

Reliability test requirements

Reliability test

No	TEST ITEM	TEST METHOD			CRITERION
		REFERENCE STANDARD	CONDITION	TEST TIME	
1	High Temperature Storage	JEITA EIAJ ED-4701/201 MIL-STD-883 1008.2	Ta=85°C	1000h	It is due to the electric characteristic standard.
2	Low Temperature Storage	JEITA EIAJ ED-4701/201 MIL-STD-883 1008.2	Ta=-40°C	1000h	It is due to the electric characteristic standard.
3	High Temperature Operating Life	JEITA EIAJ ED-4701/101 MIL-STD-883 1005.8 JEDEC JESD22-A108	Ta=70°C VDD=MAX	1000h	It is due to the electric characteristic standard.
4	Pressure Cooker	JEITA EIAJ ED-4701/102 MIL-STD-883 1005.2	Ta=60°C RH=90% VDD=MAX *1	1000h	It is due to the electric characteristic standard.
5	Temperature Cycle	JEITA EIAJ ED-4701/105 MIL-STD-883 1010.7	-40°C/85°C 30min/30min *1	100cycle	It is due to the electric characteristic standard.
6	Resistance to Soldering Heat	JEITA EIAJ ED-4701/301 JEITA EIAJ ED-4701/302 JIS-C0050, C0054	Ta=255±5°C 3Times *2	10sec	The malfunction on the outward appearance isn't admitted and meets a specification electrically.
7	Solderability	JEITA EIAJ ED-4701/303 MIL-STD-883 2003.7	Ta=240°C	3sec	Equal to or more than 95% of the outerlead is matted.
8	Electrostatic Discharges	(MM) JEITA EIAJ ED-4701/304 JEDEC JESD22-A115	Capacitor charge method C=200pF, R=0Ω, Ta=RT 5 pulses applied Positive and negative strengths of all pins All terminal: 200V		It is due to the electric characteristic standard.
		(HBM) MIL-STD-883 3015.7 JEDEC JESD22-A114	Capacitor charge method C=100pF, R=1.5kΩ, Ta=RT 3 pulses applied Positive and negative strengths of all pins All terminal: 2000V		
9	Latch-up	JEITA EIAJ ED-4701/306 JEDEC JESD78	Current input method VDD=MAX, Ta=RT To VDD pin:+pulse To VSS pin:-pulse Impressed condition: Pulse width: 10msec All I/O terminal: 100mA		It is due to the electric characteristic standard.

*1Pre-condition: 30°C/60% 96h→Infrared reflow 255±5°C、10sec、3times

*2Pre-condition: 30°C/60% 96h