



TUHS15F series Reliability Test result

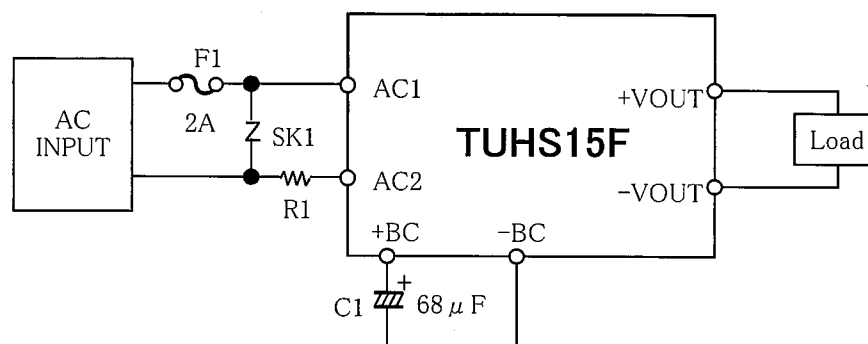
September 14, 2017
CS Design DEPT.

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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.	5	0
3	Vibration test	(1) $f=10\sim55\text{Hz}$, 49.0m/s^2 (5.0G) (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 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) Soldering iron 260°C, 15 seconds (2) Mounting board : $t\leq 1.6\text{mm}$ / FR4	(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 $235^\circ\text{C}\pm 5^\circ\text{C}$,2seconds	(1)Over 95% of dipped part is covered with solder.	5	0
7	Pin strength test	(1) Weight 2kg (2) Bending angle:90 deg., total 180 deg (3) 1 cycle	(1)No degradation of electric characteristics after test. (2)No broken or bent pin.	1	0
8	Static electricity immunity test	(1) Applied voltage $\pm 8\text{kV}$ (2) At rated input and load (3) Testing circuitry Fig.1	(1)No protection circuit fail. (2)No output voltage drop due to control circuit fail. (3)No any other function fail.	1	0

○ Testing circuitry



F1: SLT250V2A (Nippon Seisen)

R1: CW3CJ (KOA)

SK1: TND10V-511K (NIPPON CHEMI-CON)

2A

10 Ω

Fig.1 Testing circuitry