CSPT12A03-4.0F Version:100525

## **Description**

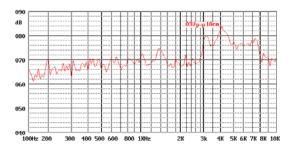
Chinasound SMD Piezo Transducer 12mm length, type A(=12mm width,3.0mm height), 3Vp-p rated voltage - 4.0KHz resonant frequency, lead Free reflowing solderable and RoHS compliant

### ♦ RoHS compliant

- Reliable Solid State Piezoelectric Technology
- Corrosion Resistance Diaphragm
- Flame Retardant Plastic
- Tape and reel packaging for auto mounting **Characteristics**

#### **Picture**





#### **Specification**

**Operating Voltage Operating Frequency Typical Sound Output** Typ. Operating Current Capacitance **Operating Temp.** 

**Storage Temperature** Termination

**Construction Materials** 

Weight (Typical) Reliability

4,000+/-500Hz

20 Vp-p max.

75dB min. at 3Vp-p 10cm 4KHz 25 °C 1mA max. at 3Vp-p 4KHz 25 °C 15,000+/-30% pF at 100Hz 1Vrms -40 °C to +105 °C -40 °C to +120 °C without package

2 soldering pads, Sn plated Brass Plastic, LCP Vectra E130i or equal Ni Alloy Disc N42 or equal

0.8g

\*Life Test At 3 Vp-p, 1 minutes ON 1 minutes OFF in room temperature continuously for 1,000 hours \*High Temperature No function at +120+/-2 °C for 240 hours; Function at +105+/-2 °C for 240 hours

No function at -40+/-2 °C for 240 hours; Function at -40+/-2 °C for 240 hours

+40+/-2°C, 95+/-5%RH, 240 hours

-40+/-2 °C 0.5 hr → +25+/-2 °C 0.25 hr → +105+/-2 °C 0.5 hr → +25+/-2 °C 0.25 hr. Temperature Go

up or Drop time is 0.5 hr. 3 hrs per 1 cycle. Total is 5 cycles

\*Vibration 1.5mm with 10 to 50Hz of vibration frequency to each of 3 perpendicular directions for 2 hours \*Shock 980m/s<sup>2</sup> (=100g) shock for each mutually perpendicular directions, half sine wave, 3 times each Dropped naturally from 750mm height onto the surface of 10mm wooden board. 2 directions -\*Drop Test

upper and side of the part are applied \*Soldering Heat Resistance Samples put through reflowing soldering oven 2 twice

\*\*Solderability Samples put on PCB with solder paste through reflowing soldering oven 1 times

For a period of one (1) year from date of manufacture under normal operations

#### Warranty

\*All specifications must be satisfied after the test (Recovery:2 to 4 hrs of recovery under the standard condition after the removal from test chamber).

\*\*90% min. soldering pads shall be with solder.(except the edge of pad)

Description

Diaphragm

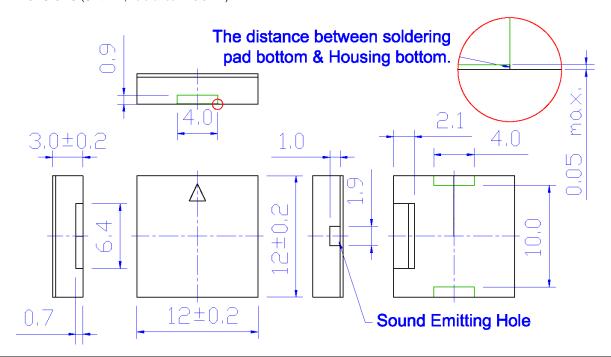
\*Humidity

\*Low Temperature

\*Thermal Shock

Case

#### **Dimensions** (Unit:mm, Tolerance: ±0.3mm)

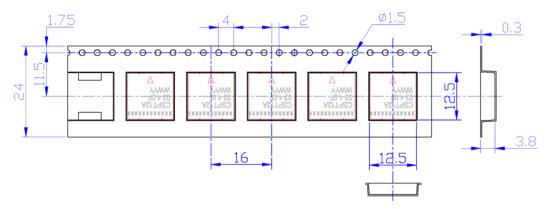


All specifications are subject to change without notice

Composed by: Guo J/100525 Checked by: Gao CL, Gong YS, Zhu YC/100525 Approved by: Wang Z/100525

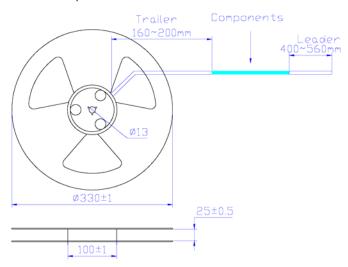


## Tape & Reel Dimensions (Unit:mm)

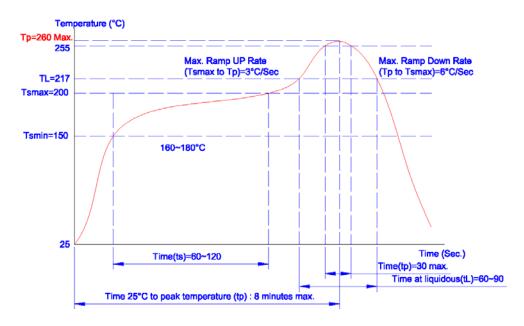


## NOTE:

- 1.10 sprocket hole pitch cumulative tolerance +/-0.20mm.
- 2. Carrier camber not to exceed 1 mm in 100 mm.
- 3. All dimensions meet EIA-481-2-A requirements.
- 4. Thickness: 0.30+/-0.05 mm.
- 5. Component loaded per 13" reel: 1000 pcs.



# Recommend Reflowing Profile as per IPC/JEDEC J-STD-020D



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# ISO9001 certified

# **Revison History**

Version Number	Description	Name
040223	Original, CSPT12A03-4.0	Guo Jun
040825	Change to RoHS compliant version, CSPT12A03-4.0F	Guo Jun
050309	Add Recommend Reflowing Profile	Guo Jun
061214	New specification format	Gao Li
090513	Recommended reflowing soldering profile is updated as per JEDEC J-STD-020D	Guo Jun
100525	To add requirement on the distance between soldering pads bottom and housing bottom must be 0.05mm	Guo Jun
	max., in order to prevent bad solderability	



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