



GS1000FL~GS1010FL

SURFACE GENERAL PURPOSE RECTIFIERS

VOLTAGE 50 to 1000 Volts **CURRENT** 1.0 Amperes

SOD-123FL

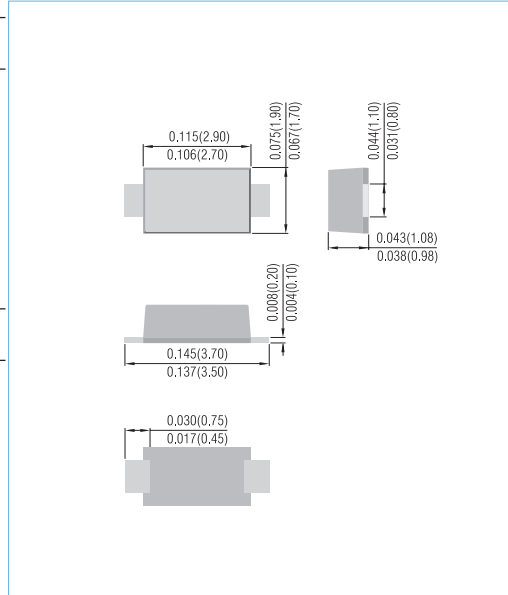
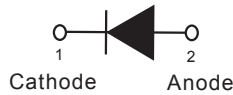
Unit: inch (mm)

FEATURES

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- High temperature soldering : 260°C /10 seconds at terminals
- Glass Passivated Chip Junction
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

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 cathode



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	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current (Note 1)	$I_{F(AV)}$	1.0							A
Peak one cycle surge forward current (non-repetitive)	I_{FSM}	30 (60Hz)							A
Maximum Forward Voltage at 1.0A	V_F	1.1							V
Maximum DC Reverse Current at $T_J=25^\circ\text{C}$ Rated DC Blocking Voltage $T_J=125^\circ\text{C}$	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							$^\circ\text{C} / \text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-50 to +150							$^\circ\text{C}$

NOTES:

1. Pulse test: 300u pulse width, 1% duty cycle.
2. Soldering land: 6mm x 6mm



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RATING AND CHARACTERISTIC CURVES

