



## GS2DF-LE SERIES

### SURFACE MOUNT RECTIFIER

**Voltage**

**200~1000 V**

**Current**

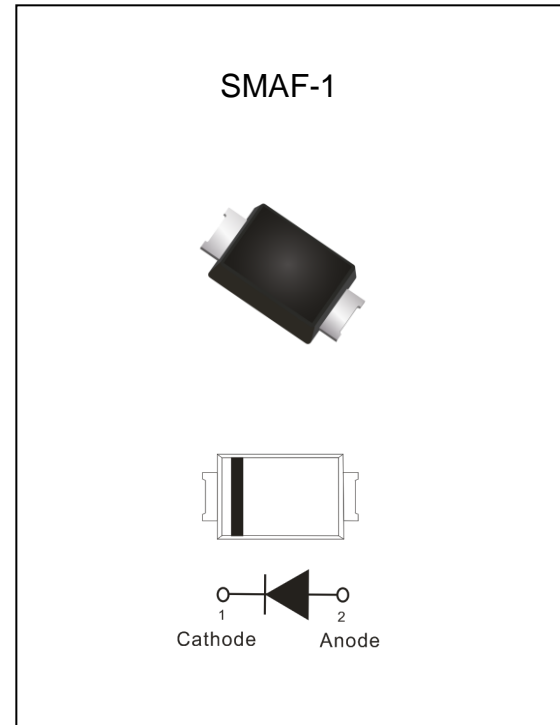
**2 A**

#### Features

- For surface mounted applications in order to optimize board space
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Low forward drop
- 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 2.0
- Green molding compound as per IEC 61249 standard

#### Mechanical Data

- Case: Molded plastic, SMAF-1
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- Approx. Weight: 0.00093 ounces, 0.027 grams



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

PARAMETER	SYMBOL	GS2DF-LE	GS2GF-LE	GS2JF-LE	GS2KF-LE	GS2MF-LE	UNIT	
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	1000	V	
Maximum rms voltage	$V_{RMS}$	140	280	420	560	700	V	
Maximum dc blocking voltage	$V_R$	200	400	600	800	1000	V	
Maximum average forward current	$I_{F(AV)}$	2					A	
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	60					A	
Typical forward voltage at 2A	$V_F$	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 $V_R=4\text{V}$	$C_J$	22					pF	
Typical thermal resistance	(Note 1)	$R_{\theta JA}$	150					$^\circ\text{C/W}$
	(Note 2)	$R_{\theta JC}$	16.5					
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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## TYPICAL CHARACTERISTIC CURVES

