R5439K Series Reliability Test Report

305439KAU-Ver.Ca

FUNCTION : Li-ion Polymer Battery Protection

PACKAGE : DFN(PLP)-2020-8 ··· Au plate, Halogen free resin

No.	TEST ITEM	TEST CONDITION	(*)PRE- CONDITION	TIME	r/n
1	High Temp. Operating Life	Ta=125°C VDD=Vopt max. Static	No	1000h	0/32
2	High Temp. Storage	Ta=150°C	No	1000h	0/22
3	Temp. Cycle	Ta=-65 to 150°C (30-30min)	1)+2)	200cycles	0/22
4	USPCBT	Ta=125°C RH=85% 2X105Pa VDD=Vopt max. Static	1)+2)	100h	0/22
5	Resistance To Soldering Heat	IR Reflow	1	3times	0/44
6	ESD(1)	HBM C=100pF R=1.5k ohm ±2.0kV	No	3times	0/3
7	ESD(2)	CDM ±1.0kV	No	Once	0/3
8	Latch-up	Pulse Current Injecting Method ±100mA	No	Once	0/6

Criteria: The electrical characteristics prescribed in the individual specifications shall be satisfied.

*) Pre-Condition

(J-STD-020)

The test shall be performed this pre-condition before testing.

①Ta=85°C, RH=85%, storage=168h

②IR Reflow soldering heat stress (3times)

[Moisture Sensitivity Level]

MSL Level = 1

Conclusio: The reliability result was good.