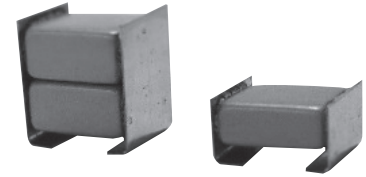


## KVJ Series



### ◆FEATURES

1. Automotive grade(AEC-Q200)
2. Small size and large capacitance, high ripple current.
3. Temperature cycle: 1000 cycles.
4. X8L temperature characteristics.
5. For reflow soldering use.
6. Suitable for aluminum substrate.



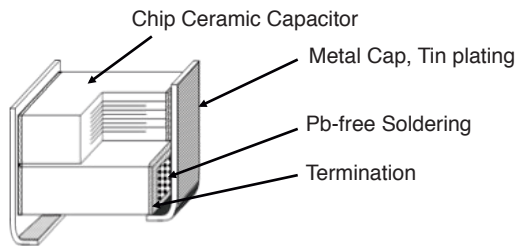
### ◆APPLICATIONS

1. For automotive equipment
2. Smoothing circuit of switching mode AC-DC or DC-DC converter.
3. On-board power supply.
4. 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~+150°C
2. Rated Voltage Range	25, 50, 100V <sub>dc</sub>
3. Rated Capacitance Range	0.68 to 22μF
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.	
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.		
4	Dissipation Factor	5.0% maximum	Temperature	25±2°C
			Frequency	1±0.1kHz      120±12Hz
			Voltage	1±0.2V <sub>rms</sub> 0.5±0.2V <sub>rms</sub>
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.

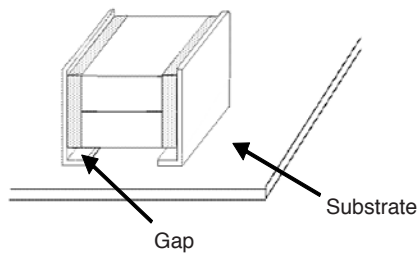
### ◆SPECIFICATIONS

No.	Items	Specification	Test Condition															
6	Temperature Cycle	Appearance : No visible damage. $\Delta C/C : \pm 15\%$ 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 <math>\pm 3</math></td> <td>30<math>\pm</math>3</td> </tr> <tr> <td>2</td> <td>Room temperature</td> <td>3 max.</td> </tr> <tr> <td>3</td> <td>Max. Category temperature <math>\pm 3</math></td> <td>30<math>\pm</math>3</td> </tr> <tr> <td>4</td> <td>Room temperature</td> <td>3 max.</td> </tr> </tbody> </table> <Cycle> 1000 cycles	Step	Temperature (°C)	(min.)	1	Min. Category temperature $\pm 3$	30 $\pm$ 3	2	Room temperature	3 max.	3	Max. Category temperature $\pm 3$	30 $\pm$ 3	4	Room temperature	3 max.
Step	Temperature (°C)	(min.)																
1	Min. Category temperature $\pm 3$	30 $\pm$ 3																
2	Room temperature	3 max.																
3	Max. Category temperature $\pm 3$	30 $\pm$ 3																
4	Room temperature	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.	Temperature : 85 $\pm$ 3°C Humidity : 80 to 85%RH Voltage : Rated voltage Time : 1000 $\pm$ <sub>0</sub> <sup>48</sup> hours															
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.	Temperature : 150 $\pm$ 3°C Voltage : Rated voltage Time : 1000 $\pm$ <sub>0</sub> <sup>48</sup> hours															

\* $C_R$  : Rated Capacitance( $\mu$ F)

### ◆Note of mountig for KVJ 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.

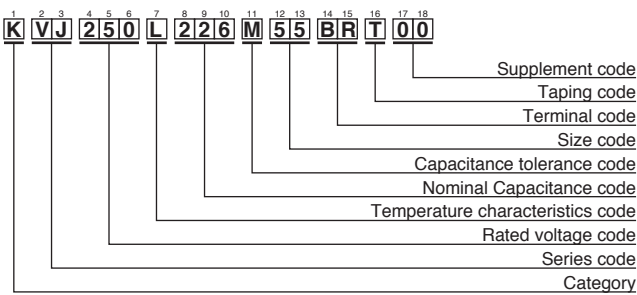


### ◆STANDARD RATINGS

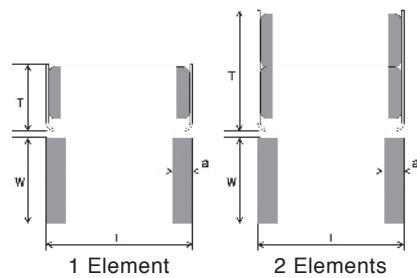
Rated voltage (Vdc)	Rated Capacitance (μF)	Dimensions(mm)				Element	Maximum ripple current (Arms)	Part Number	Taping Quantity per reel (pcs. / reel)
		L	W	Tmax.	a				
25	6.8	6.0±0.4	5.3±0.4	3.8	1.3±0.3	1	2.0	KVJ250L685M55ART00	400
	10	6.0±0.4	5.3±0.4	3.8	1.3±0.3			KVJ250L106M55ART00	400
	15	6.0±0.4	5.3±0.4	5.5	1.3±0.3	2	3.0	KVJ250L156M55BRT00	2,000
	22	6.0±0.4	5.3±0.4	6.0	1.3±0.3			KVJ250L226M55BRT00	2,000
50	2.2	6.0±0.4	5.3±0.4	3.8	1.3±0.3	1	2.0	KVJ500L225M55ART00	400
	3.3	6.0±0.4	5.3±0.4	3.8	1.3±0.3			KVJ500L335M55ART00	400
	4.7	6.0±0.4	5.3±0.4	3.8	1.3±0.3			KVJ500L475M55ART00	400
	6.8	6.0±0.4	5.3±0.4	5.5	1.3±0.3	2	3.0	KVJ500L685M55BRT00	2,000
	10	6.0±0.4	5.3±0.4	6.0	1.3±0.3			KVJ500L106M55BRT00	2,000
	0.68	6.0±0.4	5.3±0.4	3.8	1.3±0.3			KVJ101L684M55ART00	400
100	1.0	6.0±0.4	5.3±0.4	3.8	1.3±0.3	1	2.0	KVJ101L105M55ART00	400
	1.5	6.0±0.4	5.3±0.4	5.5	1.3±0.3			KVJ101L155M55BRT00	2,000
	2.2	6.0±0.4	5.3±0.4	6.0	1.3±0.3	2	3.0	KVJ101L225M55BRT00	2,000

※ 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.