



DHS200A Reliability Test results

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NS 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.	9	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.	6	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.	4	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.	4	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±5°C,2seconds	(1)Over 95% of dipped part is covered with solder.	1	0
7	Pin strength test immunity test	(1) Weight $\phi 1$ pin : 2kg $\phi 2$ 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 $\pm 8\text{kV}$ (2) At rated input and load	(1)No protection circuit fail. (2)No output voltage drop with control circuit fail. (3)No any other function fail.	2	0