~300KHz	
SIZE: 56×41×65		**SIZE:** 45×33×48	
Pin number: 9×2		**Pin number:** 9×2	
CORE TYPE ER49		**CORE TYPE** ER42	

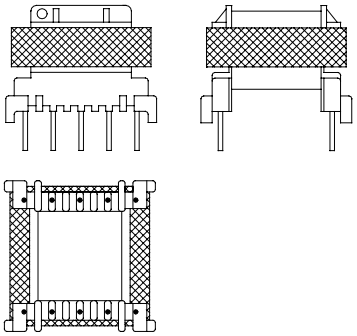
TVR35xx		TVT34xx	
POWER: 280W		**POWER:** 250W	
FREQ.: 25K~500KHz		**FREQ.:** 25K~500KHz	
SIZE: 42 x 27 x 50mm		**SIZE:** 36 x 30 x 40mm	
Pin number: 9 x 2		**Pin number:** 6 x 2	
CORE TYPE ER35		**CORE TYPE** ETD34	

TVR29xx		TVR28xx	
POWER: 180W		**POWER:** 150W	
FREQ.: 25K~500KHz		**FREQ.:** 25K~300KHz	
SIZE: 37 x 27 x 50mm		**SIZE:** 30 x 25 x 37mm	
Pin number: 6 x 2		**Pin number:** 5 x 2	
CORE TYPE ETD29		**CORE TYPE** ER28	

■ Transformers

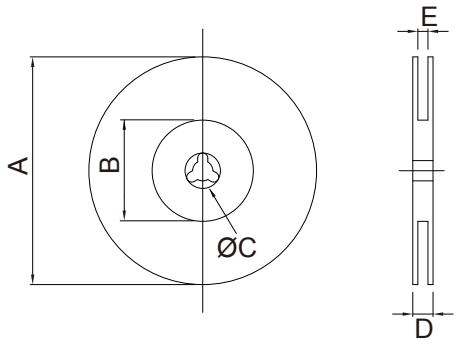
TRANSFORMER

TVE16xx		TVE19xx	
POWER: 5W		**POWER:** 35W	
FREQ.: 50K~300KHz		**FREQ.:** 25K~500KHz	
SIZE: 17.5 x 14 x 16mm		**SIZE:** 23 x 19 x 32mm	
Pin number: 3 x 2		**Pin number:** 5 x 2	
CORE TYPE EE16		**CORE TYPE** EE19	

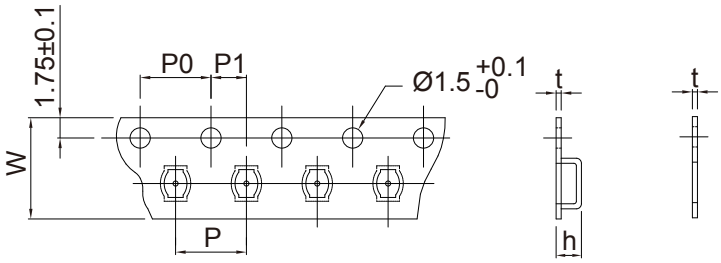
THF25xx	
POWER: 40W	
FREQ.: 50K~500KHz	
SIZE: 27 x 27 x 23 mm	
Pin number: 5 x 2	
CORE TYPE EF25	

Tape and Reel Specifications

CARRIER TAPE REELS



TAPE DIMENSIONS (mm)



Plastic Paper

SMD RF MULTI-LAYER CHIP BEADS

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	BOX	CARTON
FB100505 (0402)	180	75	13	12.5	10	8	2	4	2	----	0.60	10,000	----	----	500,000
FB/TI160808 (0603)	180	75	13	12.5	10	8	4	4	2	----	0.92	4,000	----	----	200,000
FB/TI201209 (0805)	180	75	13	12.5	10	8	4	4	2	----	1.04	4,000	----	----	200,000
FB/TI321611 (1206)	180	75	13	12.5	10	8	4	4	2	1.27	0.23	3,000	----	----	150,000
FB/TI322513 (1210)	180	75	13	12.5	10	8	4	4	2	1.55	0.23	2,000	----	----	100,000
FB/TI451616 (1806)	180	75	13	16.5	14	12	4	4	2	1.93	0.23	2,000	----	----	80,000
FB/TI453215 (1812)	180	75	13	16.5	14	12	8	4	2	1.85	0.23	1,000	----	----	40,000

