

Test Sheet of Monolithic Ceramic Capacitor



GJM15(0402/1005) series [Temperature Compensating Type]

Typical Murata Global Part No	Size (inch/mm)	Temp. Chara.	Cap.Value	Cap.Tol.	Volt.
GJM1555C1HR20BB01 (MADE IN SINGAPORE)	0402/1005	C0G	0.2pF	+/-0.1pF	50V
GJM1555C1HR20BB01 (MADE IN JAPAN)	0402/1005	C0G	0.2pF	+/-0.1pF	50V

Data No.:QU-GJ-044
DATE: 2013.4.5

Murata Manufacturing Co., Ltd.

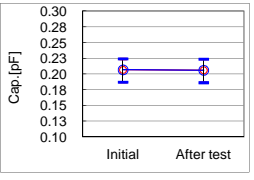
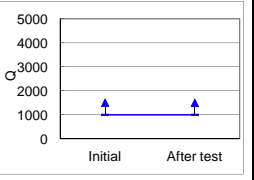
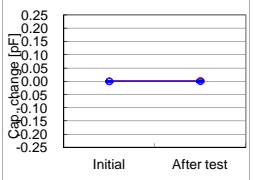
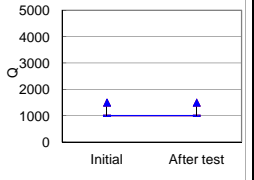
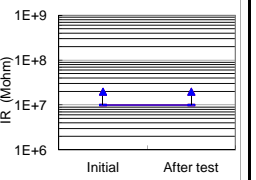
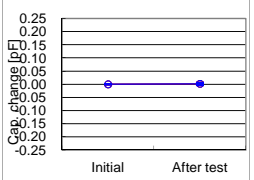
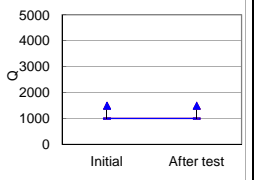
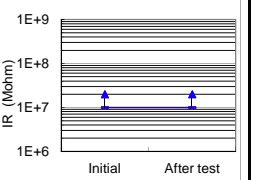
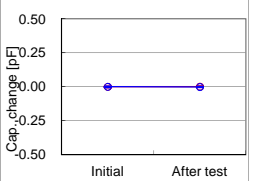
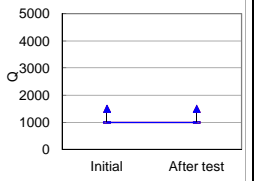
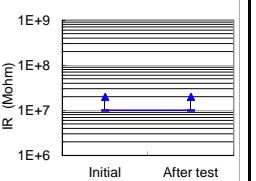
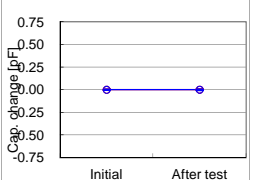
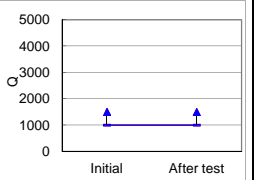
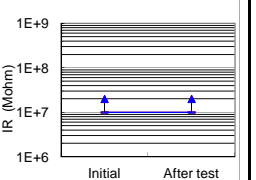
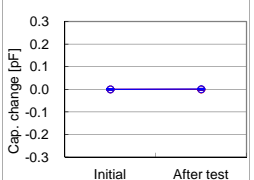
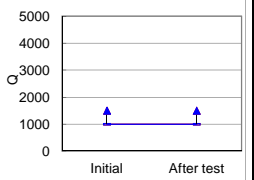
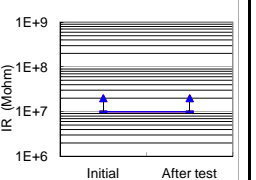
Operating Temperature Range / 使用温度範囲: -55 ~ +125°C

