

Reliability Test Result

Product Schottky barrier Diode Package Through hole molded package
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Life Test				
TEST ITEM	TEST CONDITION	STANDARD	n[pcs] (Sample QTY.)	Pn[pcs] (NG QTY.)
High temperature reverce bias	Tjmax、VR=VR Max、 1000h	JESD22-A108	77	0
High humidity,High temp. reverse bias	85±2°C、Rh=85±5%、 VR = less than VR MAX※, 1000h	JESD22-A101	77	0
Temperature cycle	-55 ± 5 ℃(30min.) \longleftrightarrow 150 ±5 ℃(30min.)、 200cyc	JESD22-A104	77	0
Pressure cooker test (Autoclave)	Ta=121±2℃、Rh=100%、203kPa、 100h	JESD22-A102	77	0
Intermittent Operation Life or Power and Temperature Cycle	Ta=25±5°C、 \triangle Tj≥100°C、 Duration: 15000cycles Ta = -40(+0/-10)°C \sim +85(+10/-0)°C、 ON 300s/OFF 300s per cycle Duration: 6000cycles	MIL-STD-750 Method 1037 JESD22 A-105	77	0

 $\ensuremath{\ensuremath{\mbox{\%}}}$ Conducted under the VR in which thermal runaway doesn't occur.

Stress Test						
TEST ITEM	TEST CONDITION	STANDARD	n[pcs] (Sample QTY.)	Pn[pcs] (NG QTY.)		
Solder heat resistance 1	260±5°C、10sec.、Solder - bath	JESD22-B106D	30	0		
Solder heat resistance 2	350±10°C、3s.、Dipping leads into solder bath at 350±10°C.	JESD22-B106D	30	0		
Solderability	245±5°C、3s.、Solder-Bath	JESD22-B102	10	0		
Terminal strength (Pulling)	Pulling) Pull force fixed body; 20N, 10s JEITA ED-4701/ 400-401		10	0		
Terminal strength (Bending)	Bend force; 10N, 90°, 2times	JEITA ED-4701/ 400-401	10	0		

Measurement Item & Criteria				
Item	Condition	Criteria		
Forward Voltage(V F)	Par specification	Less than x1.1 of Initial value		
Reverse Current (IR)	Par specification	Less than x2 of Initial value		
Appearance	Visual check	No outstanding change in physical		
Solderability	Visual check	More than 95% of the electrode must be covered with solder		

JUDGEMENT

No failure is observed from each test item.

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