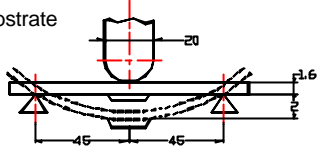


Reliability Test

SMD Multilayer Ceramic Chip Inductors

JMC Series

1-1.Mechanical Performances

No	Item	Specification	Test Method
1-1-1	Flexure Strength	The forces applied on the right conditions must not damage the terminal electrode and the ferrite.	Test device shall be soldered on the substrate Substrate Dimension: 100x40x1.6mm Deflection: 2.0mm Keeping Time: 30sec *For 100505, substrate dimension is 100x40x0.8mm 
1-1-2	Vibration		Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1min Amplitude: 1.5mm Time: 2hrs for each axis (X, Y & Z), total 6hrs
1-1-3	Resistance to Soldering Heat	Appearance: No damage	Pre-heating: 150 , 1min Solder Composition: Sn/Pb = 63/37 Solder Composition:Sn/Ag3.0/Cu0.5(Pb-Free) Solder Temperature: 260 ±5 Immersion Time: 10 ±1sec
1-1-4	Solder ability	The electrodes shall be at least 90% covered with new solder coating	Pre-heating: 150 , 1min Solder Composition: Sn/Pb = 63/37 Solder Temperature: 220 ±5 Solder composition:Sn/Ag3.0/Cu0.5(Pb-Free) Solder Temperature:245 ±5 (Pb-Free) Immersion Time: 4 ±1sec

1-2.Environmental Performances

No	Item	Specification	Test Method															
1-2-1	Temperature Cycle	Appearance: No damage Inductance: within ±0% of initial value Q change: within ±0% of initial value	One cycle: <table border="1" data-bbox="774 1332 1220 1467"> <thead> <tr> <th>Step</th> <th>Temperature ()</th> <th>Time (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25 ±3</td> <td>30</td> </tr> <tr> <td>2</td> <td>25 ±2</td> <td>3</td> </tr> <tr> <td>3</td> <td>85 ±3</td> <td>30</td> </tr> <tr> <td>4</td> <td>25 ±2</td> <td>3</td> </tr> </tbody> </table> Total: 100cycles Measured after exposure in the room condition for 24hrs	Step	Temperature ()	Time (min)	1	-25 ±3	30	2	25 ±2	3	3	85 ±3	30	4	25 ±2	3
Step	Temperature ()	Time (min)																
1	-25 ±3	30																
2	25 ±2	3																
3	85 ±3	30																
4	25 ±2	3																
1-2-2	Humidity Resistance		Temperature: 40 ±2 Relative Humidity: 90 ~ 95% Time: 1000hrs Measured after exposure in the room condition for 24hrs															
1-2-3	High Temperature Resistance		Temperature: 85 ±3 Relative Humidity: 20% Applied Current: Rated Current Time: 1000hrs. Measured after exposure in the room condition for 24hrs															
1-2-4	Low Temperature Resistance		Temperature: -25 ±3 Relative Humidity: 0% Time: 1000hrs Measured after exposure in the room condition for 24hrs															