RELIABILITY TEST DATA

Product name : S-8358NxxBD-xxxTx
Package type : 6-Pin SNB(B)

No.	Test item	Test Condition	Test Time	r/n
1	High Temperature Operation	Ta=125 °C V_{OUT} = $V_{OUT(s)}$×0.6	1000 h	0/22
2	High Temperature Bias	Ta=125 °C V_{OUT} =Vabs max.×0.9	1000 h	0/22
3	#1 Temperature Humidity Bias	Ta=85 °C RH=85 % V_{OUT} =Vabs max.×0.9	1000 h	0/22
4	#1 Un-saturated Pressure Cooker Bias	Ta=125 °C RH=85 % P=2×10^5 Pa V_{OUT} =Vabs max.×0.9	100 h	0/22
5	High Temperature Storage	Tstg max.=150 °C	1000 h	0/22
6	Low Temperature Storage	Tstg min.=−65 °C	1000 h	0/22
7	#1 Temperature Cycle (Gas phase)	Tstg max.=150 °C , Tstg min.=−65 °C (30 min each)	200 cycles	0/22
8	#1 Thermal Shock (Liquid phase)	Tstg max.=150 °C , Tstg min.=−65 °C (5 min each)	100 cycles	0/22
9	#1 Resistance to soldering heat - 1 (reflow)	T=260 °C ,10 s	3 times	0/22
10	Solder Joint Reliability (Temperature Cycle + shear test)	Tstg max.=125 °C , Tstg min.=−40 °C (30 min each) Solder material ; Sn-3.0Ag-0.5Cu criteria ;After temperature cycle test, keep strength for shear stress more than the 50 % of initial mean value.	2000 cycles	0/5
11	ESD - 1 (Human Body Model)	V=±2000 V C=100 pF R=1.5 kΩ Ref. To V_{OUT} / Vss (5units for each direction)	5 pulses	0/20
12	ESD - 2 (Machine Model)	V=±200 V C=200 pF R=0 Ω Ref. To V_{OUT} / Vss (5units for each direction)	3 pulses	0/20
13	Latch Up	±100 mA (V_{CLAMP} = Vopr max.) 10 ms pulse V_{OUT} =Vopr max.	1 pulse	0/5

Remark : Vabs max. = Absolute maximum voltage , Vopr max. =Maximum operation voltage
Vopr min. =Minimum operation voltage
: Each test designated # is performed after Pre-Treatment finished.
Pre-Treatment consists of High Temperature Storage ,Temperature Humidity Storage and Soldering Heat. (See the table below.)

Pre Treatment (#1)		
High Temp. Storage	Temperature Humidity Storage	Soldering Heat
Ta=125 °C t=24 h	Ta=85 °C RH=85 % t=168 h	Infrared Reflow 3 times T=260 °C t=10 s