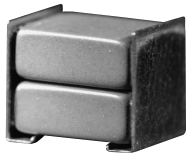
METAL CAP TYPE MULTILAYER CERAMIC CAPACITORS

New!

NTJ Series

RoHS Compliant



◆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.

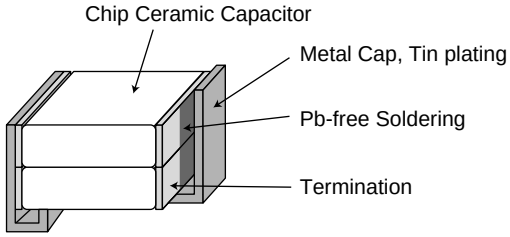
◆APPLICATIONS

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

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

CAT. No. E1002N

METAL CAP TYPE MULTILAYER CERAMIC CAPACITORS

New!
NTJ Series

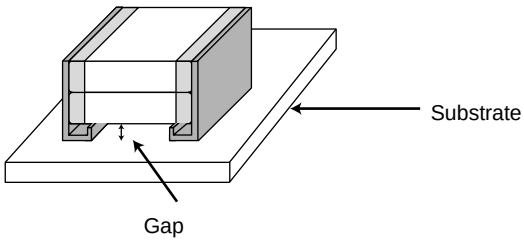
◆SPECIFICATIONS

No.	Items	Specification	Test Condition
6	Temperature Cycle	Appearance : No visible damage. ΔC/C : ±15% D.F. : To meet the initial specification. I.R. : To meet the initial specification.	<table><tr><th>Step</th><th>Temperature (℃)</th><th>(min.)</th></tr><tr><td>1</td><td>Min. Category temperature ±3</td><td>30±3</td></tr><tr><td>2</td><td>Room temperature</td><td>3 max.</td></tr><tr><td>3</td><td>Max. Category temperature ±3</td><td>30±3</td></tr><tr><td>4</td><td>Room temperature</td><td>3 max.</td></tr></table><Cycle> 1000 cycles
7	Humidity Load Life	Appearance : No abnormality. ΔC/C : ±20% D.F. : 10% max. I.R. : 25/C_R(MΩ) or 1000(MΩ) whichever is less.	Temperature : 40±2℃ Humidity : 90 to 95%RH Voltage : Rated voltage Time : 500^{+24}_{0}hours
8	Endurance	Appearance : No abnormality. ΔC/C : ±20% D.F. : 10% max. I.R. : 50/C_R(MΩ) or 1000(MΩ) whichever is less.	Temperature : 85±2℃ Voltage : 200% of rated voltage. Time : 1000^{+48}_{0}hours Temperature : 125±3℃ Voltage : Rated voltage Time : 1000^{+48}_{0}hours

*C_R : 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.



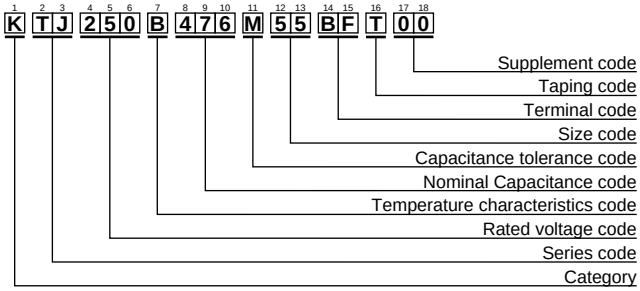
METAL CAP TYPE MULTILAYER CERAMIC CAPACITORS

New!
NTJ Series

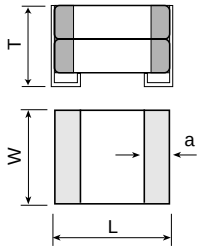
◆STANDARD RATINGS

Rated voltage (Vdc)	Rated Capacitance (μF)	Dimensions(mm)				Maximum ripple current (Arms)	Part Number
		L	W	Tmax.	a		
25	33	6.0±0.4	5.3±0.4	5.5	1.3±0.3	3.0	KTJ250B336M55BFT00
	47						KTJ250B476M55BFT00
50	15	6.0±0.4	5.3±0.4	5.5	1.3±0.3	3.0	KTJ500B156M55BFT00
	22						KTJ500B226M55BFT00
100	6.8	6.0±0.4	5.3±0.4	5.5	1.3±0.3	3.0	KTJ101B685M55BFT00
	10						KTJ101B106M55BFT00
250	1.5	6.0±0.4	5.3±0.4	5.5	1.3±0.3	3.0	KTJ251B155M55BFT00
	2.2						KTJ251B225M55BFT00

◆PART NUMBERING SYSTEM



◆DIMENSIONS



CAT. No. E1002N