SMD RF MULTI-LAYER CHIP INDUCTORS

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	BOX	CARTON
TF100505 (0402)	180	75	13	12.5	10	8	2	4	2	----	0.60	10,000	----	----	500,000
TF160808 (0603)	180	75	13	12.5	10	8	4	4	2	----	0.92	4,000	----	----	200,000
FL160808 (0603)	180	75	13	12.5	10	8	4	4	2	----	0.92	4,000	----	----	200,000
FL201209 (0805)	180	75	13	12.5	10	8	4	4	2	----	0.95	4,000	----	----	200,000
FL201212 (0805)	180	75	13	12.5	10	8	4	4	2	----	1.22	3,000	----	----	150,000
FH201210 (0805)	180	50	13	15.0	10	8	4	4	2	1.30	0.23	3,000	----	15,000	90,000
FH201610 (0805)	180	50	13	15.0	10	8	4	4	2	1.30	0.23	3,000	----	15,000	90,000

Tape and Reel Specifications

SMD RF CHIP INDUCTORS

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	BOX	CARTON
0402CP	180	75	13	12.5	8.4	8	2	4	2	---	0.60	4,000	----	20,000	120,000
FEC0603CP	180	75	13	12.5	8.4	8	4	4	2	1.07	0.25	4,000	----	20,000	120,000
FEC0805CP	180	75	13	12.5	8.4	8	4	4	2	1.38	0.25	3,000	----	15,000	90,000
FEC1008CP	180	75	13	12.5	8.4	8	4	4	2	2.30	0.25	2,000	----	10,000	60,000
1210C	180	75	13	12.5	8.4	8	4	4	2	2.43	0.23	1,500	----	7,500	45,000
1812CP	180	50	13	18.4	12.4	12	8	4	2	3.60	0.35	600	----	3,000	18,000
0805F	180	75	13	12.5	8.4	8	4	4	2	1.38	0.25	3,000	----	15,000	90,000
1008F	180	75	13	12.5	8.4	8	4	4	2	2.52	0.25	2,000	----	10,000	60,000

SMD COMMON MODE CHIP COILS

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	BOX	CARTON
MCM08062G	180	50	13	16.5	11.5	8	2	4	2	0.60	0.23	10,000	----	50,000	300,000
SCM2012F-I	180	75	12	12.5	8.4	8	4	4	2	1.45	0.22	2,000	----	10,000	60,000
SCM2012FH	180	75	12	12.5	8.4	8	4	4	2	1.45	0.22	2,000	----	10,000	60,000
SCM7038F	340	100	13	22.4	16.5	16	12	4	2	4.25	0.35	----	1,000	2,000	6,000

SMD AIR COILS

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	BOX	CARTON
291A	180	75	13	16.5	12.5	12	8	4	2	3.30	0.25	500	----	2,000	12,000
291B	180	75	13	20.5	16.5	16	8	4	2	3.30	0.25	500	----	1,500	9,000
292AR	180	75	13	12.5	8.4	8	4	4	2	1.70	0.30	2,000	----	10,000	60,000
292BR	180	50	13	18.4	12.4	12	4	4	2	1.75	0.35	2,000	----	6,000	36,000
293A	340	100	13	25.5	16.5	16	12	4	2	4.40	0.30	----	1,000	1,000	10,000
294A	340	100	13	30.4	24.5	24	12	4	2	5.30	0.35	----	1,000	1,000	8,000

SMD SQUARE TYPE AIR COILS

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	BOX	CARTON
LSQ0806A	180	50	13	16.4	12.5	12	4	4	2	1.75	0.23	2,000	----	8,000	48,000
LSQ0807A	180	50	13	16.4	12.5	12	4	4	2	1.86	0.23	2,000	----	8,000	48,000
LSQ0908A	180	50	13	16.4	12.5	12	4	4	2	2.10	0.25	2,000	----	8,000	48,000

SMD MOLDING TYPE POWER INDUCTOR

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	BOX	CARTON
CF252018	180	50	13	12.5	8.4	8	4	4	2	2.10	0.30	2,000	----	10,000	60,000
CF322522	180	50	13	12.5	9.7	8	4	4	2	2.40	0.25	2,000	----	10,000	60,000
CF453232	180	50	13	18.4	12.4	12	8	4	2	3.50	0.35	500	----	2,000	12,000

