

### ◆FEATURES

1. Small size and large capacitance, high ripple current.
2. Temperature cycle: 1000 cycles.
3. X7R temperature characteristics.
4. Excellent noise absorption.
5. For reflow soldering use.
6. Suitable for aluminum substrate.



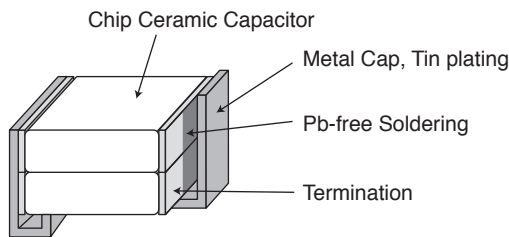
### ◆APPLICATIONS

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°C
2. Rated Voltage Range	25, 35, 50, 100, 250V <sub>dc</sub>
3. Rated Capacitance Range	1.0 to 100μF
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 250V <sub>dc</sub> products : 475V)												
2	Insulation Resistance	100/C <sub>R</sub> (MΩ) or 4000(MΩ) whichever is less.	Rated voltage shall be applied for 60±5 seconds at temperature 25±2°C.												
3	Rated Capacitance	Within specified tolerance.	<table border="1"> <tr> <td></td> <td>C<sub>R</sub>≤10μF</td> <td>C<sub>R</sub>&gt;10μF</td> </tr> <tr> <td>Temperature</td> <td colspan="2">25±2°C</td> </tr> <tr> <td>Frequency</td> <td>1±0.1kHz</td> <td>120±12Hz</td> </tr> <tr> <td>Voltage</td> <td>1±0.2V<sub>rms</sub></td> <td>0.5±0.2V<sub>rms</sub></td> </tr> </table>		C <sub>R</sub> ≤10μF	C <sub>R</sub> >10μF	Temperature	25±2°C		Frequency	1±0.1kHz	120±12Hz	Voltage	1±0.2V <sub>rms</sub>	0.5±0.2V <sub>rms</sub>
	C <sub>R</sub> ≤10μF	C <sub>R</sub> >10μF													
Temperature	25±2°C														
Frequency	1±0.1kHz	120±12Hz													
Voltage	1±0.2V <sub>rms</sub>	0.5±0.2V <sub>rms</sub>													
4	Dissipation Factor	5.0% maximum													
5	Rated Ripple Current	See STANDARD RATINGS	10kHz~1MHz (sine curve) Ripple voltage V <sub>p</sub> shall be less than the rated voltage.												

As customer requirement, Chemi-Con has submits the test results according to AEC-Q200 for Multilayer ceramic capacitors. Please contact us for more information.

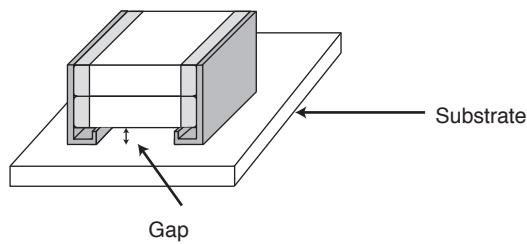
◆SPECIFICATIONS

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 border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>(min.)</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>&lt;Cycle&gt; 1000 cycles</p>	Step	Temperature (°C)	(min.)	1	Min. Category temperature ±3	30±3	2	Room temperature	3 max.	3	Max. Category temperature ±3	30±3	4	Room temperature	3 max.
Step	Temperature (°C)	(min.)																
1	Min. Category temperature ±3	30±3																
2	Room temperature	3 max.																
3	Max. Category temperature ±3	30±3																
4	Room temperature	3 max.																
7	Humidity Load Life	Appearance : No abnormality. ΔC/C : ±20% D.F. : 10% max. I.R. : 25/C <sub>R</sub> (MΩ) or 1000(MΩ) whichever is less.	Temperature : 40±2°C Humidity : 90 to 95%RH Voltage : Rated voltage Time : 500± <sup>24</sup> <sub>0</sub> hours															
8	Endurance	Appearance : No abnormality. ΔC/C : ±20% D.F. : 10% max. I.R. : 50/C <sub>R</sub> (MΩ) or 1000(MΩ) whichever is less.	Temperature : 125±3°C Voltage : Rated voltage Time : 1000± <sup>48</sup> <sub>0</sub> hours															

\*C<sub>R</sub> : 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 degradation of temperature cycling capability, if need to be careful about amount of solder that would not go into the inner side of terminations.

