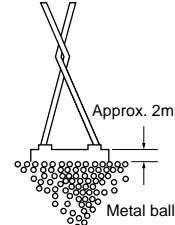
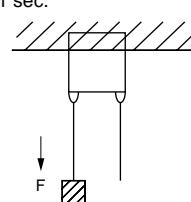


No.	Item		Specifications	Test Method												
1	Operating Temperature Range		-55 to +125°C	—												
2	Appearance		No defects or abnormalities	Visual inspection												
3	Dimension and Marking		See previous pages	Visual inspection, Vernier Caliper												
4	Dielectric Strength	Between Terminals	No defects or abnormalities	<p>The capacitor should not be damaged when voltage in Table is applied between the terminations for 1 to 5 sec. (Charge/Discharge current $\leq 50\text{mA}$)</p> <table border="1"> <thead> <tr> <th>Rated voltage</th> <th>Test voltage</th> </tr> </thead> <tbody> <tr> <td>DC250V</td> <td>200% of the rated voltage</td> </tr> <tr> <td>DC630V</td> <td>150% of the rated voltage</td> </tr> </tbody> </table>	Rated voltage	Test voltage	DC250V	200% of the rated voltage	DC630V	150% of the rated voltage						
Rated voltage	Test voltage															
DC250V	200% of the rated voltage															
DC630V	150% of the rated voltage															
Body Insulation	No defects or abnormalities	<p>The capacitor is placed in a container with metal balls of 1mm diameter so that each terminal, short-circuit, is kept approximately 2mm from the balls as shown in the figure, and 200% of the rated DC voltage is impressed for 1 to 5 sec. between capacitor terminals and metal balls.</p> <p>(Charge/Discharge current $\leq 50\text{mA}$)</p> 														
5	Insulation Resistance	Between Terminals	$C < 0.01\mu\text{F}$: $10,000\text{M}\Omega$ min. $C \geq 0.01\mu\text{F}$: $100\text{M}\Omega \cdot \mu\text{F}$ min. C : Nominal capacitance	<p>The insulation resistance should be measured with DC$500 \pm 50\text{V}$ (DC$250 \pm 25\text{V}$ in case of rated voltage : DC250V) at normal temperature and humidity and within 2 min. of charging.</p> <p>(Charge/Discharge current $\leq 50\text{mA}$)</p>												
6	Capacitance		Within the specified tolerance	The capacitance/D.F. should be measured at the frequency of $1 \pm 0.1\text{kHz}$ and a voltage of AC $1 \pm 0.2\text{V}$ (r.m.s.)												
7	Dissipation Factor (D.F.)		0.025 max.													
8	Capacitance Temperature Characteristics		Within $\pm 15\%$	<p>The capacitance change should be measured at each specified temperature stage.</p> <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>25 ± 2</td> </tr> <tr> <td>2</td> <td>-55 ± 3</td> </tr> <tr> <td>3</td> <td>25 ± 2</td> </tr> <tr> <td>4</td> <td>125 ± 3</td> </tr> <tr> <td>5</td> <td>25 ± 2</td> </tr> </tbody> </table> <p>• Pretreatment Perform a heat treatment at $150 + 0/-10^\circ\text{C}$ for 1 hr., and then let sit at room temperature for 24 ± 2 hrs.</p>	Step	Temperature (°C)	1	25 ± 2	2	-55 ± 3	3	25 ± 2	4	125 ± 3	5	25 ± 2
Step	Temperature (°C)															
1	25 ± 2															
2	-55 ± 3															
3	25 ± 2															
4	125 ± 3															
5	25 ± 2															
9	Terminal Strength	Tensile Strength	Termination not to be broken or loosened	<p>As in the figure, fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N and then keep the force applied for 10 ± 1 sec.</p> 												
		Bending Strength	Termination not to be broken or loosened	<p>Each lead wire should be subjected to a force of 2.5N and then bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3 sec.</p>												
10	Vibration Resistance	Appearance	No defects or abnormalities	The capacitor should be firmly soldered to the supporting lead wire and vibrated at a frequency range of 10 to 55Hz, 1.5mm in total amplitude, with about a 1 minute rate of vibration change from 10Hz to 55Hz and back to 10Hz. Apply for a total of 6 hrs., 2 hrs. each in 3 mutually perpendicular directions.												
		Capacitance	Within the specified tolerance													
		D.F.	0.025 max.													

Continued on the following page. 

Continued from the preceding page.

No.	Item	Specifications	Test Method
11	Solderability of Leads	Lead wire should be soldered with uniform coating on the axial direction over 3/4 of the circumferential direction.	The terminal of a capacitor is dipped into a solution of ethanol (JIS-K-8101) and rosin (JIS-K-5902) (25% rosin in weight proportion) and then into molten solder (JIS-Z-3282) for 2 ± 0.5 sec. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body. Temp. of solder : $245\pm5^\circ\text{C}$ Lead Free Solder (Sn-3.0Ag-0.5Cu) $235\pm5^\circ\text{C}$ H60A or H63A Eutectic Solder
12	Resistance to Soldering Heat	Appearance	No defects or abnormalities
		Capacitance Change	Within $\pm10\%$
		Dielectric Strength (Between Terminals)	No defects
13	Temperature and Immersion Cycle	Appearance	No defects or abnormalities
		Capacitance Change	Within $\pm12.5\%$
		D.F.	0.05 max.
		Insulation Resistance	$C<0.01\mu\text{F}$: $1,000\text{M}\Omega$ min. $C\geq0.01\mu\text{F}$: $10\text{M}\Omega \cdot \mu\text{F}$ min.
		Dielectric Strength (Between Terminals)	No defects or abnormalities
14	Humidity (Steady State)	Appearance	No defects or abnormalities
		Capacitance Change	Within $\pm15\%$
		D.F.	0.05 max.
		Insulation Resistance	$C<0.01\mu\text{F}$: $1,000\text{M}\Omega$ min. $C\geq0.01\mu\text{F}$: $10\text{M}\Omega \cdot \mu\text{F}$ min.
15	Humidity Load	Appearance	No defects or abnormalities
		Capacitance Change	Within $\pm15\%$
		D.F.	0.05 max.
		Insulation Resistance	$C<0.01\mu\text{F}$: $1,000\text{M}\Omega$ min. $C\geq0.01\mu\text{F}$: $10\text{M}\Omega \cdot \mu\text{F}$ min.
16	High Temperature Load	Appearance	No defects or abnormalities
		Capacitance Change	Within $\pm15\%$
		D.F.	0.05 max.
		Insulation Resistance	$C<0.01\mu\text{F}$: $1,000\text{M}\Omega$ min. $C\geq0.01\mu\text{F}$: $10\text{M}\Omega \cdot \mu\text{F}$ min.
17	Solvent Resistance	Appearance	No defects or abnormalities
		Marking	Legible