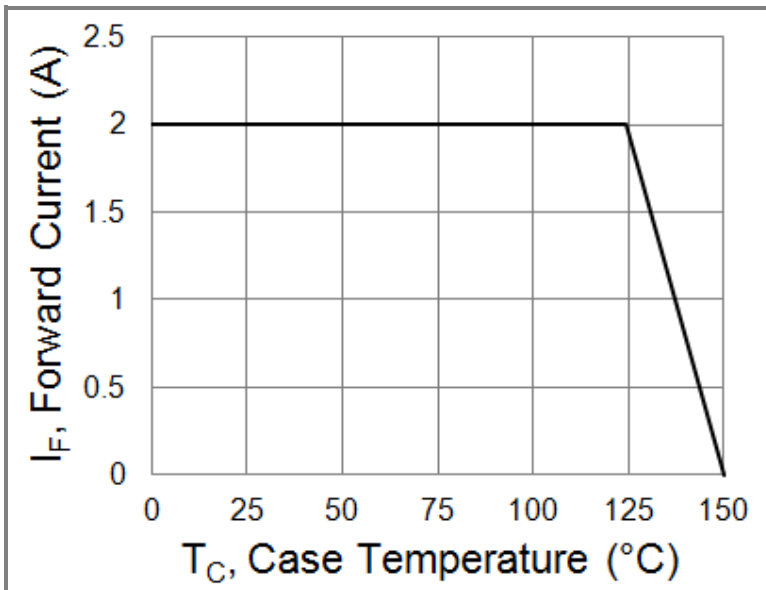


Fig.1 Forward Current Derating Curve

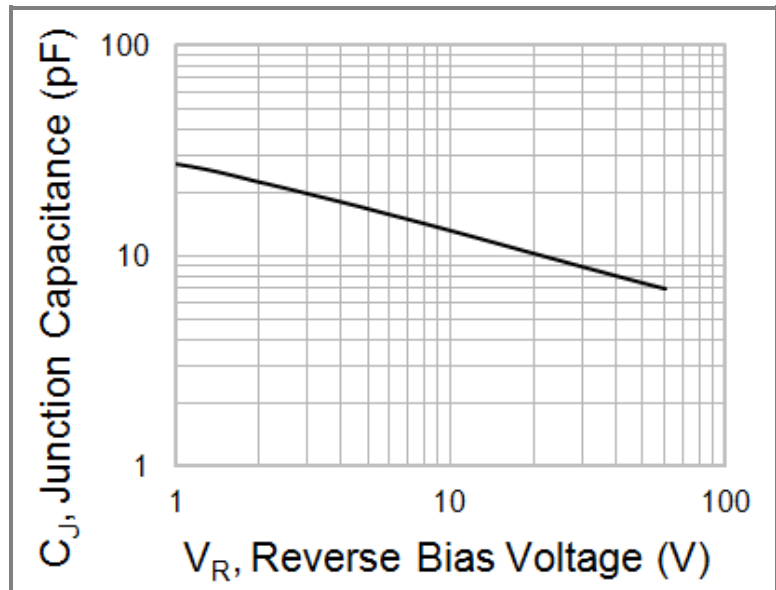


Fig.2 Typical Junction Capacitance

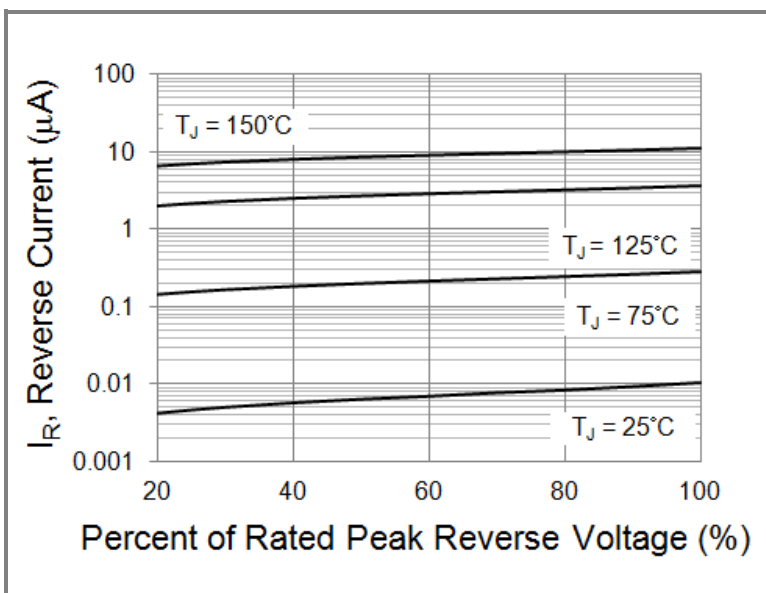


Fig.3 Typical Reverse Characteristics

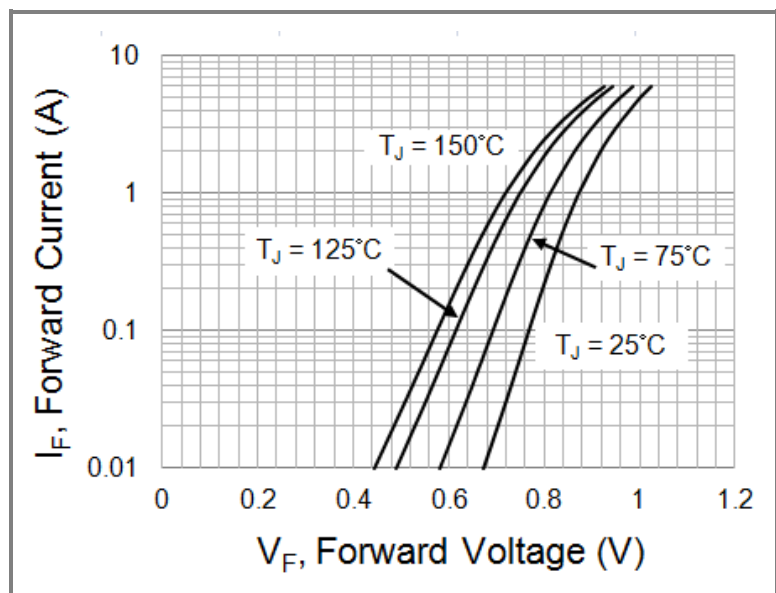


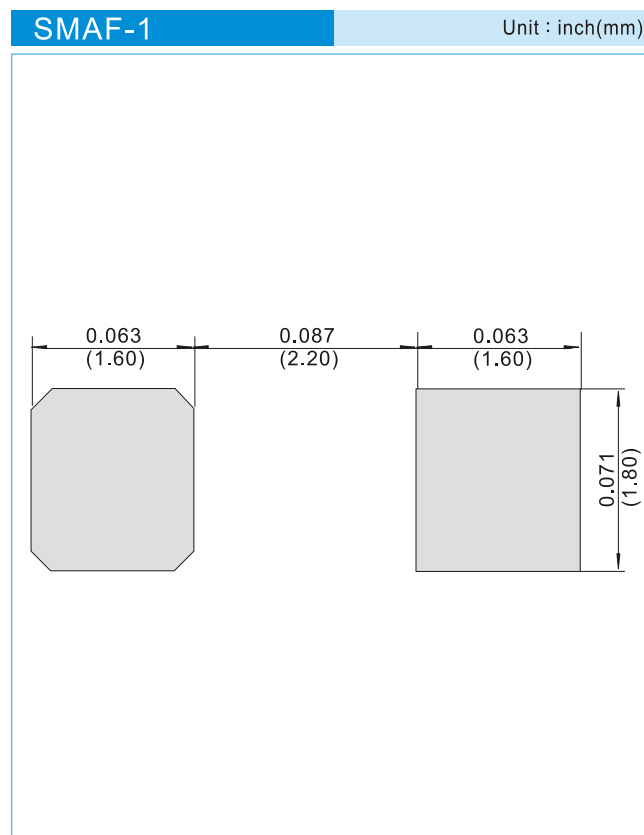
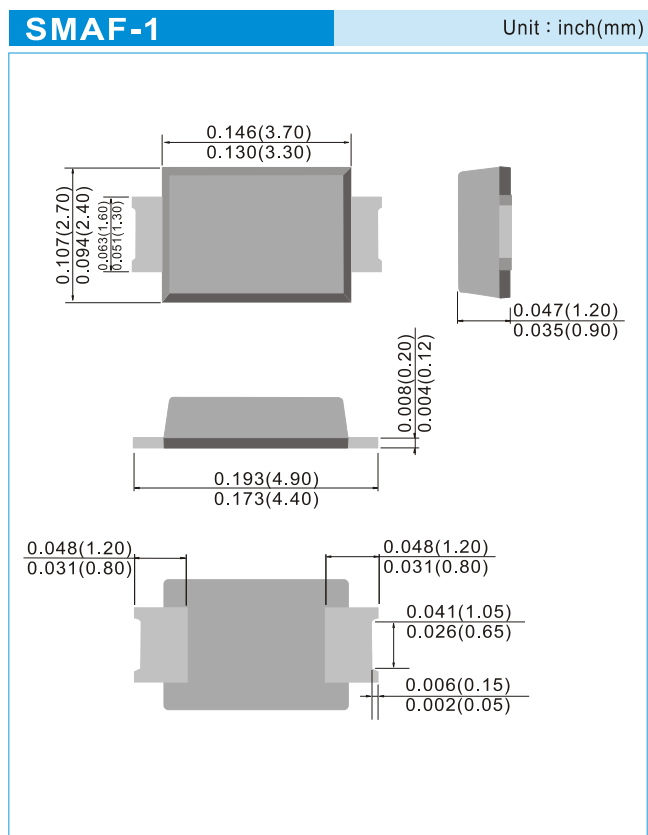
Fig.4 Typical Forward Characteristics

# GS2DF-LE SERIES

## Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
GS2DF-LE_R1_00001	SMAF-1	3K pcs / 7" reel	LGS2DF	Halogen free
GS2DF-LE_R2_00001	SMAF-1	10K pcs / 13" reel	LGS2DF	Halogen free
GS2GF-LE_R1_00001	SMAF-1	3K pcs / 7" reel	LGS2GF	Halogen free
GS2GF-LE_R2_00001	SMAF-1	10K pcs / 13" reel	LGS2GF	Halogen free
GS2JF-LE_R1_00001	SMAF-1	3K pcs / 7" reel	LGS2JF	Halogen free
GS2JF-LE_R2_00001	SMAF-1	10K pcs / 13" reel	LGS2JF	Halogen free
GS2KF-LE_R1_00001	SMAF-1	3K pcs / 7" reel	LGS2KF	Halogen free
GS2KF-LE_R2_00001	SMAF-1	10K pcs / 13" reel	LGS2KF	Halogen free
GS2MF-LE_R1_00001	SMAF-1	3K pcs / 7" reel	LGS2MF	Halogen free
GS2MF-LE_R2_00001	SMAF-1	10K pcs / 13" reel	LGS2MF	Halogen free

## Packaging Information & Mounting Pad Layout





## GS2DF-LE SERIES

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