

## High Reliability Test for DFN Products

No.	Test Item	Test Condition	Test Foundation	Quality Level
1	Solderability	Dip in flux Duration= 5 sec. Temp. of solder pot = 230± 5°C, Duration= 5~10 sec.	MIL-STD-750D, Method 2026.1	Ac/Rj=22/0
2	Soldering Heat	Temp of solder pot= 260± 5°C, Duration= 10~12 sec.	MIL-STD-750D, Method 2031.2	Ac/Rj=22/0
3	Temperature Cycle	Tstg (min.) to Tstg (max.) dwelled for 30 min and transfer Duration not exceed 1min; 20 cycles.	MIL-STD-750D, Method 1051.5	Ac/Rj=22/0
4	Thermal Shock Test	Ta1=100°C, Duration=10 min then Ta2= 0°C, Duration=10 min for 20 cycles, transfer Duration must not exceed 5 sec.	MIL-STD-750D, Method 1056.7	Ac/Rj=22/0
5	Steady State Operation Life Test	I=Io Duration=168/1000 hrs.	MIL-STD-750D, Method 1027.3	Ac/Rj=22/0
6	High Temperature Reverse Bias Life	VR=80%VR Temp.= 100/125/150/175 ± 5°C (depend on product) Testing Duration= 48	MIL-STD-750D, Method 1038.3	Ac/Rj=22/0
7	Intermittent Forward Operation Life	I=Io Power ON 1.5hrs/OFF 0.5hrs Testing Duration : 500	MIL-STD-750D, Method 1036.3	Ac/Rj=22/0
8	Pressure Cooker Test	Ta= 121°C Pressure= 15 Psi Duration= 4hrs	JESD22-A102	Ac/Rj=22/0
9	Boiling	5 hours at 100°C water.	-----	Ac/Rj=22/0
10	High Temperature Storage Life	Ta=TSTG MAX. Duration=168/1000hrs	MIL-STD-750D, Method 1031.5	Ac/Rj=22/0
11	Humidity	Ta= 85°C RH= 85% Duration= 168/1000 hrs	JIS C 7021, B-11	Ac/Rj=22/0

**High Reliability Test for TVS**

No.	Test Item	Test Condition	Test Foundation	Quality Level
1	High Temperature Reverse Bias Life	VR=80%VR Temp.= 150 ±5°C Duration= 48 /168hrs.	MIL-STD-750D METHOD-103	Ac/Rj=22/0
2	Pressure Cooker Test	TA= 121°C Pressure= 15 Psi / Duration= 48hrs	JESD22 – A102C	Ac/Rj=22/0
3	Forward Surge	8.3 ms Single Half Sine Wave	Surge Pass Standard : ≥40A	Ac/Rj=22/0
4	Steam Aging	TA= 98°C Duration= 18hrs	MIL-STD - 202F, Method 208	Ac/Rj=22/0
5	SOLDER RESISTANCE	TA= 260 ±5°C Duration= 10 ±0.5 sec.	MIL-STD-750D METHOD 2031	Ac/Rj=22/0
6	Humidity	TA= 85°C RH= 85% Duration= 168/1000 hrs	JIS C 7021, B-11	Ac/Rj=22/0