



TUNS500F series Reliability Test result

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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) 600cycles	(1)No degradation of electric characteristics after test.	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) $f=10\sim55\text{Hz}$, 49.0m/s^2 (5G) (2) 3minutes period (3) 1hour each X,Y and Z axis	(1)No degradation of electric characteristics after test. (2)No crack at solder joint. (3)No marked damage of appearance.	3	0
4	Impact test	(1) 196.1m/s^2 (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 marked damage of appearance.	3	0
5	Soldering heat test	(1) 260°C,15seconds (2) Mounting board : t=1.6mm / FR-4	(1)No crack at solder joint. (2)No marked damage of appearance.	1	0
6	Soldering test	(1) Pre-process Vapor agein(100°C/100%),1H Flux treatment (2) Soldering 235°C \pm 5°C,2seconds	(1)Over 95% of dipped part is covered with solder.	1	0
7	Pin strength test immunity test	(1) Weight ϕ 1 pin : 2kg ϕ 2 pin : 4kg (2) Bending angle:90 deg., total 180 deg. (3) 1 cycle	(1)No degration of electric characteristics after test. (2)No broken or bent pin.	5	0
8	Static electricity immunity test	(1) Applied voltage \pm 8kV (2) At rated input and load	(1)No protection circuit failure. (2)No output voltage drop with control circuit ailure. (3)No any other function ailure.	1	0