



RS1001FL~RS1010FL

SMALL SURFACE MOUNT FAST DIODES

VOLTAGE 100 to 1000 Volts **CURRENT** 1.0 Amperes

SOD-123FL

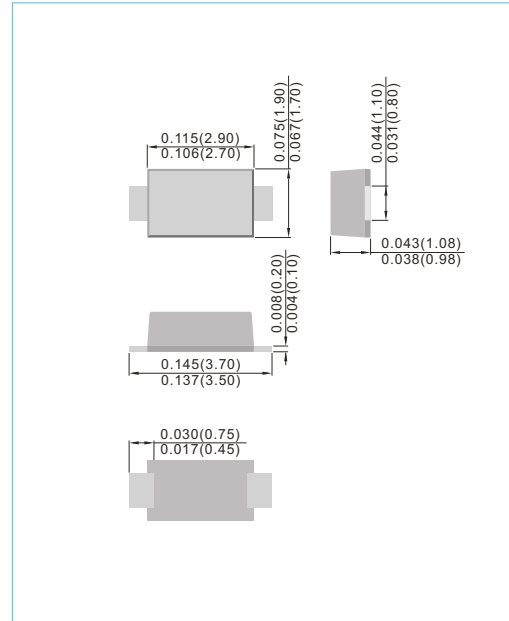
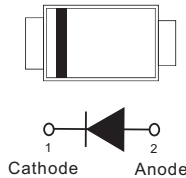
Unit : inch(mm)

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
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case : JEDEC SOD-123FL, Molded plastic over passivated junction
- Terminals : Solderable per MIL-STD-750, Method 2026
- Standard Packaging : 8mm tape (EIA-481)
- Apprx. Weight: 0.0006 ounce, 0.0172 gram
- Polarity : Color band cathode



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	RS1010FL	Units	
Marking Code		-	R1B	R1D	R1G	R1J	R1K	R1M	-	
Maximum repetitive peak reverse voltage		V_{RRM}	100	200	400	600	800	1000	V	
Maximum RMS voltage		V_{RMS}	70	140	280	420	560	700	V	
Maximum DC blocking voltage		V_{DC}	100	200	400	600	800	1000	V	
Maximum average forward rectified current Derate above $T_c=110^\circ\text{C}$		$I_{F(AV)}$	1.0						A	
Maximum instantaneous forward voltage	0.7A 1.0A	V_F	1.15 1.3						V	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	30						A	
Maximum DC reverse current at rated DC blocking voltage	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	I_R	1.0 50						μA	
Typical capacitance	4V,1MHz	C_J	9						pF	
Reverse recovery time	$I_F=0.5\text{A}$ $I_R=1\text{A}$ $I_{rr}=0.25\text{A}$	t_{rr}	150			250		500		nS
Thermal resistance junction to ambient air		$R_{\theta JA}$	180						$^\circ\text{C/W}$	
Operating junction and storage temperature range		T_J, T_{STG}	-55 to +150						$^\circ\text{C}$	



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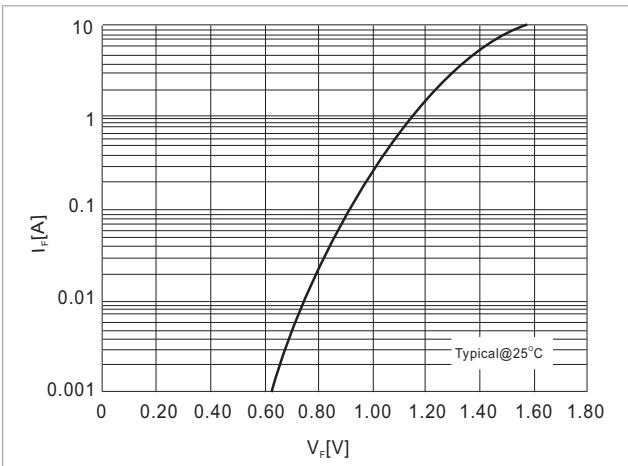