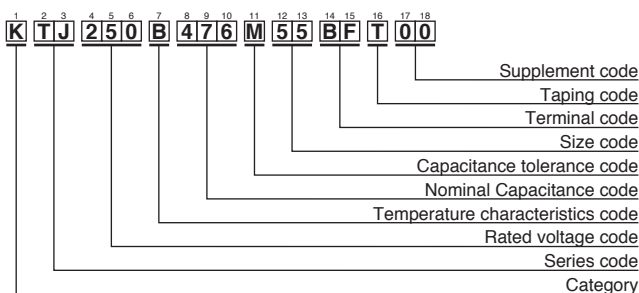


## ◆STANDARD RATINGS

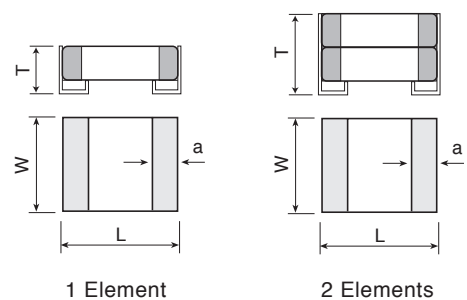
Rated voltage (Vdc)	Rated Capacitance (μF)	Dimensions(mm)				Element	Maximum ripple current (Arms)	Part Number	Taping Quantity per reel (pcs. / reel)
		L	W	Tmax.	a				
25	33	6.0±0.4	5.3±0.4	3.8	1.3±0.3	1	2.0	KTJ250B336M55AFT00	400
	33			5.5					
	47	6.0±0.4	5.3±0.4	7.0	1.3±0.3	2	3.0	KTJ250B476M55BFT00	2,000
	68			7.0					
	47			7.8±0.5					
	68	7.8±0.5	6.6±0.5	8.5	1.5±0.3	2	4.0	KTJ250B686M76BFT00	500
	100			9.5					
100	9.5								
35	33	6.0±0.4	5.3±0.4	5.5	1.3±0.3	2	3.0	KTJ350B336M55BFT00	2,000
	47			5.5					
	47	7.8±0.5	6.6±0.5	5.5	1.5±0.3	1	3.0	KTJ350B476M76AFT00	1,200
	68			8.5					
	100			8.5					
50	15	6.0±0.4	5.3±0.4	3.8	1.3±0.3	1	2.0	KTJ500B156M55AFT00	400
	15			5.5					
	22	6.0±0.4	5.3±0.4	6.5	1.3±0.3	2	3.0	KTJ500B226M55BFT00	2,000
	33			6.5					
	22			7.8±0.5					
	33	7.8±0.5	6.6±0.5	8.5	1.5±0.3	2	4.0	KTJ500B336M76BFT00	500
	47			8.5					
47	8.5								
100	4.7	6.0±0.4	5.3±0.4	3.8	1.3±0.3	1	2.0	KTJ101B475M55AFT00	400
	6.8			5.5					
	10	6.0±0.4	5.3±0.4	5.5	1.3±0.3	2	3.0	KTJ101B106M55BFT00	2,000
	15			5.5					
	22			5.5					
	6.8	7.8±0.5	6.6±0.5	5.5	1.5±0.3	1	3.0	KTJ101B685M76AFT00	1,200
15	8.5								
15	8.5								
250	1.0	6.0±0.4	5.3±0.4	3.8	1.3±0.3	1	2.0	KTJ251B105M55AFT00	400
	1.5			5.5					
	2.2	6.0±0.4	5.3±0.4	5.5	1.3±0.3	2	3.0	KTJ251B155M55BFT00	2,000
	2.2			5.5					
	2.2			7.8±0.5					
3.3	7.8±0.5	6.6±0.5	8.5	1.5±0.3	2	3.0	KTJ251B335M76BFT00	500	
3.3			8.5						

※ Please consult with us when you consider the rating other than a standard table.

## ◆PART NUMBERING SYSTEM



## ◆DIMENSIONS



Please refer to "Part Numbering System" of the beginning of a catalog for the details.