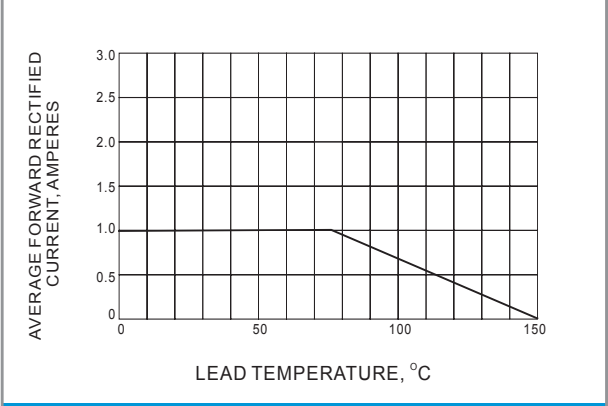


Fig.1 FORWARD CURRENT DERATING CURVE

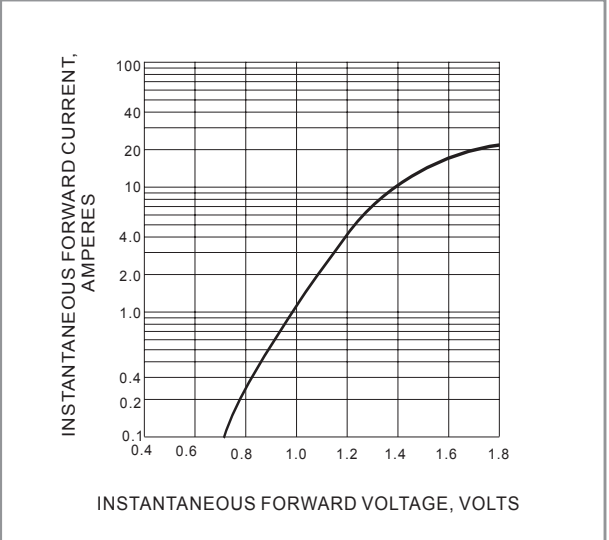


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

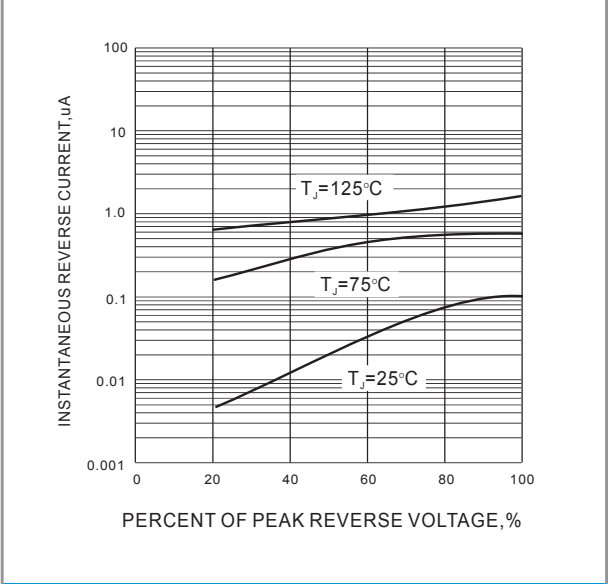


Fig.3 TYPICAL REVERSE CHARACTERISTICS

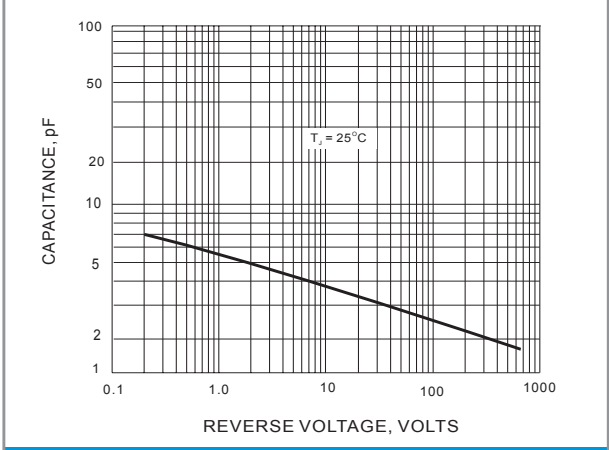


Fig.4 TYPICAL JUNCTION CAPACITANCE

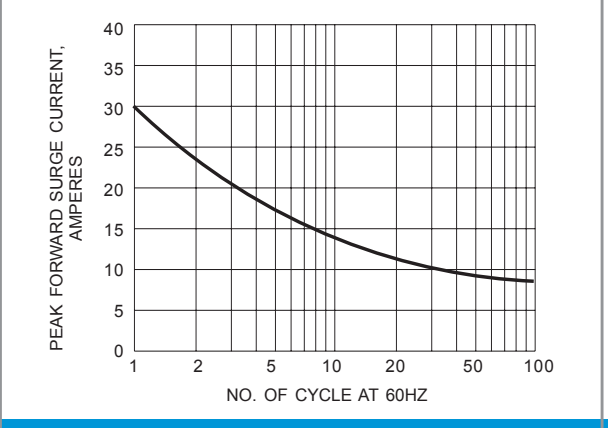
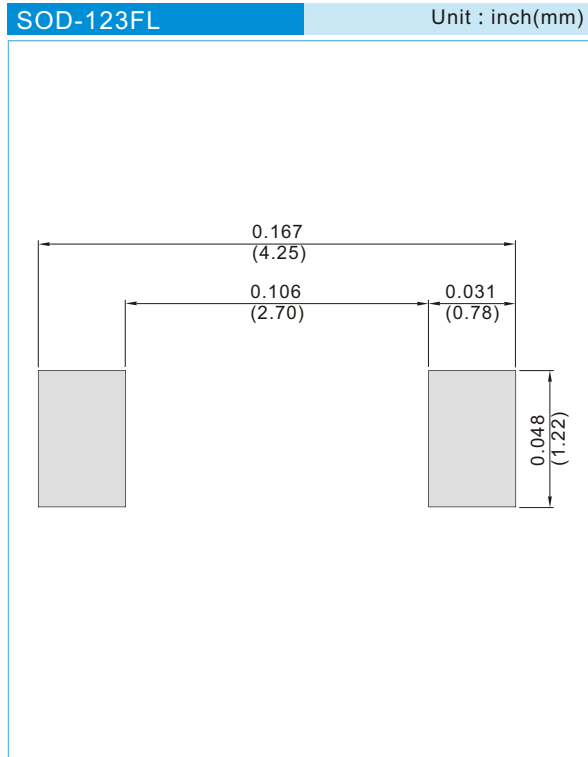


Fig.5- MAXIMUM NON - REPETITIVE SURGE CURRENT



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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



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Part No_packing code_Version

GS1000FL_R1_00001

GS1000FL_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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