



RS1001FL THRU RS1010FL

SURFACE MOUNT FAST DIODES

Reverse Voltage - 100 to 1000 Volts Forward Current - 1.0 Ampere

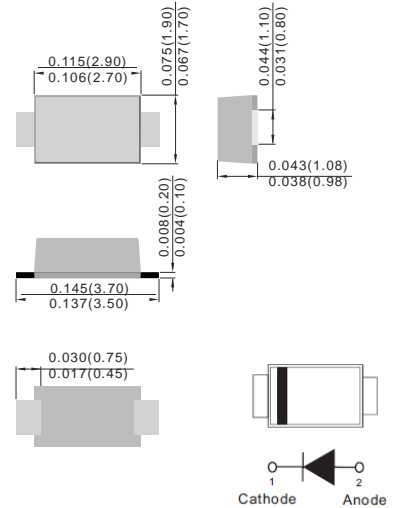
FEATURES

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- 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)
- Apporx. Weight: 0.0006 ounce, 0.0172 gram
- Polarity : Color band cathode

SOD-123FL



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%_r

Rating	Test condition	Symbol	RS1001FL	RS1002FL	RS1004FL	RS1006FL	RS1008FL	RS1010FL	Units	
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	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	$I_F=0.5\text{A}$ $I_R=1\text{A}$ $I_{tr}=0.25\text{A}$	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						$^\circ\text{C}$	

RATINGS AND CHARACTERISTIC CURVES RS1001FL THRU RS1010FL

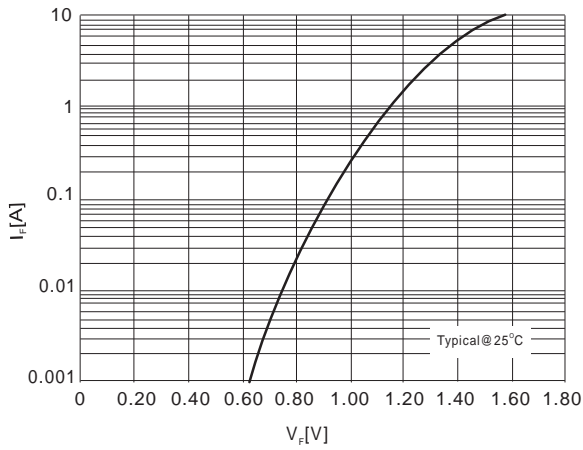


Fig.1-TYPICAL FORWARD CHARACTERISTICS

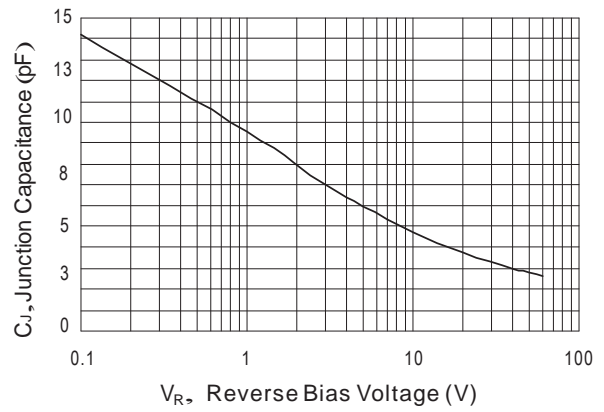


Fig.2-TYPICAL JUNCTION CAPACITANC

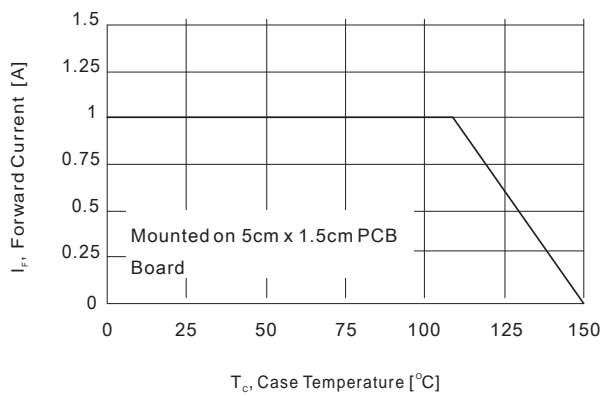


Fig.3-FORWARD CURRENT DERATING CURVE

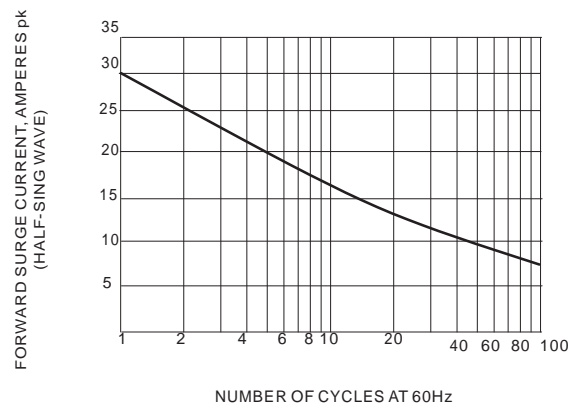
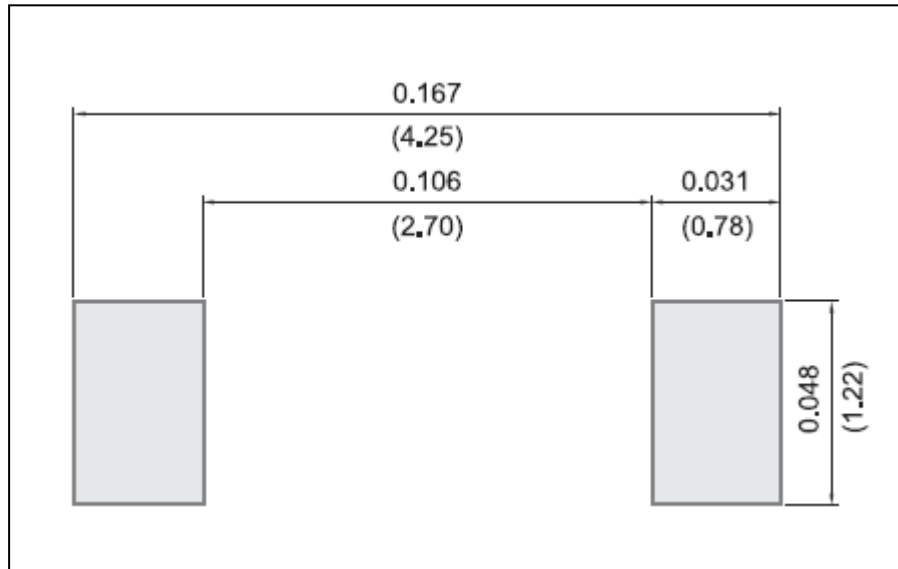


Fig.4-MAXIMUM NON-REPEITIVE SURGE CURRE

MOUNTING PAD LAYOUT

SOD-123FL (inch/mm)



ORDER INFORMATION

Package :

T/R 3K per 7 inch Reel

T/R 10K per 10 inch Reel