



TUNS1200F series Reliability test results

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OS DESIGN DEPT.

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No.	Test Item	Testing conditions	Conditions of acceptability	Number of samples	Number of failures
1	Heat cycle test	(1) -40° C ~ 125° C 30minutes each (2) 800cycles	(1)No degradation of electric characteristics after test. (2)No crack at solder joint.	5	0
2	High temperature/ High humidity bias test	(1) Ta=85°C, RH=85% (2) At rated input (3) Load 0% (4) 1000hours	(1)No degradation of electric characteristics after test.	3	0
3	Vibration test	(1) f=10~55Hz, 49.0m/s <sup>2</sup> (5G) (2) 3minutes period (3) 60minutes each X, Y and Z axis	(1)No degradation of electric characteristics after test. (2)No crack at solder joint. (3)No mechanical damage of appearance.	3	0
4	Impact test	(1) 196.1m/s <sup>2</sup> (20G), 11ms (2) Once each X, Y and Z axis	(1)No degradation of electric characteristics after test. (2)No crack at solder joint. (3)No thermal damage of appearance.	3	0
5	Soldering heat test	(1) Soldering iron 260°C, 15 seconds (2) Mounting board : t=1.6mm / FR4	(1)No crack at solder joint. (2)No marked damage of appearance.	1	0
6	Soldering test	(1) Pre-process Vapor again(100°C/100%),1H Flux treatment (2) Soldering 235°C±5°C,2seconds	(1)Over 95% of dipped part is covered with solder.	1	0
7	Pin strength test	(1) Weight φ 1pin : 2.0kg φ 2pin : 4.0kg (2) Bending angle : 90 deg., total 180 deg. (3) 1 cycle	(1)No degradation of electric characteristics after test. (2)No degradation of terminal	1	0
8	Static electricity immunity test	(1) At rated input and load (2) Amient temp. 25±10°C (3) Contact Dischaege : Level 4 (8kV) (4) Air Dischaege : Level 3 (8kV)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure.	1	0