Tape and Reel Specifications

SMD POWER CHOKES

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7”	13”	BOX	CARTON
CSN032D	180	80	13	18.5	12.5	12	8	4	2	2.50	0.35	500	----	2,000	12,000
CSN043D	340	100	13	18.4	12.4	12	8	4	2	3.60	0.35	----	2,250	4,500	13,500
CSN054D	340	80	13	18.4	12.4	12	12	4	2	5.00	0.35	----	1,000	3,000	9,000
CSN073D	340	60	13	22.4	16.4	16	12	4	2	3.80	0.35	----	1,400	2,800	8,400
CSN075D	340	80	13	22.4	16.4	16	12	4	2	5.50	0.40	----	1,000	2,000	6,000
CSN104D	340	100	13	29.5	24.5	24	12	4	2	4.80	0.30	----	1,200	1,200	4,800
CSN105D	340	100	13	30.4	24.4	24	16	4	2	5.80	0.30	----	700	700	2,800
CSN073F	340	100	13	22.4	16.5	16	12	4	2	3.70	0.30	----	1,400	2,800	8,400
CSN075F	340	100	13	22.4	16.5	16	12	4	2	5.30	0.35	----	1,100	2,200	6,600
CSN082F	340	100	13	30.4	24.5	24	16	4	2	3.00	0.35	----	1,300	1,300	13,000
CSN084F	340	100	13	30.4	24.5	24	16	4	2	5.50	0.35	----	750	750	6,000
CSS0211P	180	50	13	18.4	12.4	12	8	4	2	1.40	0.30	1,500	----	6,000	36,000
CSS0214P	180	50	13	18.4	12.4	12	8	4	2	1.60	0.30	1,000	----	3,000	15,000
CSS0218P	180	50	13	18.4	12.4	12	8	4	2	2.20	0.35	1,000	----	3,000	15,000
CSS0316P	180	50	13	16.5	12.5	12	8	4	2	2.20	0.30	1,000	----	4,000	24,000
CSS0418P	340	60	13	22.4	16.4	16	12	4	2	2.20	0.35	----	2,000	4,000	12,000
CSS0428P	340	60	13	22.4	16.4	16	12	4	2	3.20	0.35	----	1,500	3,000	9,000
CSS0518P	340	60	13	22.4	16.4	16	12	4	2	2.25	0.35	----	2,000	4,000	12,000
CSS0528P	340	60	13	22.4	16.4	16	12	4	2	3.25	0.35	----	1,500	3,000	9,000
CSS0628P	340	80	13	22.4	16.4	16	12	4	2	3.25	0.35	----	1,500	3,000	9,000
CSS0638P	340	100	13	22.4	16.4	16	12	4	2	4.50	0.35	----	1,200	2,400	7,200
CSS124P	340	100	13	30.5	25.0	24	16	4	2	5.50	0.35	----	750	750	6,000
CSS125P	340	100	13	30.5	25.0	24	16	4	2	5.20	0.35	----	500	500	4,000
CSS127P	340	100	13	30.5	24.5	24	16	4	2	8.40	0.35	----	500	500	4,000
CSS0630G	340	100	13	18.4	12.4	12	12	4	2	3.15	0.30	----	1,500	3,000	9,000
CSS1038G	340	100	13	30.5	24.5	24	16	4	2	4.30	0.35	----	1,000	1,000	8,000
CSS1050G	340	100	13	30.5	24.5	24	16	4	2	5.40	0.35	----	500	500	4,000
CSS0625F	340	100	13	22.5	16.5	16	12	4	2	3.00	0.35	----	1,000	2,000	6,000
CSS0628F	340	100	13	22.5	16.5	16	12	4	2	3.10	0.35	----	1,000	2,000	6,000
CSS0728F	340	100	13	22.5	16.5	16	12	4	2	3.10	0.35	----	1,000	2,000	6,000
CSS0730F	340	100	13	22.5	16.5	16	12	4	2	3.30	0.35	----	1,000	2,000	6,000
CSS073F	340	80	13	22.5	16.5	16	12	4	2	3.70	0.35	----	1,400	2,800	8,400
CSS0732F	340	100	13	22.5	16.5	16	12	4	2	3.50	0.35	----	1,000	2,000	6,000
CSS0745F	340	100	13	22.5	16.5	16	12	4	2	4.80	0.35	----	1,000	2,000	6,000
CSS075F	340	80	13	22.5	16.5	16	12	4	2	5.30	0.30	----	1,100	2,200	6,600
CSS084F	340	100	13	30.5	24.5	24	16	4	2	5.50	0.35	----	750	750	6,000
CSS1045F	340	100	13	30.5	24.5	24	16	4	2	4.80	0.40	----	500	500	4,000
CSS124F	340	100	13	30.5	25.0	24	16	4	2	5.50	0.35	----	750	750	6,000
CSS125F	340	100	13	30.5	25.0	24	16	4	2	6.50	0.35	----	500	500	4,000
CSS127F	340	100	13	30.5	24.5	24	16	4	2	8.40	0.35	----	500	500	4,000
CSS1355F	340	100	13	30.4	24.4	24	16	4	2	6.10	0.40	----	650	650	5,200
CSS136F	340	100	13	38.4	32.5	32	20	4	2	7.65	0.40	----	350	350	2,800
CSS1365F	340	100	13	30.4	24.4	24	20	4	2	7.10	0.40	----	450	450	3,600
CSS1375F	340	100	13	30.4	24.4	24	20	4	2	8.10	0.40	----	400	400	3,200
CSCA2016D	180	60	13	16.5	11.5	8	4	4	2	1.35	0.25	3,000	----	15,000	90,000
CSCA2520D	180	60	13	16.5	11.5	8	4	4	2	1.75	0.30	3,000	----	15,000	90,000
CSCD2012D	180	60	13	16.5	11.5	8	4	4	2	1.60	0.25	2,500	----	12,500	75,000

