



# GS1000FL~GS1010FL

## SURFACE GENERAL PURPOSE RECTIFIERS

**VOLTAGE** 50 to 1000 Volt **CURRENT** 1 Ampere

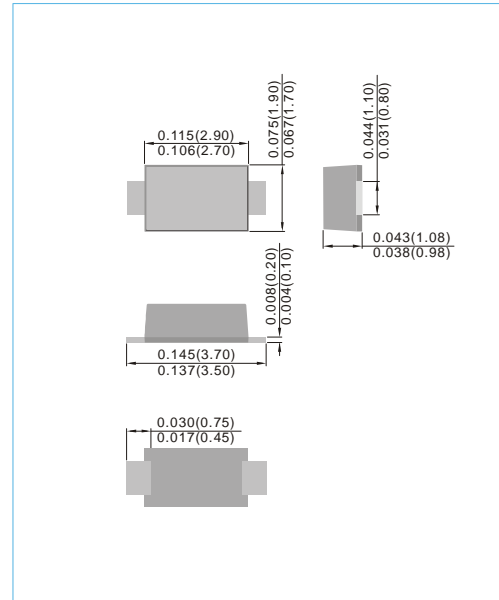
**SOD-123FL** Unit : inch(mm)

### 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 2011/65/EU directive
- 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, 0.0173grams
- 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	GS1010FL	UNITS
Marking Code		1A	1B	1D	1G	1J	1M	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	1000	V
Maximum Average Forward Current (Note 1)	$I_{F(AV)}$	1						A
Peak One Cycle Surge Forward Current (non-repetitive)	$I_{FSM}$	30 (60Hz)						A
Maximum Forward Voltage at 1A	$V_F$	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage <small>TA=25°C TA=125°C</small>	$I_R$	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	GS1010FL	UNITS
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	65						°C / W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-50 TO +150						°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

