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| No. | Test Item                                       | Testing conditions   | Conditions of acceptability  | Number of samples | Number of failures |
|-----|---|--|--|-------------------|--------------------|
| 1   | Heat cycle test                                 | (1) Pre-process<br>Step1 Humidification processing<br>(85°C, 85%, 168H)<br>Step2 Reflow soldering<br>(Peak temperature 245°C, 2times)<br>(2) -40°C ~ 125°C 30minutes each<br>(3) 800cycles                         | (1) No degradation of electric characteristics after test.<br>(2) No crack at solder joint.  | 5                 | 0                  |
| 2   | High temperature/<br>High humidity<br>bias test | (1) Pre-process<br>Step1 Humidification processing<br>(85°C, 85%, 168H)<br>Step2 Reflow soldering<br>(Peak temperature 245°C, 2times)<br>(2) Ta=85°C, RH=85%<br>(3) At rated input<br>(4) Load 0%<br>(5) 1000hours | (1) No degradation of electric characteristics after test.   | 3                 | 0                  |
| 3   | Vibration test                                  | (1) f=10~55Hz, 98.0m/s <sup>2</sup> (10G)<br>(2) 3minutes period<br>(3) 60minutes each X, Y and Z axis   | (1) No degradation of electric characteristics after test.<br>(2) No crack at solder joint.<br>(3) No mechanical damage of appearance. | 3                 | 0                  |
| 4   | Impact test                                     | (1) 490.3m/s <sup>2</sup> (55G), 11ms<br>(2) Once each X, Y and Z axis   | (1) No degradation of electric characteristics after test.<br>(2) No crack at solder joint.<br>(3) No thermal damage of appearance.    | 3                 | 0                  |
| 5   | Soldering heat test                             | (1) Soldering iron 340~360°C,<br>7.5 seconds<br>(2) Mounting board : t=1.6mm / FR4   | (1) No crack at solder joint.<br>(2) No marked damage of appearance.   | 1                 | 0                  |
| 6   | Pin solderability test                          | (1) Pre-process<br>Step1 Humidifying processing<br>(100°C, 100%, 1H)<br>Step2 Dip into flux<br>(2) Dip soldering 230~240°C, 2sec   | (1) Over 95% of dipped part is covered with solder.  | 1                 | 0                  |
| 7   | Pin strength test                               | (1) Weight : 250g<br>(2) Bending angle : 90 deg., total 180 deg.<br>(3) 1 cycle  | (1) No crack at solder joint.<br>(2) No mechanical damage of appearance.   | 1                 | 0                  |
| 8   | Static electricity<br>immunity test             | (1) Applied voltage ±8kV<br>(2) At rated input and load  | (1) No protection circuit fail.<br>(2) No output voltage drop due to control circuit fail.<br>(3) No any other function fail.          | 4                 | 0                  |