Tape and Reel Specifications

SMD MOLDING TYPE HIGH CURRENT POWER CHOKES

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	BOX	CARTON
MCS0420	330	100	13	12.4	16.6	12	8	4	2	2.50	0.30	----	2,000	2,000	12,000
MCS0630	340	100	13	21.2	16.6	16	12	4	2	3.40	0.40	----	1,000	1,000	6,000
MCS1040	340	100	13	29.2	24.6	24	16	4	2	4.25	0.40	----	500	500	3,000

SMD COATING RESIN TYPE POWER CHOKES

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	BOX	CARTON
CSM0310D	180	60	13	12.5	8.4	8	4	4	2	1.40	0.23	2,000	----	12,000	72,000
CSM0315D	180	60	13	12.5	8.4	8	4	4	2	1.70	0.23	2,000	----	12,000	72,000
CSM0418D	330	80	13	18.5	13.5	12	8	4	2	2.10	0.30	----	3,500	7,000	28,000
CSM0645D	330	80	13	18.5	13.5	12	8	4	2	4.65	0.40	----	1,500	3,000	9,000
CSM0840D	330	100	13	22.4	16.4	16	12	4	2	4.40	0.35	----	1,000	2,000	6,000
CSMV2012D	180	60	13	16.5	11.5	8	4	4	2	1.30	0.25	2,500	----	12,500	75,000
CSMH2410D	180	60	13	16.5	11.5	8	4	4	2	1.30	0.25	2,500	----	12,500	75,000
CSMH2412D	180	60	13	16.5	11.5	8	4	4	2	1.30	0.25	2,500	----	12,500	75,000
CSMH0310D	180	60	13	16.5	11.5	8	4	4	2	1.40	0.30	2,000	----	12,000	72,000
CSMH0312D	180	60	13	16.5	11.5	8	4	4	2	1.60	0.30	2,000	----	12,000	72,000
CSMS2012D	180	60	13	16.5	11.5	8	4	4	2	1.30	0.25	2,500	----	12,500	75,000
CSMS0315D	180	60	13	16.5	11.5	8	4	4	2	2.00	0.30	2,000	----	12,000	72,000
CSMS0410D	330	80	13	18.5	13.5	12	8	4	2	1.40	0.30	-----	5,000	10,000	40,000
CSMS0412D	330	80	13	18.5	13.5	12	8	4	2	1.60	0.30	----	4,500	9,000	36,000
CSMS0418D	330	80	13	18.5	13.5	12	8	4	2	2.10	0.30	----	3,500	7,000	28,000
CSMS0510D	180	60	13	20.5	15.5	12	8	4	2	1.40	0.30	1,000	----	4,000	24,000
CSMS0512D	180	60	13	20.5	15.5	12	8	4	2	1.40	0.30	1,000	----	4,000	24,000
CSMS0514D	180	60	13	20.5	15.5	12	8	4	2	2.00	0.30	1,000	----	4,000	24,000
CSMS0520D	180	60	13	20.5	15.5	12	8	4	2	2.30	0.30	800	----	3,200	19,200
CSMS0540D	330	80	13	18.5	13.5	12	8	4	2	4.20	0.40	----	1,500	3,000	9,000
CSMS0610D	180	60	13	20.5	15.5	12	8	4	2	1.40	0.40	1,000	----	4,000	24,000
CSMS0612D	180	60	13	20.5	15.5	12	8	4	2	1.60	0.40	1,000	----	4,000	24,000
CSMS0620D	330	80	13	18.5	13.5	12	8	4	2	2.30	0.40	----	2,500	5,000	15,000
CSMS0628D	330	80	13	18.5	13.5	12	8	4	2	3.10	0.40	----	2,000	4,000	24,000
CSMS0645D	330	80	13	18.5	13.5	12	8	4	2	4.70	0.40	----	1,500	3,000	12,000
CSMS0840D	330	80	13	22.5	17.5	16	12	4	2	4.50	0.50	----	1,000	2,000	8,000

