



PDA50F series Reliability test results

Dec 14, 2023
New Product Development Dept.1

Approved : Tetsukazu Okamoto

Prepared : Tomoharu Konishi

No.	Test Item	Testing conditions	Conditions of acceptability	Number of samples	Number of failures
1	Heat cycle test	(1) -40°C ~ 125°C 30 minutes each (2) 800 cycles	(1)No degradation of electric characteristics after test. (2)No crack at solder joint.	1	0
2	High temperature/ High humidity bias test	(1) Ta=85°C, RH=85% (2) At rated input (3) Load 0% (4) 1000 hours	(1)No degradation of electric characteristics after test.	1	0
3	Vibration test	(1) f=10~150Hz, 29.4m/s ² (3G) (2) 3 minutes period (3) 60 minutes along 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) 294m/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 thermal damage of appearance.	3	0
5	Electrostatic discharge immunity test	(1) Ambient temperture 25±10°C (2) At rated input and load (3) Contact discharge : Level 4 (8kV) (4) Air discharge : Level 4 (15kV) (5) Applied to Input, Output, FG	(1)No protection circuit fail. (2)No output voltage drop with control circuit fail. (3)No function fail.	1	0