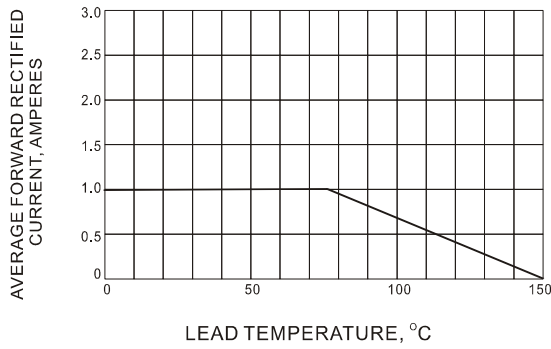


Fig.1 FORWARD CURRENT DERATING CURVE

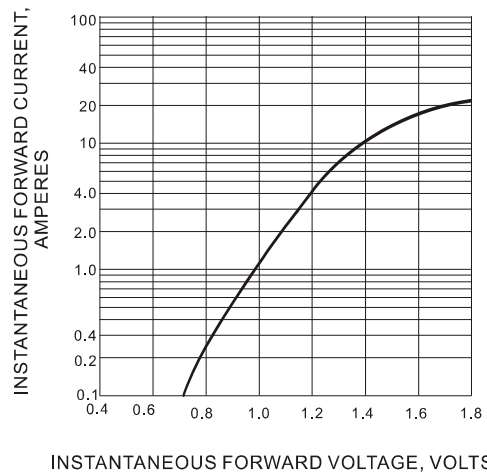


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

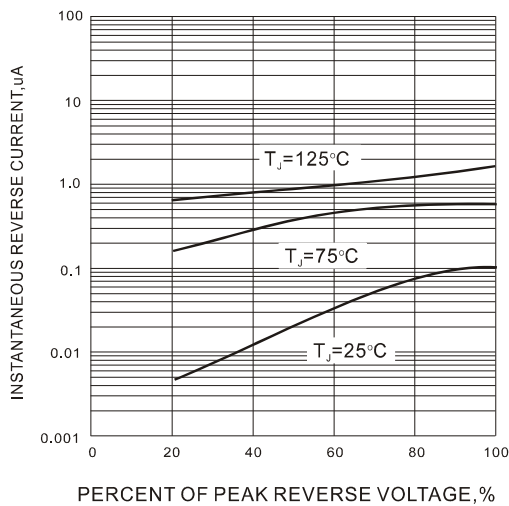


Fig.3 TYPICAL REVERSE CHARACTERISTICS

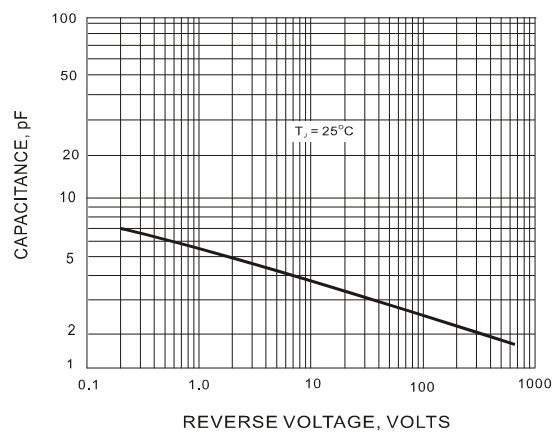


Fig.4 TYPICAL JUNCTION CAPACITANCE

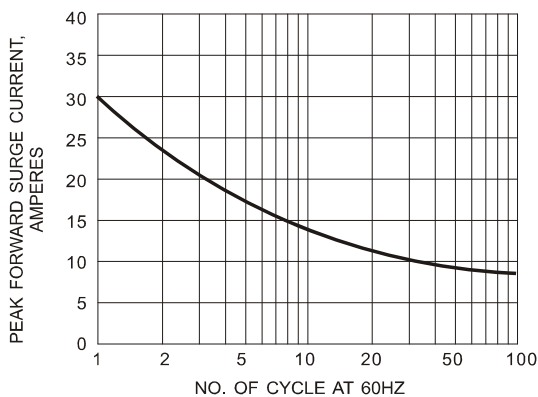
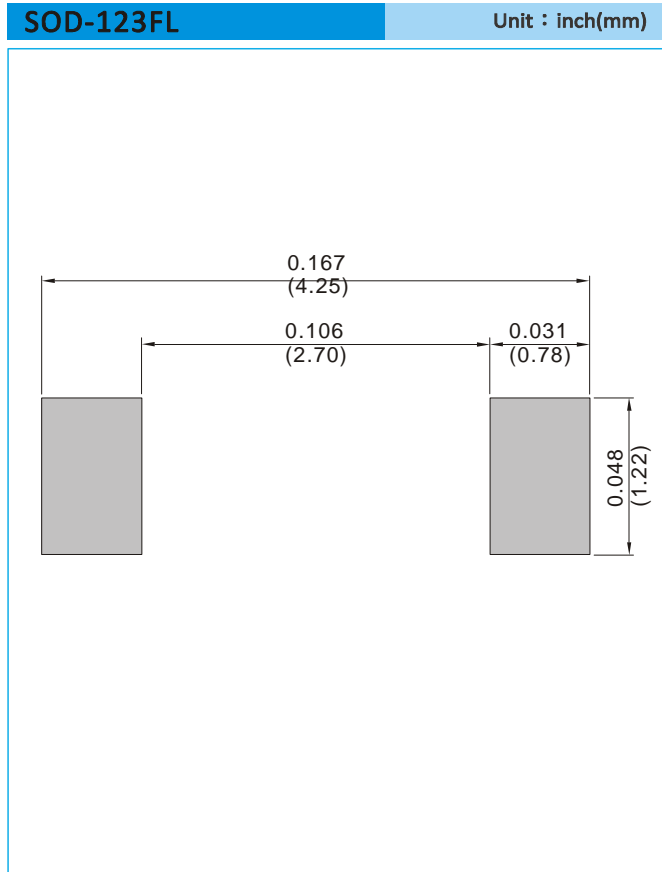


Fig.5- MAXIMUM NON - REPETITIVE SURGE CURRENT



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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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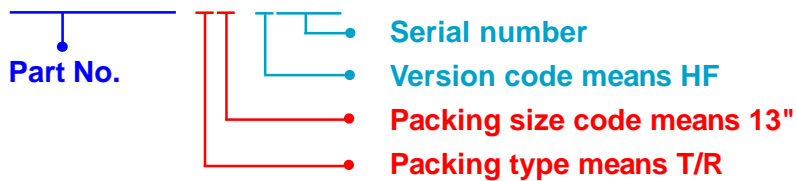
### Part No\_packing code\_Version

GS1000FL\_R1\_00001

GS1000FL\_R2\_00001

For example :

**RB500V-40** **R2** **00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> 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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