

R3117N(-AE) Series Reliability Test Report

303117NAE-Ver.Ba

FUNCTION : Voltage Detectors (Reset ICs)

PACKAGE : SOT-23-5

…Tin plate (Sn(Matte-Tin)), Halogen free resin

No.	TEST ITEM	TEST CONDITION	(*)PRE-CONDITION	TIME	r /n
1	High Temp. Operating Life	Ta=125°C VDD=Vo _{opt} max. Static	No	2000h	0/32
2	Temp. Humidity Bias	Ta=85°C RH=85% VDD=Vo _{opt} max. Static	①+②	2000h	0/22
3	High Temp. Storage	Ta=150°C	No	2000h	0/22
4	Low Temp. Storage	Ta=-65°C	No	1000h	0/22
5	Temp. Humidity	Ta=85°C RH=85%	①+②	2000h	0/22
6	Temp. Cycle	Ta=-65 to 150°C(30-30min)	①+②	200cycles	0/11
7	HAST	Ta=125°C RH=85% VDD=Vo _{opt} max. Static	①+②	200h	0/11
8	UHAST	Ta=125°C RH85%	①+②	200h	0/11
9	Resistance To Soldering Heat(1)	IR Reflow	①	3times	0/77
10	Resistance To Soldering Heat(2)	Ta=350°C (Soldering iron)	①	5s	0/11
11	Solderability by Solder Dip Method(1)	Ta=235°C (Solder: Sn-37Pb)	③	5s	0/11
12	Solderability by Solder Dip Method(2)	Ta=245°C (Solder: Sn-3.0Ag-0.5Cu)	③	5s	0/11
13	Solderability by Wetting Balance Method(1)	Ta=235°C (Solder: Sn-37Pb)	③	Zero cross Time 3s	0/5
14	Solderability by Wetting Balance Method(2)	Ta=245°C (Solder: Sn-3.0Ag-0.5Cu)	③	Zero cross Time 3s	0/5
15	ESD-MM	C=200pF R=0 ohm ±200V	No	5times	0/11
16	ESD-HBM	C=100pF R=1.5k ohm ±2.0kV	No	3times	0/11
17	ESD-CDM	±1.0kV	No	Once	0/11
18	LU-I	Pules Current Injecting Method ±100mA	No	Once	0/11

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.

- ① Ta=85°C, RH=85%, storage=168h
- ② IR Reflow soldering heat stress (3times)
- ③ In Steam, storage=4h

[Moisture Sensitivity Level]

MSL Level = 1

Conclusion: The reliability result was good.