RT5C348A/B Reliability Test Report

30T5C348A0-Ver.A

FUNCTION : Real Time Clock ICs
PACKAGE : TSSOP-10G Lead free

No.	TEST ITEM	TEST CONDITION	(*)PRE-CONDITION	TIME	r/n
1	High Temp. Operating Life	Ta=125°C VDD=Vopt max. Dynamic	Non	1000h	0/32
2	Temp. Humidity Bias	Ta=85°C RH=85% VDD=Vopt max. Static	(1)+(2)	1000h	0/22
3	High Temp. Storage	Ta=125°C	Non	1000h	0/22
4	Low Temp. Storage	Ta=-55°C	Non	1000h	0/22
5	Temp. Humidity	Ta=85°C RH=85%	(1)+(2)	1000h	0/22
6	Temp. Cycle	Ta=-55 to 125°C(30-5-30min)	(1)+(2)	100cycles	0/11
7	Thermal Shock	Ta=-55 to 125°C(5min-10s-5min)	(1)+(2)	100cycles	0/11
8	USPCBT	Ta=125°C RH=85% 2X10^{5}Pa VDD=Vopt max. Static	(1)+(2)	100h	0/11
9	USPCT	Ta=125°C RH=85% 2X10^{5}Pa	(1)+(2)	100h	0/11
10	Resistance To Soldering Heat(1)	IR Reflow (See Fig.1)	(1)	3times	0/88
11	Resistance To Soldering Heat(2)	Ta=350°C(only terminal)	(1)	5s	0/11
12	Solderability by Reflow Method	Ta=215°C(Solder: Sn-37Pb)	(3)	5s	0/11
13	Solderability by Solder Dip Method(2)	Ta=245°C(Solder: Sn-3.0Ag-0.5Cu)	(3)	5s	0/11
14	Solderability by Wetting Balance Method(1)	Ta=235°C(Solder: Sn-37Pb)	(3)	Zero cross Time 3s	0/5
15	Solderability by Wetting Balance Method(2)	Ta=245°C(Solder: Sn-3.0Ag-0.5Cu)	(3)	Zero cross Time 3s	0/5
16	ESD(1)	C=200pF R=0 ohm ±200V	Non	5times	0/11
17	ESD(2)	C=100pF R=1.5k ohm ±3.0kV	Non	3times	0/11
18	Latch-up	Pulse Current Injecting Method ±200mA	Non	Once	0/11

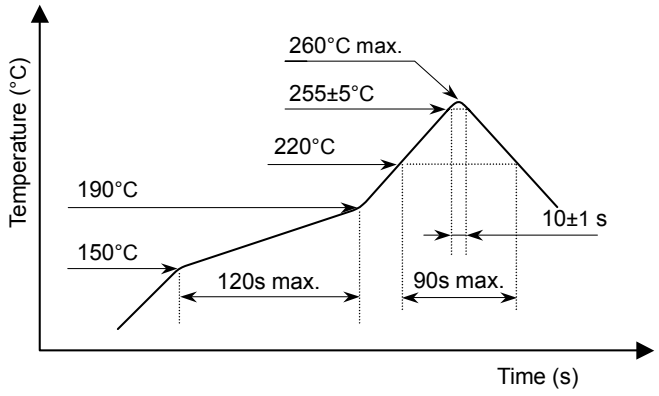
Criteria : The electrical characteristics prescribed in the individual specifications shall be satisfied.

*)Pre-Condition
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 (J-STD-020)

HEATING TREATMENT CONDITION
OF INFRARED-RAY REFLOW



Conclusion : We have good results of reliability test.