

Reliability Test – NL252018 Series

SMD Open Type Wire Wound Ferrite Chip Inductors

- NL252018 Series

1-1.Mechanical Performances

No	Item	Specification	Test Method
1-1-1	Resistance To Soldering Heat	Appearance: No Damage	1、 Pre-Heating: 150 , 1min. 2、 Solder Composition: Sn/Pb = 63/37. 3、 Solder Temperature: 260 ±5 . 4、 Immersion Time: 10 ±1sec.
1-1-2	Solder ability	The Electrodes Shall Be At Least 90% Covered With New Solder Coating	1、 Pre-Heating: 150 , 1min. 2、 Solder Composition: Sn/Pb = 63/37. 3、 Solder Temperature: 230 ±5 . 4、 Immersion Time: 4 ±1sec.
1-1-3	Component Adhesion (Push Test)	1 Lbs. For LS0603 2 Lbs. For NL201614 4 Lbs. For The Rest	The Device Should Be Reflow Soldered (230 ±5 For 10 Seconds) To A Tinned Copper Substrate. A Force Gauge Should Be Applied To The Side Of The Component. The Device Must Withstand A Minimum Force Of 1 Or 2 Or 4 Pounds Without A Failure Of The Termination Attached To Component.

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 ±80% 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> Total: 5 cycles Measured After Exposure In The Room Condition For 1Hrs	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: 100Hrs Measured After Exposure In The Room Condition For 1Hrs															
1-2-3	High Temperature Resistance		Temperature: 85 ± Time: 50Hrs Measured After Exposure In The Room Condition For 1Hrs															
1-2-4	Low Temperature Resistance		Temperature: -25 ± Time: 50Hrs Measured After Exposure In The Room Condition For 1Hrs															
1-2-5	High Temperature Load Life		Temperature: 85 ± Load: Allowed DC Current Time: 1000Hrs															
1-2-6	Humidity Load Life	There Should Be No Evidence Of Short Or Open Circle	Temperature: 40 ± Relative Humidity: 90 ~ 95% Load: Allowed DC Current Time: 1000Hrs															