



GHA500F series Reliability Test result

September 29, 2015
Design engineering dep.

Approved : Kenji Shiho
Kenji Shiho

Prepared : Tomoyuki Sakuma
Tomoyuki Sakuma

No.	Test Item	Testing conditions	Conditions of acceptability	Number of samples	Number of failures
1	Heat cycle test	(1) $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$ 30minutes each (2) 1000cycles	(1)No degradation of electric characteristics after test.	3	0
2	High temperature/ High humidity bias test	(1) $T_a=85^{\circ}\text{C}$, RH=85% (2) At rated input (3) Load 0% (4) 500hours	(1)No degradation of electric characteristics after test.	1	0
3	Vibration test	(1) $f=10 \sim 150\text{Hz}$, 29.4m/s^2 (3G) (2) 3minutes period (3) 1hour 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) 294.2m/s^2 (30G), 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	Static electricity immunity test	(1) Applied voltage $\pm 8\text{kV}$ (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