



# GS1010FL-LE

## SURFACE GENERAL PURPOSE RECTIFIERS

**Voltage**

**1000 V**

**Current**

**1 A**

### 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
- Ultra Thin Profile Package for Space Constrained Utilization
- Package suitable for automated handling
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std..(Halogen Free)

### Mechanical Data

- Case: Molded plastic, SOD-123FL-1
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- Approx. Weight: 0.00054 ounces, 0.0155 grams
- Marking: M7W



SOD-123FL-1



### Maximum Ratings ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

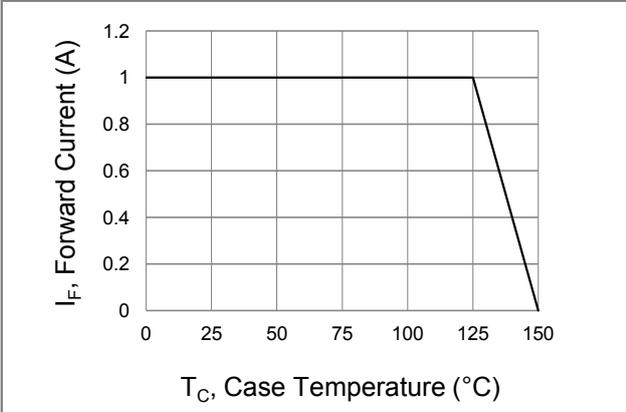
PARAMETER	SYMBOL	LIMIT	UNIT	
Maximum repetitive peak reverse voltage	$V_{RRM}$	1000	V	
Maximum rms voltage	$V_{RMS}$	700	V	
Maximum dc blocking voltage	$V_R$	1000	V	
Maximum average forward current	$I_{F(AV)}$	1	A	
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	25	A	
Typical forward voltage at 1A	$V_F$	1.1	V	
Maximum dc reverse current at rated dc blocking voltage	$I_R$	5	$\mu\text{A}$	
Typical junction capacitance Measured at 1MHz and applied $V_R=4\text{V}$	$C_J$	9	pF	
Typical thermal resistance	(Note 1)	$R_{\theta JA}$	200	$^{\circ}\text{C/W}$
	(Note 2)	$R_{\theta JC}$	20	
Operating and storage temperature range	$T_J, T_{STG}$	-55 to +150	$^{\circ}\text{C}$	

Note : 1. Mounted on a FR4 PCB, single-sided copper, mini pad.

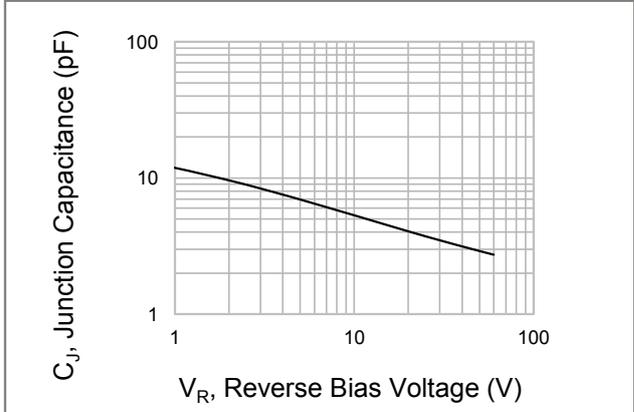
2. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area



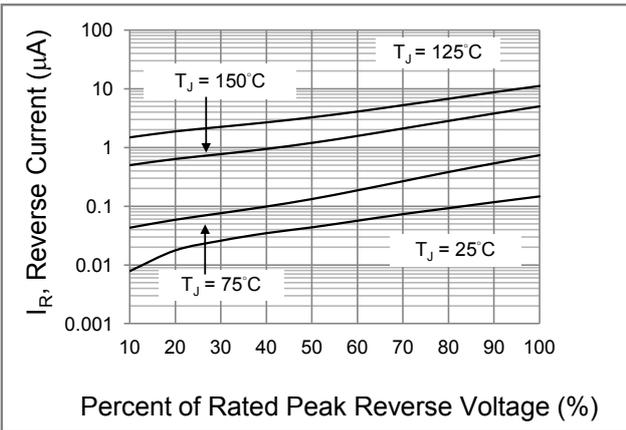
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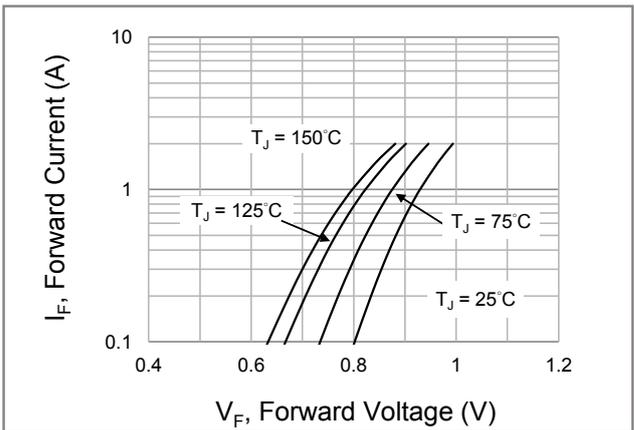
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**

