

Reliability Test – NL322522/ NL453232 Series

SMD Wire Wound Ferrite Chip Inductor

- NL322522/ NL453232 Series

1-1.Mechanical Performances

No	Item	Specification	Test Method
1-1-1	Vibration	Appearance: No damage Inductance: within $\pm 0\%$ of initial value Q change: within $\pm 0\%$ of initial value	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
1-1-2	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: 230 ± Immersion Time: 4 ± sec

1-2.Environmental Performances

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