

Reliability and Test Condition

| Item | Performance | Test Condition |
|---------------------------------------|---|--|
| High Temperature Exposure Test | Electric specifications should be satisfied | Temperature: 125 ± 2°C. Duration: 1000 ± 12hrs. Measured at room temperature after placing for 2 to 3hrs. (MIL-PRF-27) |
| Low Temperature Life Test | | Temperature:-40 ± 2°C. Duration: 500 ± 12hrs. Measured at room temperature after placing for 2 to 3hrs. |
| Biased Humidity Test | | Humidity: 85 ± 3%RH. Temperature: 85 ± 2°C. Duration: 1000 ± 12hrs. Measured at room temperature after placing for 2 to 3hrs (AEC-Q200-REV D) |
| Thermal Shock Test | | Condition for 1 cycle Step1:-40+0 / -2°C 15±1 min. Step2: Room temperature within ≤0.2 min. Step3: +125+2 / -0°C 15±1min. Number of cycles: 300 Measured at room temperature after placing for 2 to 3 hrs. (AEC-Q200-REV D) |
| Vibration Test | | Frequency: 10-2000-10Hz for 20 min. Amplitude: Parts mounted within 2" from any secure point. Directions and times: X, Y, Z directions for 20 min. This cycle shall be performed 12 times in each of three mutually perpendicular directions (Total 12hrs). (MIL-STD-202 Method 204 D Test condition B) |



| Item | Performance | Test Condition |
|--------------------|---|---|
| Reflow Test | Electric specifications should be satisfied | Pre-heat : 150 ± 5°C Duration : 5 minutes Temperature : 260 ± 5°C, 20 ~ 40 sec (IPC/JEDEC J-STD-020E) |
| Solder Test | Terminals should be covered by over 95% solder on visual inspection | After dip into flux, dip into solder 235 ± 5°C, 4 ± 1sec Flux , solder for lead free (ANSI /J-STD-002D Method B) |

