Mica Capacitor Common Specification Table 1/2

Ⓜ 有限会社松崎電機製作所

Item		Specification(JIS C 6439-1995) (Matsuzaki Electric Corporation)	Test Procedure (JIS C 5102)
Operating Temperature Range		Symbol Operating Temperature Range X -55 ~ +125°C Y -55 ~ +85°C Z -25 ~ +85°C	
Withstand Voltage	Between terminals	No abnormality	(According to JIS C 5102-7.1) Set test voltage to 200% of the rated voltage Set the application time to 2~5 seconds Set the current limit of charge and discharge to 50mA MAX
	Between terminals and between case or exterior		
Insulation Resistance	Between Terminals	Equal or above the value specified in Figure 1	(According to JIS C 5102-7.6) Set the measured voltage for rated voltage below or equal to 500V to 100V and for above 500V to 500V
	Between terminals and between case or exterior		
Capacitance		Within prescribed tolerance	(According to JIS C 5102-7.8) Set measured voltage equal or below 5Vrms Set measured frequency for 1000PF to 1MHz and above 1000PF to 1KHz
Dissipation Factor (tan δ)		Equal or below the value shown in Figure 2	
Temperature Coefficient (ppmv/°C) of Capacitance and Gap of Capacitance		Chara-cteristic / Temperature Coefficient / Gap of Capacitance B No Specification No Specification C -200~200 within ±(0.5%+0.1PF) D -100~100 within ±(0.3%+0.1PF) E -20~100 within ±(0.1%+0.1PF) F 0~70 within ±(00.5%+0.1PF)	(According to JIS C 5102-7.12)
Heat-resistant	Appearence	No noticable abnormality	(According to JIS C 5102-9.2) The test temperature is ±2°C the maximum operating temperature Test time is 16±1 hours
	Insulation Resistance (between terminals)	Equal or above the value specified in Figure 3	
	Capacitance Change	The greater value before testing of either ±5% or ±1PFm	
	Appearence	No noticable abnormality	(According to JIS C 5102-9.18) Clear water at temperature of 65°C
	Withstand Voltage (between terminals)	Equal or above the value specified in Figure 4	
	Insulation Resistance (between terminals)	Equal or below 150% of the prescribed value of Number 5	
	Capacitance Change	The greater value before testing of either ±3% or ±1PF	
Humidity Resistance (Steady State)	Appearence	No noticable abnormality	(According to JIS C 5102-9.5) Test temperature: 40±2°C Relative humidity: 90~95% Test time: 240 hours ± 8 hours
	Withstand Voltage (between terminals)	Fulfills Number 2	
	Insulation Resistance (between terminals)	Equal or above the value specified in Figure 4	
	Dissipation Factor	Equal or below 120% of the prescribed value of Number 5	
	Capacitance Change	The greater value before testing of either ±3% or ±1PF	