Fig.1-TYPICAL FORWARD CHARACTERISTICS

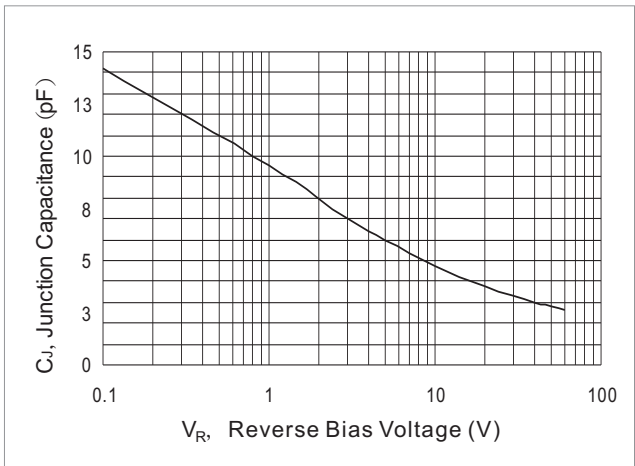


Fig.2-TYPICAL JUNCTION CAPACITANCE

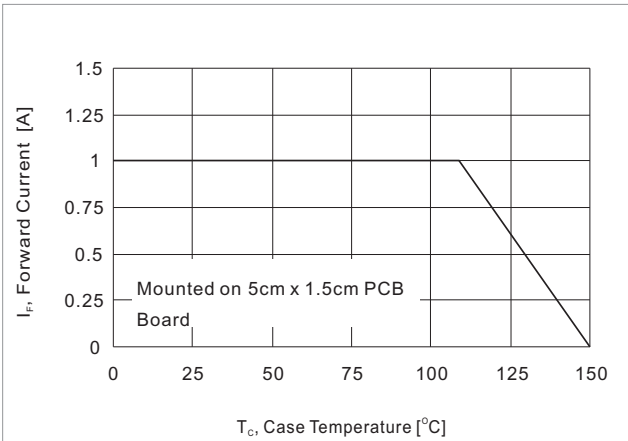


Fig.3-FORWARD CURRENT DERATING CURVE

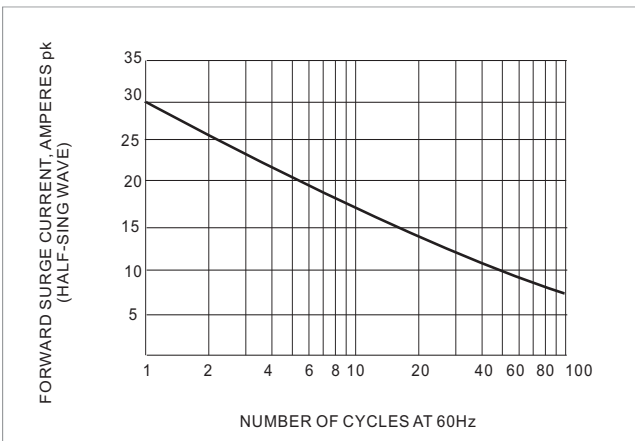
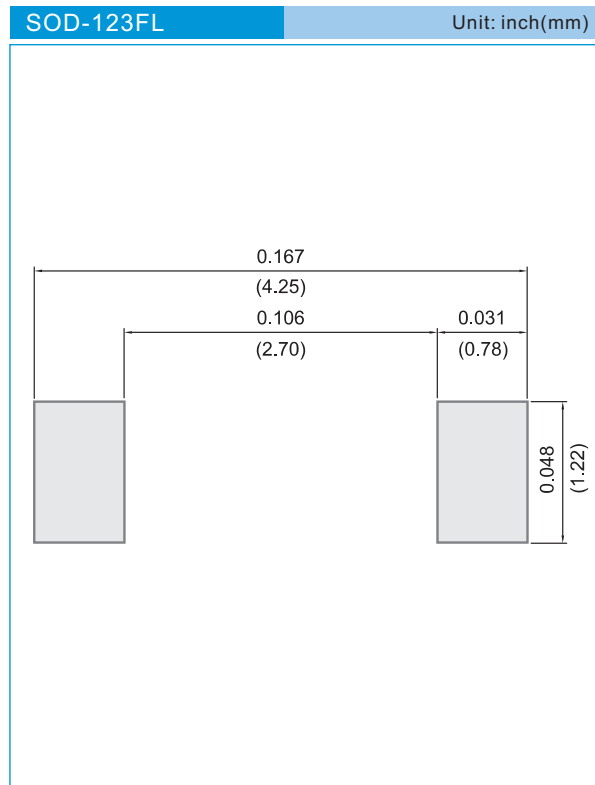


Fig.4-MAXIMUM NON-REPEITIVE SURGE CURRENT



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

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