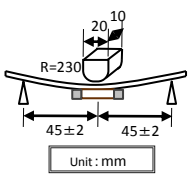
Performance and Test Method

■Performance and Test Methods

Item		Performance		Test Method and Conditions (In accordance with JIS C 5101-1)
		CG,UJ Characteristics	R, X	
Dissipation Factor		2.5% or less * Performance specifications are different for each product. Please check the individual specification sheet for the detail.		CG : 1MHz UJ, R, F : 1kHz Measurement voltage : 0.5~2Vrms
Withstanding Voltage		No insulation breakdown and no failure		Application time is 1~5seconds. CG: 300% of rated voltage R : 250% of rated voltage
Insulation Resistance		No less than 10,000MΩ or 500MΩ• μF, whichever is smaller.		Applied Voltage : Rated Voltage Applied Time : 1 minute
Adhesion Strength of Termination		No peeling-off or no such indication of terminations		Load Weight : 5N Holding Time : 10 seconds
Vibration Resistance	Visual	No remarkable damage		Vibration frequency: 10~55Hz Full amplitude: 1.5mm, 10~55~10Hz 1 min. XYZ direction 2hrs for each, Total 6hrs.
	Capacitance	Within specified tolerance		
	Dissipation Factor	Initial standard values must be satisfied.		
Resistance for Soldering Heat	Visual	No remarkable damage		Heat Treatment Temperature: 270±5℃ Immersion Time: 10±1 sec. Preheat: ①80~100℃ (1~2min) ②170~200℃ (1~2min) Immersion into solder should be carried out continuously after preheating.
	Capacitance	No more than 2.5% or 0.25pF, whichever is larger.	Within 7.5%	
	Q and Dissipation Factor	Initial standard values be satisfied.		
	Insulation Resistance	Initial standard values be satisfied.		
	Withstanding Voltage	Initial standard values be satisfied.		
Solderability		Termination surface should be covered with new solder to over 75%.		Temperature: 230±5℃ Immersion time: 2±1 sec.
Temp. Cycling	Visual	No remarkable damage		Normal Temp.→Min. Working Temp. →Normal Temp.→Max. Working Temp. 3 mins→ 30 mins → 3 mins → 30 mins Leave under these four levels of temperatures mentioned above in order as one cycle The cycle is repeated 5 times.
	Capacitance	No more than ±2.5% or ±0.25pF, whichever is larger.	Less than ±7.5%	
	Q and Dissipation Factor	Initial standard values be satisfied.		
	Insulation Resistance	Initial standard values be satisfied.		
	Withstanding Voltage	No damage or insulation breakdown.		
Humidity Load Test	Visual	No remarkable damage		Voltage Treatment Test Temp.: 40±2℃ Relative humidity: 90~95%RH Test Voltage: Rated Voltage Test Time: 500 hours
	Capacitance	No more than ±5% or ±0.5pF, whichever is larger.	Less than ±12.5%	
	Q and Dissipation Factor	Less than 5%	Less than 7.5%	
	Insulation Resistance	No less than 1,000MΩ or 50MΩ・μF, whichever is smaller.		
Life Test at High Temp. Load	Visual	No remarkable damage		Voltage Treatment Test Temp: Upper limit temp. ±3℃ Test Voltage: Rated Voltage × 200% DC Voltage Test Time: 1000 hours * Test conditions are different for each product. Please check the individual spec sheet for the detail.
	Capacitance	No more than ±3% or ±0.3pF, whichever is larger	Less than ±12.5%	
	Q and Dissipation Factor	Less than 4%	Less than 7.5%	
	Insulation Resistance	No less than 1,000MΩ or 50MΩ・μF, whichever is smaller.		
Flexion	Visual	No mechanical damage		Heat Treatment Flexion: 1mm Speed: 0.5mm/sec. Have a capacitance meter connected to both ends of sample during a test.
	Capacitance	No more than ±5% or ±0.5pF, whichever is larger.	Less than ±12.5%	



Note 1: Performance specifications are different for each product. Please check the individual specification sheet for the detail.
Note 2: Heat treatment is at 150+0/-10℃ for 1 hour, then leave in the room temperature for 48±4 hours.
Note 3: Voltage treatment is under the condition which is required by test condition for 1 hour, then leave in the room temperature for 48±4 hours.