TOP ONE SEMI CONDUCTOR

SMALL SURFACE MOUNT SUPER FAST DIODES

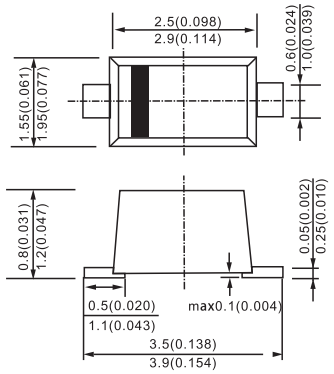
RS1001FL THRU RS1008FL

100V-800V 1.0A

FEATURES

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- Glass Passivated Chip Junction
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product : 99% Sn can meet RoHS environment substance directive request

SOD-123FL



Dimensions in millimeters

MECHANICAL DATA

- Case: JEDEC SOD-123FL, Molded plastic over passivated junction.
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes positive end (cathode)
- standard Packaging : 8mm tape (EIA-481)
- Approx. Weight: 0.0168 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Rating	Test condition	Symbol	RS1001FL	RS1002FL	RS1004FL	RS1006FL	RS1008FL	Units
Maximum repetitive peak reverse voltage		V_{RRM}	100	200	400	600	800	V
Maximum RMS voltage		V_{RMS}	70	140	280	420	560	V
Maximum DC blocking voltage		V_{DC}	100	200	400	600	800	V
Maximum average forward rectified current	T_{tp}=65°C T_A=45°C	$I_{F(AV)}$	1.4 0.5					A
Maximum instantaneous forward voltage	0.7A	V_F	1.15					V
Maximum DC reverse current at rated DC blocking voltage	T_A=25°C T_A=125°C	I_R	10 50					μA
Thermal resistance junction to ambient air		$R_{\theta JA}$	180					K/W
Operating junction and storage temperature range		T_J ,T_{STG}	-50 TO + 150					°C
Reverse recovery time	I_F=0.5A I_R=1A t_{rr}=0.25A	t_{rr}	150			250	500	nS
Typical capacitance	4V,1MHz	C_J	9					pF

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RATINGS AND CHARACTERISTIC CURVES RS1001FL THRU RS1008FL

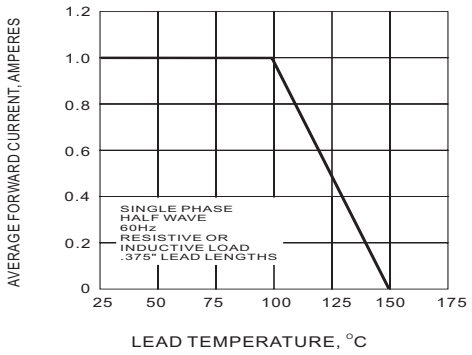

Fig.1 FORWARD CURRENT DERATING CURVE

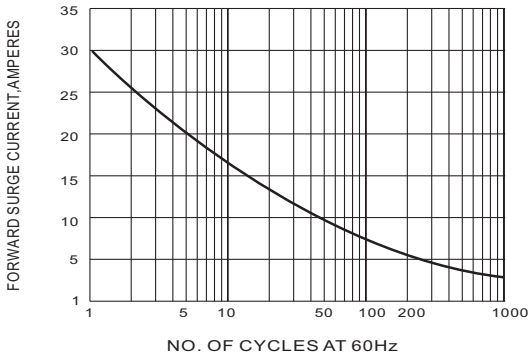

Fig.2 PEAK FORWARD SURGE CURRENT

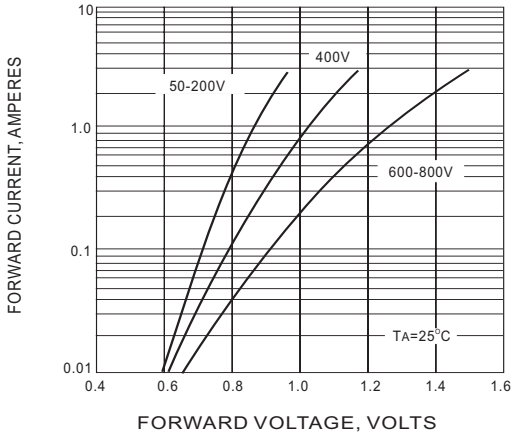

Fig.3 FORWARD CHARACTERISTICS

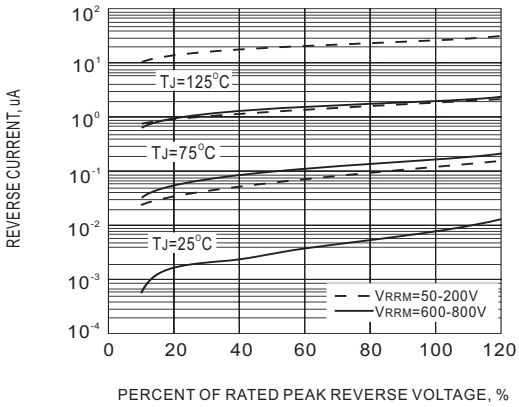

Fig.4 TYPICAL REVERSE CHARACTERISTICS

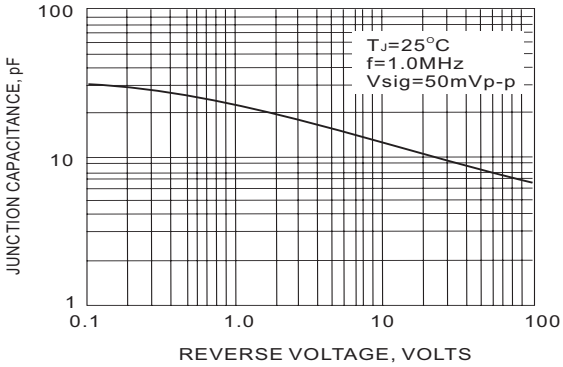

Fig.5 TYPICAL JUNCTION CAPACITANCE