SMD SIGNAL CHOKES

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	BOX	CARTON
OI0707BI	340	100	13	20.5	16.5	16	12	4	2	6.50	0.35	----	800	1,600	4,800
OI0604DV	340	100	13	20.5	16.5	16	12	4	2	6.20	0.40	----	700	1,400	4,200

SMD BALUN TRANSFORMER

Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	BOX	CARTON
BIH2012OB	180	75	12	12.5	8.4	8	4	4	2	1.45	0.22	2,000	----	10,000	60,000
BIY3520AB	340	100	13	18.4	12.4	12	8	4	2	3.30	0.35	----	2,500	5,000	35,000
BIY3520KB	340	100	13	18.4	12.4	12	8	4	2	3.40	0.35	----	2,500	5,000	35,000
BIY3520KM	340	100	13	18.4	12.4	12	8	4	2	3.40	0.35	----	2,500	5,000	35,000
BIY5030KB	340	100	13	22.4	16.4	16	12	4	2	4.30	0.35	----	1,000	2,000	12,000
BIY5030FM	340	100	13	22.4	16.4	16	12	4	2	4.30	0.35	----	1,000	2,000	12,000

Business Operation 經營模式分析

- Vertical integration to improve competitiveness.
- Building strategic alliances to strengthen competitiveness.
- Expanding Western and Japanese markets, cultivation high-end products.
- Moving into Chinese market to expand market share.
- 垂直整合發展，擺脫同業競爭
- 運用策略聯盟，產品水平延伸
- 拓展歐美日市場，深耕高階產品
- 跨足中國市場，擴大市佔率

Branding Strategy 品牌經營策略

- Developing specialized products market.
- Enhancing brand value with continuing innovation and R&D ability.
- Improving competitiveness through vertical integration.
- Satisfying customer's need through extending product lines.
- 深耕被動元件特殊品市場及其上游材料產業高階產品
- 持續創新研發能力，提升品牌含金量
- 產品垂直整合，強化競爭優勢
- 產品水平延伸，滿足客戶一次購足

Keystothe Success 關鍵成功因素

- The only local manufacturer with vertical production capability from ceramic dielectric powder material to multiple-layer ceramic chip capacitors.
- Differentiating marketing strategy with niche product.
- Diversifying product lines to expand customer base.
- Continuing innovation and R&D ability.
- Focusing core competence with PSA group support.
- 國內唯一有能力由上游初發原料，向下垂直整合至被動晶片元件的廠商，掌握材料與製程的完整關鍵性技術
- 利基產品差異化與行銷差異化策略
- 產品線多元發展，擴大客戶群
- 持續創新與研發，開發新產品與導入新製程
- 共享集團資源，聚焦核心競爭力

Characteristics 企業特色

- PDC is the domestic manufacturer devoting to ceramic dielectric materials.
- 為國內廠商對介電瓷粉材料研發投注最深者

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