Tested Item/ 試験項目	Tested Condition/ 試験条件	Result/試験結果 (Rejection Number/Sample Number)	
1.Adhesive Strength of Termination / 固着性	Substrate/基板: Glass-epoxy Pressurization Power / 加圧力: 5N Keeping Time / 保持時間: 10±1s Solder Type / はんだ種類: Sn-3.0Ag-0.5Cu Pressuring Speed/加圧速度: 0.5 mm/sec	0/10	0/10
2.Vibration Resistance/ 耐振性	Oscillation Frequency/振動周波数: 10Hz to 55Hz to 10Hz for 1min. Total Amplitude/全振幅: 1.5 mm Time/時間: A period of 2 hours in each of 3 mutually perpendicular directions. (Total 6 hours)	0/10	0/10
3.Deflection / 耐基板曲げ性	Substrate/基板: Glass-epoxy (100mm x 40mm x 0.8mm) Deflection/たわみ量: 1mm Keeping Time/保持時間: 5±1s Pressure jig/加圧治具: R230mm	0/10	0/10
4.Solderability of Termination / はんだ付け性	Flux/フラックス: Ethanol solution of rosin 25(wt)% Solder/はんだ: Sn-3.0Ag-0.5Cu Solder Temperature/はんだ温度: 245±5°C Immersion Time/浸せき時間: 2s±0.5s Immersion Position/浸せき位置: Covering terminal electrode / 端子電極が隠れるところまで。 Preheat/試験前予熱: 80 to 120°C for 10-30 sec	0/10	0/10
5.Resistance to soldering Heat/ はんだ耐熱性	Solder/はんだ: Sn-3.0Ag-0.5Cu Solder Temperature/はんだ温度: 270±5°C Immersion Time/浸せき時間: 10s±0.5s Immersion Position/浸せき位置: Covering terminal electrode / 端子電極が隠れるところまで。 Preheating/試験前予熱: 120 to 150°C for 60 sec	0/10	0/10
6.Temperature Cycle/温度サイクル	1 Cycle condition/1サイクル条件 step 1: Min. Operating Temp.(+0°C,-3°C) , 30min±3min step 2: Ordinary Temp.,2min to 3 min step 3: Max. Operating Temp.(+3°C,-0°C) , 30min±3min step 4: Ordinary Temp.,2min to 3 min Cycle/回数: 5 cycles	0/10	0/10
7.Humidity (Steady State)/ 耐湿性	Temperature/温度: 40°C±2°C Humidity/湿度: 90%(RH) to 95%(RH) Time/時間: 500±12h	0/10	0/10
8.Humidity Load/ 耐湿負荷	Temperature/温度: 40°C±2°C Humidity/湿度: 90%(RH) to 95%(RH) Voltage/電圧: The Rated Voltage/定格電圧 Time/時間: 500±12h	0/10	0/10
9.High Temperature Load/ 高温負荷	Temperature/温度: Max. Operating Temp.±3°C Voltage/電圧: Apply 200% of the rated voltage / 定格電圧 x 200% Time/時間: 1000±12h	0/10	0/10

Note: These test condition and specification are for the typical item.

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○—	AVE.	■	MAX.	■	MIN.
○—	AVE.	■	MAX.	■	MIN.

Tested Item/ 試験項目	Confirmed Criteria/ 評価項目	Specification and Result / 規格値 および 試験結果				
1.Adhesive Strength of Termination / 固着性	Appearance/外観	No defects including no peeling of the termination. 端子電極のはく離及びその他異常はありません。	OK			
2.Vibration/ 耐振性	Appearance/外観	No defects / 著しい異常はありません。	OK			
	Capacitance / 静電容量	0.15 to 0.25pF				
	Q	404 (min.)				
3.Deflection/ 耐基板曲げ性	Appearance/外観	No defects / 著しい異常はありません。	OK			
	Capacitance Change/ 静電容量変化(pF)	±0.5pF (within)	OK			
4.Solderability / はんだ付け性	Wetting area/ はんだ付き面積	75% of the termination is to be soldered evenly and continuously. / 端子電極の3/4以上に切れ目なくはんだが付着しています。	OK			
5.Resistance to Soldering Heat/ はんだ耐熱性	Appearance/外観	No defects / 著しい異常はありません。	OK			
	Capacitance Change/ 静電容量変化(pF)	±0.25pF (within)				
	Q	404 (min.)				
	IR/絶縁抵抗(MΩ)	10000 (min.)				
	Dielectric Strength/ 耐電圧	No defects/異常ありません。	OK			
6.Temperature Cycle/ 温度サイクル	Appearance/外観	No defects / 著しい異常はありません。	OK			
	Capacitance Change/ 静電容量変化(pF)	±0.25pF (within)				
	Q	404 (min.)				
	IR/絶縁抵抗(MΩ)	10000 (min.)				
	Dielectric Strength/ 耐電圧	No defects/異常ありません。	OK			
7.Humidity (Steady State)/ 耐湿性	Appearance/外観	No defects / 著しい異常はありません。	OK			
	Capacitance Change/ 静電容量変化(pF)	±0.5pF (within)				
	Q	202 (min.)				
	IR/絶縁抵抗(MΩ)	10000 (min.)				
8.Humidity Load/ 耐湿負荷	Appearance/外観	No defects / 著しい異常はありません。	OK			
	Capacitance Change/ 静電容量変化(pF)	±0.75pF (within)				
	Q	101 (min.)				
	IR/絶縁抵抗(MΩ)	500 (min.)				
9.High Temperature Load/ 高温負荷	Appearance/外観	No defects / 著しい異常はありません。	OK			
	Capacitance Change/ 静電容量変化(pF)	±0.3pF (within)				
	Q	202 (min.)				
	IR/絶縁抵抗(MΩ)	1000 (min.)				