Figure 1 The relation of nominal capacitance and insulation resistance

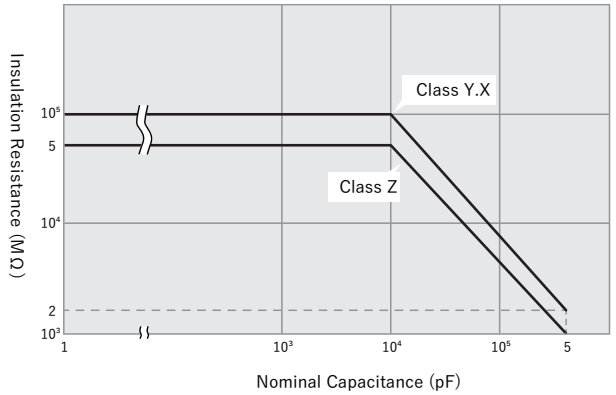


Figure 2 The relation of nominal capacitance and dissipation factor

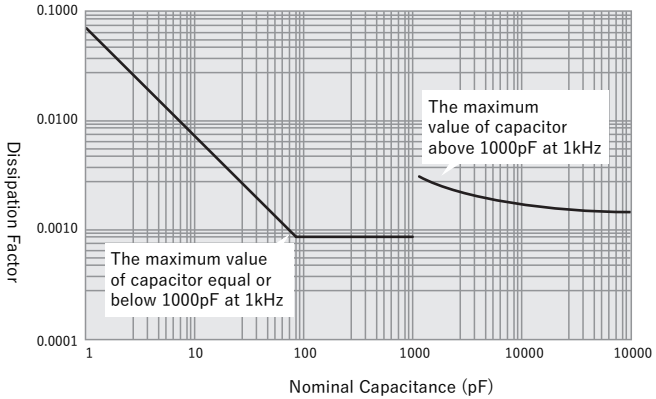
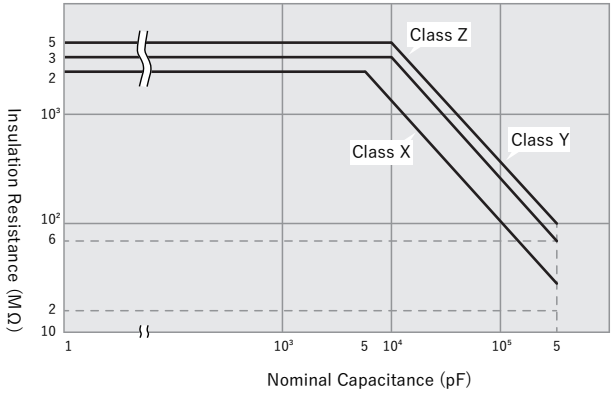


Figure 3 The relation of nominal capacitance and insulation resistance



Mica Capacitor Common Specification Table 2/2

Item		Specification(JIS C 6439 -1995) (Matsuzaki Electric Corporation)	Test Procedure (JIS C 5102)
Humidity Resistance (Steady State)	Appearence	No noticable abnormality	(According to JIS C 5102 - 9.5) Test temperature: 40 ± 2°C Relative humidity: 90 ~ 95% Test time: 240 hours ± 8 hours
	Withstand Voltage (between terminals)	Fulfills Number 2	
	Insulation Resistance (between terminals)	Equal or above the value specified in Figure 4	
	Dissipation Factor	Equal or below 120% of the prescribed value of Number 5	
	Capacitance Change	The greater value before testing of either ±3% or ±1PF	
Humidity Resistance (Temperature Humidity Cycle)	Withstand Voltage (between terminals)	No noticable abnormality	(According to JIS C 5102 - 9.6) Test method: Method 1
	Appearence	Fulfills Number 2	
	Insulation Resistance (between terminals)	Equal or above the value specified in Figure 4	
	Dissipation Factor	Equal or below 150% of the prescribed value of Number 5	
	Capacitance Change	The greater value before testing of either ±3% or ±1PF	
Humidity Load	Appearence	No noticable abnormality	(According to JIS C 5102 - 9.9) Test temperature: 40 ± 2°C Relative humidity: 90 ~ 95% Test time: 500 hours
	Withstand Voltage (between terminals)	Fulfills Number 2	
	Insulation Resistance (between terminals)	Equal or above the value specified in Figure 4	
	Dissipation Factor	Equal or below 200% of the prescribed value of Number 5	
	Capacitance Change	The greater value before testing of either the value below or ±1PF	
Humidity Load	Appearence	No noticable abnormality	(According to JIS C 5102 - 9.9) Test condition Symbol Test temperature (°C) Test time (h) Z 85 ± 3 1000 ± 12 Y 85 ± 3 2000 ± 12 X 125 ± 3 2000 ± 12
	Withstand Voltage (between terminals)	Fulfills Number 2	
	Insulation Resistance (between terminals)	Equal or above the value specified in Figure 4	
	Dissipation Factor	Equal or below 200% of the prescribed value of Number 5	
	Capacitance Change	The greater value before testing of either the value below or ±1PF Characteristic C : Change rate ±3% Characteristic D,E,F : Change rate ±5%	
Solderability		More than 95% of the circumference of the surface is covered with new solder at the point of immersion	(According to JIS C 5102 - 8.4) Test method: Method 1
Solder heat resistance	Appearence	No noticable abnormality	(According to JIS C 5102 - 8.5) Immersion condition : Condition D
	Withstand Voltage (between terminals)	Fulfills Number 2	
	Insulation Resistance (between terminals)	Equal or above the value specified in Figure 4	
	Dissipation Factor	Equal or below 150% of the prescribed value of Number 5	
	Capacitance Change	The greater value before testing of either ±0.5% or ±5F	

Figure 4 The relation of nominal capacitance and insulation resistance