

FEATURES

- For surface mounted applications in order to optimize board space
- Low profile package
- Ideal for automated placement
- High temperature soldering : 260°C /10 seconds at terminals
- Glass passivated chip junction
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

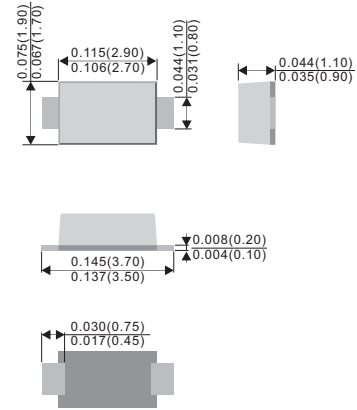
MECHANICAL DATA

- Case: SOD-123FL, Molded plastic over passivated junction
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0006 ounces, 0.0173 grams
- Standard Packaging: 8mm tape (EIA-481)
- Polarity: Color band denotes cathode end



SOD-123FL

Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GS1000FL	GS1001FL	GS1002FL	GS1004FL	GS1006FL	GS1008FL	GS1010FL	UNITS
Marking Code		1A	1B	1D	1G	1J	1K	1M	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	640	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	1							A
Peak One Cycle Surge Forward Current (non-repetitive)	I_{FSM}	30 (60Hz)							A
Maximum Forward Voltage at 1A (Note 1)	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	I_R	1 50							μA
Typical Junction Capacitance at 4V, MHz	C_J	4							pF

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GS1000FL	GS1001FL	GS1002FL	GS1004FL	GS1006FL	GS1008FL	GS1010FL	UNITS
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	65							$^{\circ}C / W$
Operating and Storage Temperature Range	T_J, T_{STG}	-50 TO +150							$^{\circ}C$

NOTES:1.Pulse test : 300us pulse width, 1% duty cycle.

