Reliability Performance

Reliability Experiment For Electrical

Test Item	Accept Criteria	Test Conditions	Standard Source
Humidity Test	1. Change From an initial value L: within ±5% 2. no visible damage	+40℃±2℃, humidity of 90%±5% (Total 96 hours)	MIL-STD-202G Method 103B Test Condition B
High Temperature Test	1. Change From an initial value L: within ±5% 2. no visible damage	1. Temperature : +125℃±2℃ 2. Test time : 48±2 hrs	IEC 68-2 Test Condition B
Low Temperature Test	1. Change From an initial value L: within ±5% 2. no visible damage	1. Temperature : -25℃±2℃ 2. Test time : 48±2 hrs	IEC 68-2 Test Condition A
Thermal shock	1. Change From an initial value L: within ±5% 2. no visible damage	+125℃±5℃ (30 minutes) ~ -55±5℃ (30 minutes), temperature switch time : 5 minutes (Total 50 cycles) Wind speede 10m/sec.	MIL-STD-202G Method 107G Test Condition A-2
Life Test	1. Change From an initial value L: within ±5% 2. no visible damage	+70℃±5℃ (250 Hours)	Reference MIL-STD-202G Method 108A Test Condition B

Reliability Experiment For Physical

Test Item	Accept Criteria	Test Conditions	Standard Source
Vibration Test	1. Change From an initial value L: within ±5% 2. no visible damage	Frequency : 10-55-10 HZ, Amplitude : 1.5mm, Direction : X, Y, Z axes, each axis 2 houre (Total 6 hours)	MIL-STD-202G Method 201A
Solder Heat Resistance Test	1. no visible damage	IR/convection reflow : Peak Temp 255℃~ 260℃ for 3~5 sec. in air, Through 2 Cycle. Temperature Ramp : +1 ~4℃/sec.; Above 217℃, must keep 90 s -120 s.	Reference MIL-STD-202G Method 210F Test Condition K (Reflow)
Solder Ability Test	1. Lead must have 95% above coverage	Soak in 245℃ solder pot of 3 ~5 Sec.	Reference J-STD-002D

TYPICAL RoHS REFLOW PROFILE