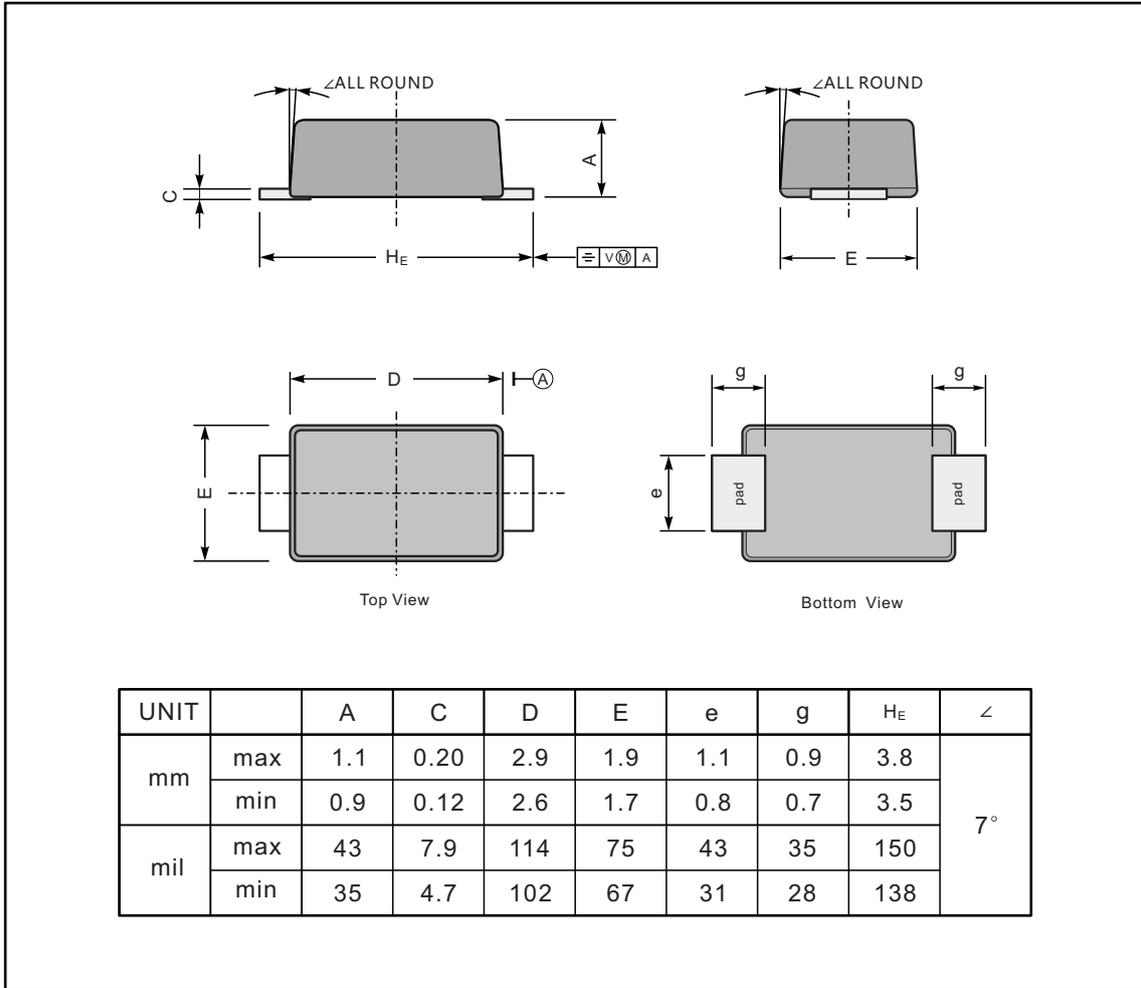


**Fig.4 Typical Forward Characteristics**

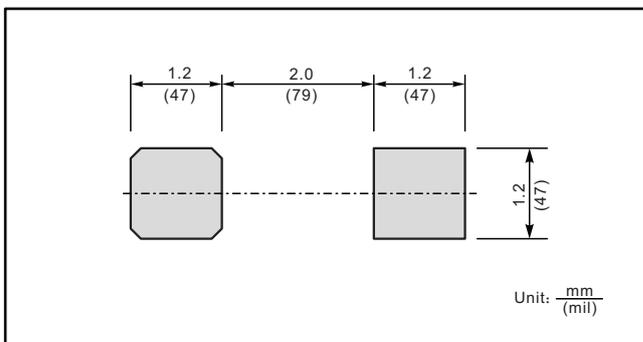


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## Package Outline



## Pad Layout





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