2.Soldering land: 6mm x 6mm

RATING AND CHARACTERISTIC CURVES

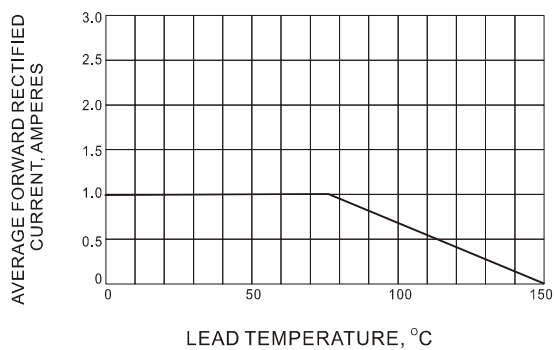


Fig.1 FORWARD CURRENT DERATING CURVE

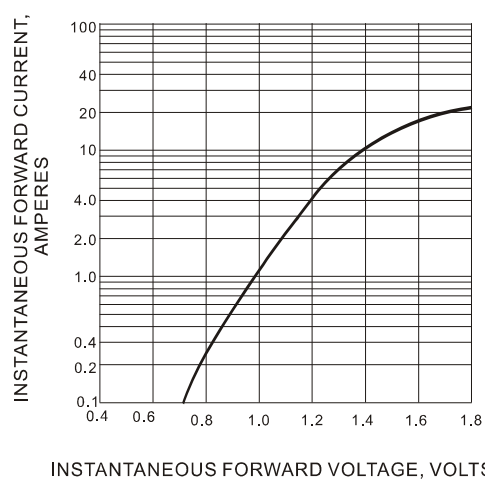


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

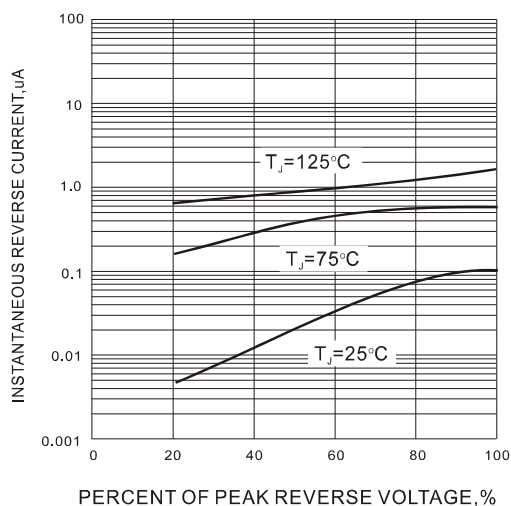


Fig.3 TYPICAL REVERSE CHARACTERISTICS

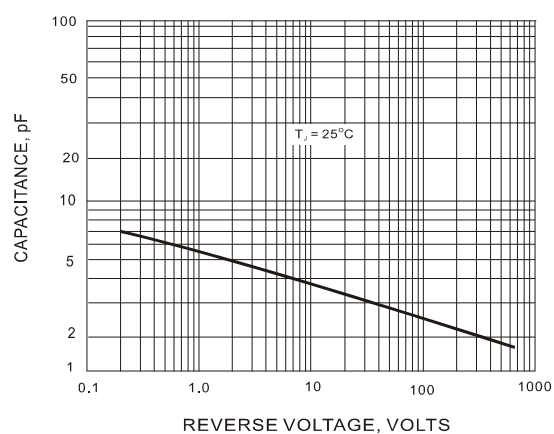


Fig.4 TYPICAL JUNCTION CAPACITANCE

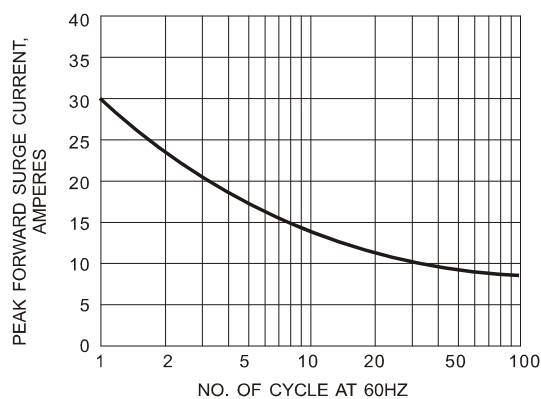
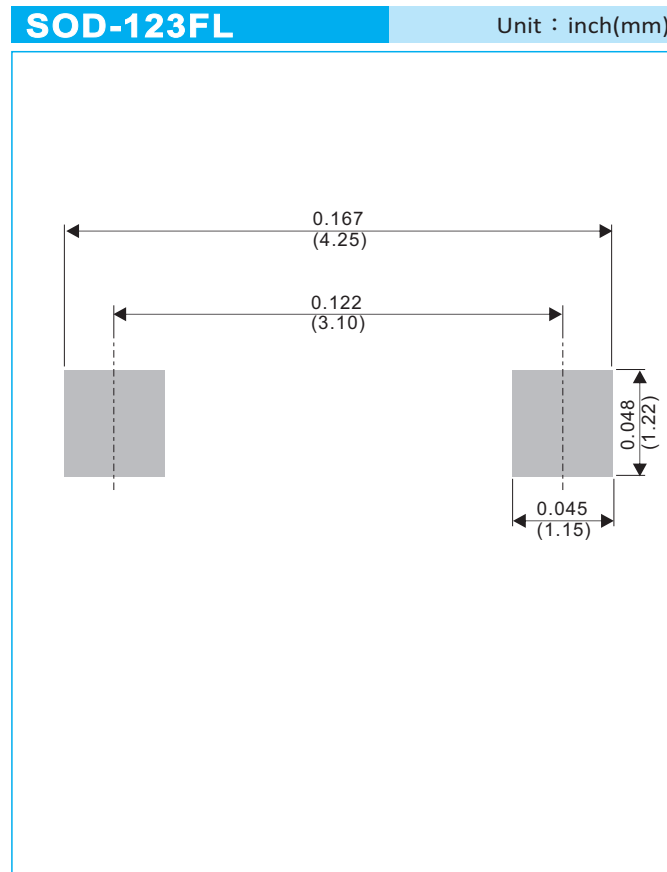


Fig.5- MAXIMUM NON - REPETITIVE SURGE CURRENT

MOUNTING PAD LAYOUT



ORDER INFORMATION

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