



RoHS compliance, Halogen free
 High reliability: 85°C85%RH rated voltage applied (warranty)
 higher thermal resistance: 125°C guaranteed (ambient temperature)
 Power supply circuit of entertainment equipment for the car.

Specifications

| Items | Condition | Specifications | |
|--|---|--|---------------------------------------|
| Rated voltage (V) | — | 6.3 | 10 |
| Surge voltage (V) | — | 7.2 | 12 |
| Category temperature range (°C) | — | -55 to +125 | |
| Capacitance tolerance (%) | 120Hz/20°C | M: ±20 | |
| Rated capacitance range (μF) | 120Hz/20°C | 68 to 150 | |
| Dissipation Factor (DF) | 120Hz/20°C | Please see the attached characteristics list | |
| Leakage current | Rated voltage applied, after 5 minutes | Please see the attached characteristics list | |
| Equivalent series resistance (ESR) | 100kHz/20°C | Please see the attached characteristics list | |
| Characteristics of impedance ratio at high temp. and low temp. | 100kHz/+20°C | -55°C Z/Z _{20°C} | 0.6 to 2.0 |
| | | +105°C Z/Z _{20°C} | 0.6 to 2.0 |
| Endurance | 125°C, 1,000h, category voltage applied (105°C 2,000h, rated voltage applied) | temp | 125 105 |
| | | ΔC/C | Within±20% of the initial value |
| | | DF | ≤ 2 times of the initial limit |
| | | LC | ≤ 2 times of the initial limit |
| Damp heat(Load) | 85°C, 85 to 90%RH, 500h, rated voltage applied | ΔC/C | Within+40%, -20% of the initial value |
| | | DF | ≤ 1.5 times of the initial limit |
| | | LC | Within the initial limit |
| Surge | 105°C, 1,000 cycles, 1kΩ discharge resistance, surge voltage applied | ΔC/C | Within±5% of the initial value |
| | | DF | Within the initial limit |
| | | LC | ≤ 3 times of the initial limit |

Marking and dimensions

D2E, D3L size

| Size code | L ±0.3 | W ±0.2 | H ±0.2※1 | S ±0.2 | W1 ±0.1 |
|-----------|--------|--------|----------|--------|---------|
| D2E | 7.3 | 4.3 | 1.8 | 1.3 | 2.4 |
| D3L | 7.3 | 4.3 | 2.8 | 1.3 | 2.4 |

※1 ±0.1: D2E

Rated capacitance

※1 The rated voltage is as follows.

| R.V. | 6.3 | 10 |
|------|-----|----|
| Mark | j | A |

※2 Lot.No.shows roughly manufacturing date.

※3 The rated capacitance is as follows.

| Capacitance(μF) | 68 | 150 |
|-----------------|----|-----|
| Mark | W7 | E8 |

Recommended land pattern dimension of PWB

| Size code | a | b | c |
|-----------|-----|-----|-----|
| D2E | 2.4 | 2.9 | 3.7 |
| D3L | 2.4 | 2.9 | 3.7 |

(unit : mm)

Size list

| RV | 6.3 | 10.0 |
|-----|-----|------|
| μF | | |
| 68 | | D2E |
| 150 | D2E | D3L |

RV:Rated voltage

TV series characteristics list

| Size code | Part number | Rated voltage (V) | Rated temperature (°C) | Rated capacitance (μF) | Category voltage (V) | Category temperature (°C) | DF (% max) | LC (μA) max/5min. | ESR (mΩmax) 100kHz/20°C | Maximum allowable ripple current (mA rms) 100kHz※1 | MSL | |
|-----------|-------------|-------------------|------------------------|------------------------|----------------------|---------------------------|------------|-------------------|-------------------------|--|----------------------|----------------------|
| | | | | | | | | | | | Reflow temp. ≤ 260°C | Reflow temp. ≤ 250°C |
| D2E | 10TVE68M | 10 | 105 | 68 | 6.3 | 125 | 10 | 68.0 | 25 | 2400 | 5 | 3 |
| | 6TVE150M | 6.3 | 105 | 150 | 4.0 | 125 | 10 | 94.5 | 25 | 2400 | 5 | 3 |
| D3L | 10TVE150ML | 10 | 105 | 150 | 6.3 | 125 | 10 | 150.0 | 25 | 2400 | 5 | 3 |

※1 100k to 500kHz, 45°C