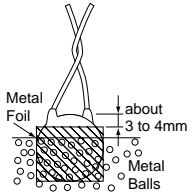



Safety Standard Certified Type KY/KH/KX Specifications and Test Methods

Operating Temperature Range: -25 to +125°C (-25 to +85°C in case of the standard of UL)

No.	Item	Specifications	Test Method																								
1	Appearance and Dimensions	No marked defect on appearance form and dimensions are within specified range.	The capacitor should be visually inspected for evidence of defect. Dimensions should be measured with slide calipers.																								
2	Marking	To be easily legible	The capacitor should be visually inspected.																								
3	Capacitance	Within specified tolerance	The capacitance, dissipation factor and Q should be measured at 20°C with 1±0.1kHz (char. SL: 1±0.1MHz) and AC5V(r.m.s.) max.																								
4	Dissipation Factor (D.F.) Q	<table border="1"> <thead> <tr> <th>Char.</th> <th>Specifications</th> </tr> </thead> <tbody> <tr> <td>B, E</td> <td>D.F. ≤2.5%</td> </tr> <tr> <td>F</td> <td>D.F. ≤5.0%</td> </tr> <tr> <td>SL</td> <td>Q ≥ 400+20C*¹ (C < 30pF) Q ≥ 1000 (C ≥ 30pF)</td> </tr> </tbody> </table>		Char.	Specifications	B, E	D.F. ≤2.5%	F	D.F. ≤5.0%	SL	Q ≥ 400+20C* ¹ (C < 30pF) Q ≥ 1000 (C ≥ 30pF)																
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5	Insulation Resistance (I.R.)	10000MΩ min.	The insulation resistance should be measured with DC500±50V within 60±5 sec. of charging. The voltage should be applied to the capacitor through a resistor of 1MΩ.																								
6	Between Lead Wires	No failure	<p>The capacitor should not be damaged when test voltages of Table 1 are applied between the lead wires for 60 sec.</p> <p style="text-align: center;"><Table 1></p> <table border="1"> <thead> <tr> <th>Type</th> <th>Test Voltage</th> </tr> </thead> <tbody> <tr> <td>KY</td> <td>In case of lead spacing F=5mm AC2000V(r.m.s.) In case of lead spacing F=7.5mm AC2600V(r.m.s.)</td> </tr> <tr> <td>KH</td> <td>AC2600V(r.m.s.)</td> </tr> <tr> <td>KX</td> <td>AC4000V(r.m.s.)</td> </tr> </tbody> </table>	Type	Test Voltage	KY	In case of lead spacing F=5mm AC2000V(r.m.s.) In case of lead spacing F=7.5mm AC2600V(r.m.s.)	KH	AC2600V(r.m.s.)	KX	AC4000V(r.m.s.)																
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Dielectric Strength	Body Insulation	No failure	<p>First, the terminals of the capacitor should be connected together. Then, as shown in figure at right, a metal foil should be closely wrapped around the body of the capacitor to the distance of about 3 to 4mm from each terminal.</p>  <p>Then, the capacitor should be inserted into a container filled with metal balls of about 1mm diameter. Finally, AC voltage of Table 2 is applied for 60 sec. between the capacitor lead wires and metal balls.</p> <p style="text-align: center;"><Table 2></p> <table border="1"> <thead> <tr> <th>Type</th> <th>Test Voltage</th> </tr> </thead> <tbody> <tr> <td>KY</td> <td>AC2600V(r.m.s.)</td> </tr> <tr> <td>KH</td> <td>AC2600V(r.m.s.)</td> </tr> <tr> <td>KX</td> <td>AC4000V(r.m.s.)</td> </tr> </tbody> </table>	Type	Test Voltage	KY	AC2600V(r.m.s.)	KH	AC2600V(r.m.s.)	KX	AC4000V(r.m.s.)																
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8	Solderability of Leads	Lead wire should be soldered with uniform coating on the axial direction over 3/4 of the circumferential direction.	<p>The lead wire of a capacitor should be dipped into molten solder for 2±0.5 sec. The depth of immersion is up to about 1.5 to 2.0mm from the root of lead wires. Temp. of solder: Lead Free Solder (Sn-3Ag-0.5Cu) 245±5°C H63 Eutectic Solder 235±5°C</p>																								

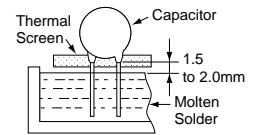
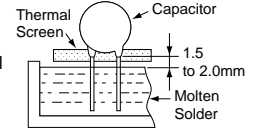
*1 "C" expresses nominal capacitance value (pF).

Continued on the following page. 

Safety Standard Certified Type KY/KH/KX Specifications and Test Methods

Continued from the preceding page.

No.	Item	Specifications	Test Method								
9	Soldering Effect (Non-Preheat)	Appearance	No marked defect								
		Capacitance Change	Within $\pm 10\%$								
		I.R.	1000M Ω min.								
		Dielectric Strength	Per Item 6								
10	Soldering Effect (On-Preheat)	Appearance	No marked defect								
		Capacitance Change	Within $\pm 10\%$								
		I.R.	1000M Ω min.								
		Dielectric Strength	Per Item 6								
11	Vibration Resistance	Appearance	No marked defect								
		Capacitance	Within the specified tolerance								
		D.F. Q	<table border="1"> <thead> <tr> <th>Char.</th> <th>Specifications</th> </tr> </thead> <tbody> <tr> <td>B, E</td> <td>D.F. $\leq 2.5\%$</td> </tr> <tr> <td>F</td> <td>D.F. $\leq 5.0\%$</td> </tr> <tr> <td>SL</td> <td> $Q \geq 400 + 20C^{*1}$ (C < 30pF) $Q \geq 1000$ (C ≥ 30pF) </td> </tr> </tbody> </table>	Char.	Specifications	B, E	D.F. $\leq 2.5\%$	F	D.F. $\leq 5.0\%$	SL	$Q \geq 400 + 20C^{*1}$ (C < 30pF) $Q \geq 1000$ (C ≥ 30 pF)
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12	Humidity (Under Steady State)	Appearance	No marked defect								
		Capacitance Change	<table border="1"> <thead> <tr> <th>Char.</th> <th>Capacitance Change</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>Within $\pm 10\%$</td> </tr> <tr> <td>E, F</td> <td>Within $\pm 15\%$</td> </tr> <tr> <td>SL</td> <td>Within $\pm 5\%$</td> </tr> </tbody> </table>	Char.	Capacitance Change	B	Within $\pm 10\%$	E, F	Within $\pm 15\%$	SL	Within $\pm 5\%$
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I.R.	3000M Ω min.										
Dielectric Strength	Per Item 6										
13	Humidity Loading	Appearance	No marked defect								
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I.R.	3000M Ω min.										
Dielectric Strength	Per Item 6										



*1 "C" expresses nominal capacitance value (pF).

*2 "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmospheric pressure: 86 to 106kPa

Continued on the following page.

