



KING CORE ELECTRONICS INC.

Tel: 886-3-4698855 Fax: 886-3-4691395

Web Site: <http://www.kingcore.com.tw>

e-mail: kc@mail.kingcore.com.tw

RELIABILITY TEST – HLC SERIES

1-1 Mechanical Performance

No	Item	Specification	Test Method
1-1-1	Vibration	Appearance: No damage L change: within±10% Q change: within±30%	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	Resistance to Soldering Heat	Appearance: No damage	Pre-heating: 150°C, 1min Solder Composition: Sn/Pb = 100% Sn Solder Temperature: 260±5°C Immersion Time: 10±1sec
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating	Pre-heating: 150°C, 1min Solder Composition: Sn/Pb = 100% Sn Solder Temperature: 230±5°C Immersion Time: 4±1sec

1-2 Environmental Performance

No	Item	Specification	Test Method															
1-2-1	Temperature Cycle	Appearance: No damage L change: within±10% Q change: within±30%	One cycle: <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</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 This test procedure was according to JESD22-A103-A	Step	Temperature (°C)	Time (min)	1	-25±3	30	2	25±2	3	3	85±3	30	4	25±2	3
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1	-25±3	30																
2	25±2	3																
3	85±3	30																
4	25±2	3																
1-2-2	Humidity Resistance		Temperature: 40±2°C Relative Humidity: 90 ~ 95% Time: 1000hrs Measured after exposure in the room condition for 24hrs This test procedure was according to MIL-STD-202F method 103B															
1-2-3	High Temperature		Temperature: 85±3°C Relative Humidity: 20% Applied Current: Rated Current Time: 1000hrs Measured after exposure in the room condition for 24hrs This test procedure was according to MIL-STD-883D method 1010.7															
1-2-4	Low Temperature Resistance		Temperature: -25±3°C Relative Humidity: 0% Time: 1000hrs Measured after exposure in the room condition for 24hrs															

1. Operating Temperature Range: -25°C to +85°C

2. Storage Temperature Range: -40°C to +85°C (For products in unopened tape package 0°C to +40°C)

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.