

Reliability Report

Part Number: Schottky SMD Series

Test Results : **PASS**

Test Item	Conditions	Duration	Quantity	Rejects
TEST Pre- and Post-Stress Electrical Test	$T_a = 25\text{ }^\circ\text{C}$	N/A	all parts	see below
* Pre-conditioning for MSL 1	JESD22A-113 1. Temperature Cycling: $-40\text{ }^\circ\text{C} \sim 60\text{ }^\circ\text{C}$, 2. Bake: $125\text{ }^\circ\text{C}$, 3.1 Moisture Soak: $85\text{ }^\circ\text{C}$, 85%RH for MSL1; 3.2 Moisture Soak: $30\text{ }^\circ\text{C}$, 60%RH for MSL3; 4. Reflow*3Cycles: $260\text{ }^\circ\text{C}$	5Cycles; 24 hours; 168hours 192hours 3Cycles	308Pcs	0
HTRB High Temperature Reverse Bias	MIL-STD-750 Method 1038 $T_j = T_{jmax}$, 80% VR	1000 hours	77Pcs	0
TC Temperature Cycling	JESD22-A104 $-55\text{ }^\circ\text{C} (+0, -10)/15\text{Min} \sim 150(+15, -0)/15\text{Min}$,	1000Cycles (500hours)	77Pcs	0
AC Autoclave	JESD22-A102 $T_a = 121\text{ }^\circ\text{C} \pm 2\text{ }^\circ\text{C}$, RH = 100 %, 15psig	96 hours	77Pcs	0
H3TRB High Humidity High Temperature Reverse Bias	JESD22-A101 $T_a = 85\text{ }^\circ\text{C} \pm 2\text{ }^\circ\text{C}$, RH = 85% \pm 5%, 80 % VR (VR MAX=100V)	1000 hours	77Pcs	0
IOL Intermittent Operating Life	MIL-STD-750 Method 1037 ON 2Min/OFF 2min, devices powered to insure $\Delta T_j \geq 100\text{ }^\circ\text{C}$	15000 cycles (1000 hours)	77Pcs	0
RSH Resistance to Solder Heat	JESD22-B106 $260\text{ }^\circ\text{C} (+5, -0)$	10 s	30Pcs	0
SD Solderability	J-STD-002 $235\text{ }^\circ\text{C} \pm 5\text{ }^\circ\text{C}$	3 s	10Pcs	0
HTSL High Temperature Storage Life	JESD22-A103 T_{stgMax}	1000 hours	77Pcs	0

*Remark : detail MSL of product refer to data sheet on MCC website.