



# GS1000FL~GS1010FL

## SURFACE MOUNT SWITCHING DIODES

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

SOD-123FL

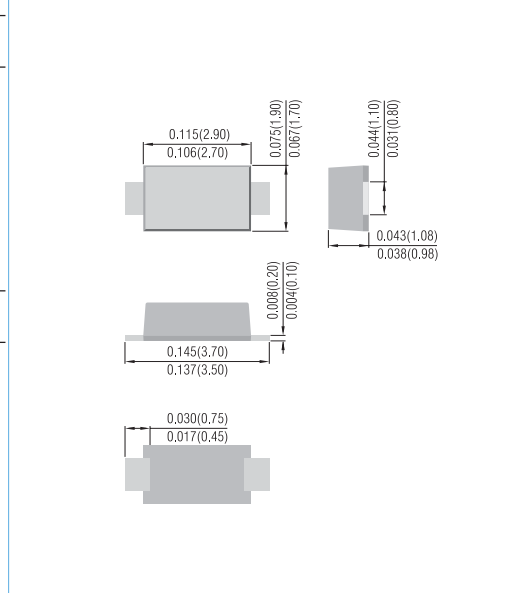
Unit: inch ( mm )

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

### MECHANICAL DATA

- Case: SOD-123FL, Molded plastic over passivated junction
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.01 gram
- Standard Packaging : 8mm tape (EIA-481)



## 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 $T_A=25^\circ\text{C}$ Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	$I_R$	10 50							$\mu\text{A}$
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

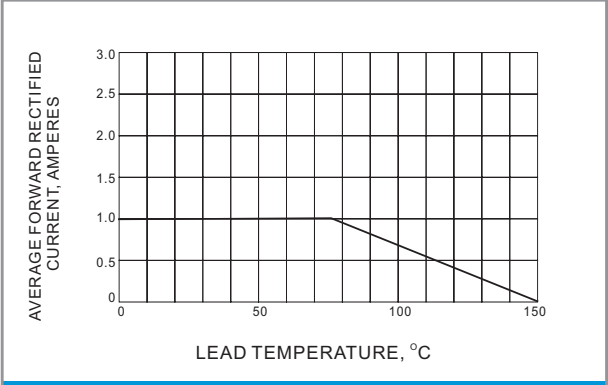


Fig.1 FORWARD CURRENT DERATING CURVE

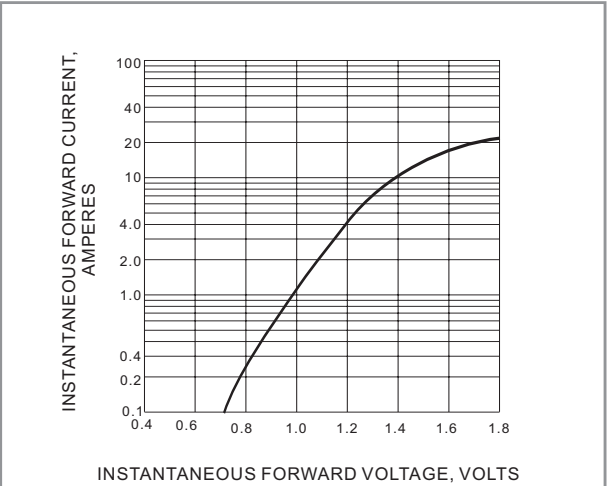


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

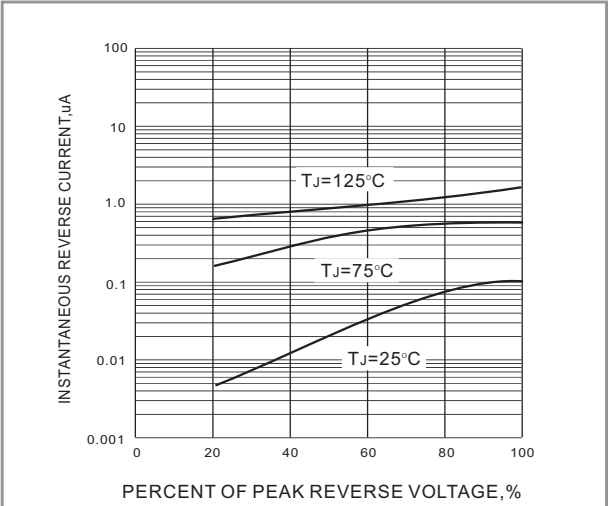


Fig.3 TYPICAL REVERSE CHARACTERISTICS

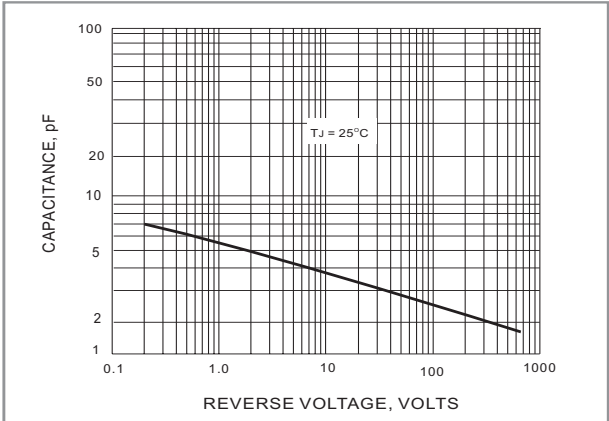
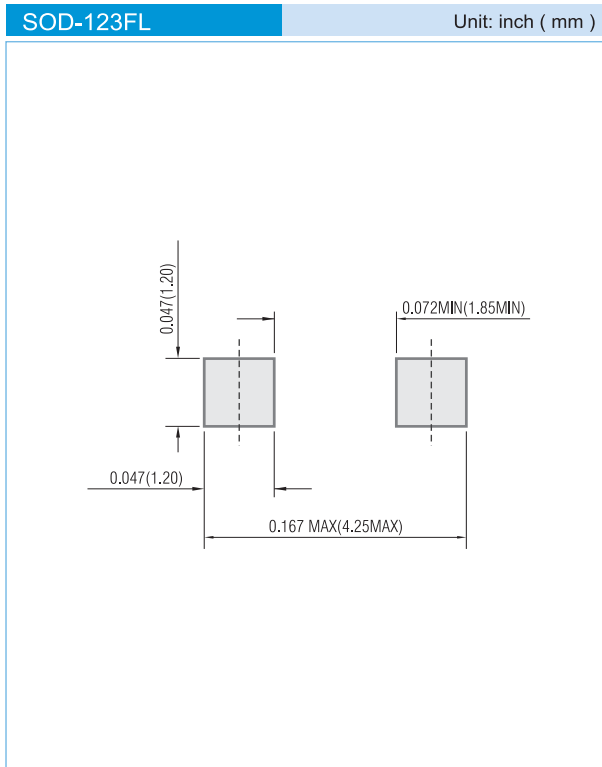


Fig.4 TYPICAL JUNCTION CAPACITANCE



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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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