NIPPON CHEMI-CON

METAL CAPTYPE MULTILAYER CERAMIC CAPACITORS





♦FEATURES

- 1. Small size and large capacitance, high ripple current.
- 2. Temperature cycle: 1,000 cycles.
- 3. X7R temperature characteristics.
- 4. Excellent noise absorption.
- 5. For reflow soldering use.
- 6. Suitable for aluminum substrate.

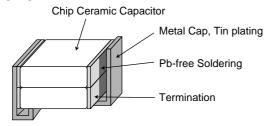
APPLICATIONS

- 1. Smoothing circuit of switching mode AC-DC or DC-DC converter.
- 2. On-board power supply.
- 3. Noise suppressor for various kinds of equipments.

♦CUSTOM MADE PRODUCTS

We can offer custom made one element metal cap type capacitors for request of customers. Please contact us if you have questions for details.

◆CONSTRUCTION



◆RATINGS

| 1. Category Temperature Range | -55~+125℃ |
|--------------------------------|---------------------------------|
| 2. Rated Voltage Range | 25, 50, 100, 250Vdc |
| 3. Rated Capacitance Range | 1.5 to 47µF |
| 4. Rated Capacitance Tolerance | M(±20%) |
| 5. Temperature Characteristics | X7R |
| 6. Rated Ripple Current | See No.5 on the following table |

SPECIFICATIONS

| No. | Items | Specification | Test Condition | | |
|-----|-----------------------|---|---|-----------|-------------|
| 1 | Withstand Voltage | No abnormality. | 250% of rated voltage shall be applied for 5 seconds. (Only 250Vdc products : 475V) | | |
| 2 | Insulation Resistance | 100/Cr(M Ω) or 4000(M Ω) whichever is less. | Rated voltage shall be applied for 60±5 seconds at temperature 25±2°C. | | |
| 3 | Rated Capacitance | Within specified tolerance. | | Cr≦10µF | Cr>10µF |
| | | | Temperature | 25±2℃ | |
| 4 | Dissipation Factor | 5.0% maximum | Frequency | 1±0.1kHz | 120±12Hz |
| | | | Voltage | 1±0.2Vrms | 0.5±0.2Vrms |
| 5 | Rated Ripple Current | Size 55 Arms 3.0 | 10kHz~1MHz (sine curve) Ripple voltage Vp shall be less than the rated voltage. | | |





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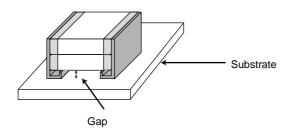
SPECIFICATIONS

| No. | Items | Specification | Test Condition | | |
|-----|--------------------|--|----------------|--|--|
| 6 | Temperature Cycle | Appearance : No visible damage. $\Delta C/C$: $\pm 15\%$ D.F. : To meet the initial specification. I.R. : To meet the initial specification. | 2 | Temperature (°C) 1. Category temperature ±3 Room temperature 3. Category temperature ±3 Room temperature | (min.) 30±3 3 max. 30±3 3 max. |
| 7 | Humidity Load Life | Appearance : No abnormality. $\Delta C/C$: $\pm 20\%$ D.F. : 10% max. I.R. : $25/C_R(M\Omega)$ or $1000(M\Omega)$ whichever is less. | Voltage : | 40±2°C : 90 to 95%RH Rated voltage 500± ²⁴ 0hours | |
| 8 | Endurance | Appearance : No abnormality. $\Delta C/C$: $\pm 20\%$ D.F. : 10% max. I.R. : $50/C_R(M\Omega)$ or $1000(M\Omega)$ whichever is less. | • | 125±3℃ Rated voltage 1000± ⁴⁸ ₀ hours | |

*CR: Rated Capacitance(µF)

♦Note of mountig for NTJ series.

- 1. The gap of capacitor and a substrate shall be the mounting face.
- 2. To prevent degredation of temperature cycling capability, if need to be careful about amount of solder that would not go into the inner side of terminations.





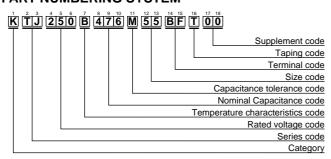
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STANDARD RATINGS

| Rated voltage | Rated Capacitance (µF) | Dimensions(mm) | | | Maximum | Don't November | | |
|---------------|------------------------|----------------|-------------|---------|---------|--------------------------|--------------------|--------------------|
| (Vdc) | | L | w | Tmax. | а | ripple current (Arms) | Part Number | |
| 0E | 33 | 6.0±0.4 | 5.3±0.4 | 5.5 | 1.3±0.3 | 3.0 | KTJ250B336M55BFT00 | |
| 25 | 47 | | | | | | KTJ250B476M55BFT00 | |
| 50 | 15 | 6.0±0.4 | 0.4 5.3±0.4 | 5.5 | 1.3±0.3 | 3.0 | KTJ500B156M55BFT00 | |
| 50 | 22 | | | | | | KTJ500B226M55BFT00 | |
| 400 | 6.8 | 6.0±0.4 | 0.010.4 | F 2±0.4 | -0104 | 4.2±0.2 | 0.0 | KTJ101B685M55BFT00 |
| 100 | 10 | | 5.3±0.4 | 5.5 | 1.3±0.3 | 3.0 | KTJ101B106M55BFT00 | |
| 250 | 1.5 | 6.0±0.4 | 5.3±0.4 | 5.5 | 1.3±0.3 | 3.0 | KTJ251B155M55BFT00 | |
| 250 | 2.2 | | | | | | KTJ251B225M55BFT00 | |

◆PART NUMBERING SYSTEM



♦DIMENSIONS

