Reliability Report 1SC2060P2

Scope

The goal of this document is to explain reliability tests done on 1SC2060P2 family. Following drivers are covered by this family:

- 1SC2060P2A0-17

Serial Environmental Load

Serial stress: all the tests in the table below are done on the same samples

Test Name	Test Settings	Results
Vibration	IEC 60068-2-6:2007-12: Frequency range: 5Hz to 200Hz	Pass
(sinusoidal)	Cross-over frequency: 8.4Hz	
	Displacement amplitude below cross-over frequency: ±3.5mm	
	Acceleration amplitude above cross-over frequency: 1g	
	Sweep rate: 1.0 Okt/min	
	Test duration per axis: 20 sweeps (X, Y and Z)	
	DUT not powered	
Shock	IEC 60068-2-27:2008-02: Pulse shape: Half-sine	Pass
	Peak acceleration: 15g	
	Corresponding duration of the nominal pulse: 6ms	
	Number of shocks in each of the six directions: 100	
	Axis: X, Y and Z (pos. and neg.)	
	DUT not powered	
Cold	IEC 60068-2-1:2007-03: Test: Ae	Pass
	Temperature: -40°C	
	Duration: 96h	
	DUT powered	
Dry heat	IEC 60068-2-2:2007-07: Test:Be	Pass
	Temperature: 85°C	
	Duration: 96h	
	DUT powered	
Change of	IEC 60068-2-14:2009-01: Test: Nb	Pass
temperature	Cycles: 2	
	Start temperature: 20°C	
	Low temperature: -40°C	
	High temperature: 85°C	
	Rate of change: 10K/min	
	Exposure time at lower/upper temperature: 30min	
	DUT powered	
Damp heat	IEC 60068-2-78:2012-10: Temperature: 40°C	Pass
	Relative humidity: 93%	
	Duration of test: 96h	
	DUT not powered	