

江苏顺烨电子有限公司

可靠性试验测试参考表

序号	试验项目 (Test Item)	试验条件 (Condition)	参考标准 (Reference)	实验时间 (Time)	适用范围 (Scope)
1	预处理 (Pre-conditioning)	Performed on surface mount devices (SMDs) prior to TC,AC, H3TRB/HAST & IOL/PTC stresses only.	JESD22A-113	1.Temperature Cycling:-40℃~60℃, 5cycles; 2.Bake:125℃,24H; 3.Moisture Soak:85±2℃, 85±5%/168h; 4.Reflow*3cycles:260℃,3cycles time 5-60min	Only For SMD Series 仅适用于贴片系列
2	高温反偏 (High Temperature Reverse Bias)	Tjmax,80%VR(Zener 100%Vz,TVS 100%Vrwm)	JESD22-A108	1000Hrs	All Series 所有系列
3	高温栅极偏压 (High Temperature Gate Bias)	Tjmax,100%Vgs	JESD22-A-108	1000Hrs	Only For MOS 仅适用于MOS产品
4	间歇老化 (Intermitt Operational Life)	ΔTj≥100℃,2min ON/2min OFF	MIL-STD-750 Method 1037	15000Cycles	Except for TVS&Zener Series TVS&Zener不适用
5	高温高湿反偏 (High-temperature High-humidity Reverse Bias)	85±2℃, 85%±5%RH, 80%VR (Max=100V)	JESD22-A101	1000Hrs	All Series 所有系列
6	高加速寿命实验 (Highly Accelerated Stress Test)	130±2℃, 85%±5%RH 80%VR (Max=42V)	JESD22-A101	96Hrs	All Series 所有系列
7	高温高湿 (High-temperature High-humidity storage test)	85±2℃, 85±5%RH	MIL-STD-202F METHOD-103B	1000Hrs	All Series 所有系列
8	温度循环试验 (Temperature Cycling)	150℃ (+15, -0) /15min, -55℃ (+0, -10) /15min	JESD22-A104	1000 cycles	All Series 所有系列
9	高温储存 (High Temperature Storage)	150℃ (+10, -0)	JESD22-A103	1000Hrs	All Series 所有系列
10	低温储存 (Low Temperature storage)	-55℃	Specification	1000Hrs	All Series 所有系列
11	高压蒸煮 (Auto-clave)	121℃±2℃,15 psig,100%RH	JESD22-A102	96Hrs	All Series 所有系列
12	盐雾试验 (Salt Spray Test)	试验温度: 35±2℃, 氯化钠盐水浓度: 5±0.1%, PH值范围: 6.5-7.2, 沉降率: 1~2ml/80cm².h	GB/T 2423.17-2008	24Hrs	All Series 所有系列
13	易焊性试验 (Solderability)	235℃±5℃	J-STD-002	3sec	All Series 所有系列
14	耐焊接热 (Resistance to solder heat)	DIP: 270±5℃ SMD: 260℃(+5,-0)	JESD22-B106 JESD22-A111	DIP: 7sec(+2, -0) SMD :10sec	All Series 所有系列
15	弯曲牢度 (Bending Strength)	φ0.6mm~0.78mm W=0.5Kg >φ1.20mm W=2Kg	90±5° MIL-STD-750 Method 2036	3Times	Axial Series 插件系列
16	终端牢度 (Terminal Strength)	φ0.6mm~φ0.78mm W=1Kg >φ1.20mm W=3Kg	MIL-STD-750 Method 2036	15sec	Axial Series 插件系列
17	正向浪涌试验 (Forward Surge Test)	8.3ms,Single,Half-Wave	MIL-STD-750 Method 4066	5Times	All Series 所有系列
18	静电测试 (ESD)	HBM: 100pF,1500Ω ,GPP:4KV; Others:2KV; MM: 200pF,0Ω ,400V	AEC-Q101-001/002	1cycle	All Series 所有系列