



## GS2DF-LE SERIES

### SURFACE MOUNT RECTIFIER

**Voltage**

**200~1000 V**

**Current**

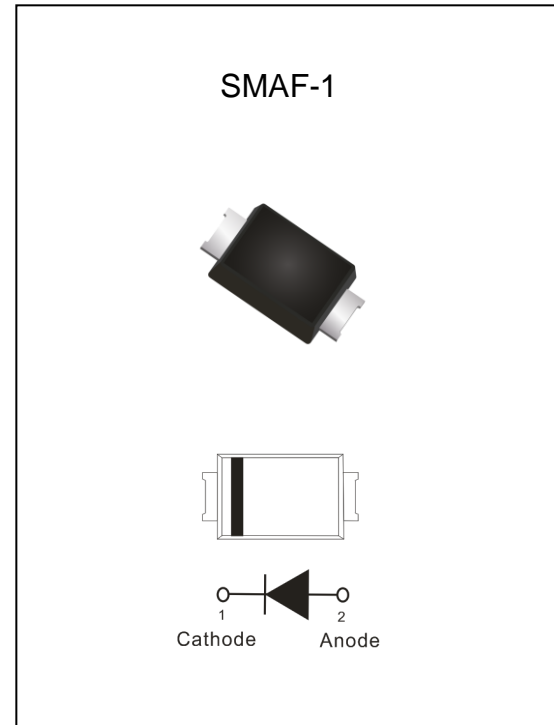
**2 A**

#### Features

- For surface mounted applications in order to optimize board space
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- 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



# GS2DF-LE SERIES

## TYPICAL CHARACTERISTIC CURVES

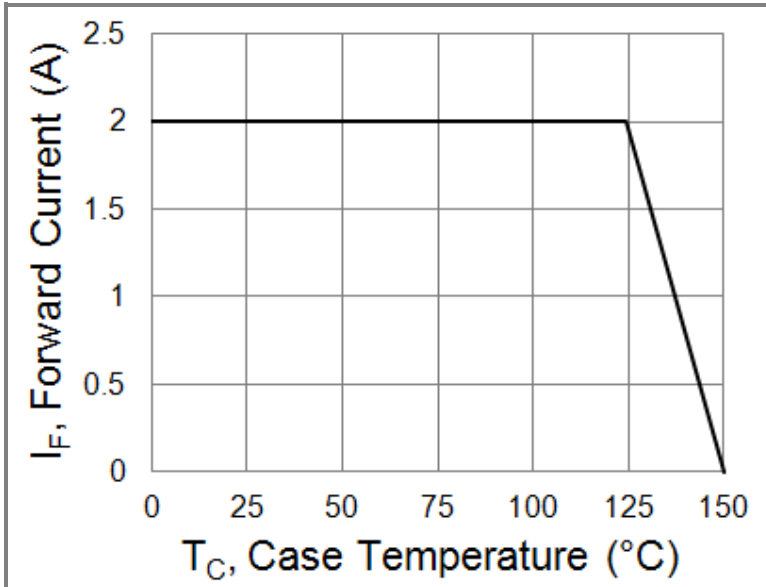


Fig.1 Forward Current Derating Curve

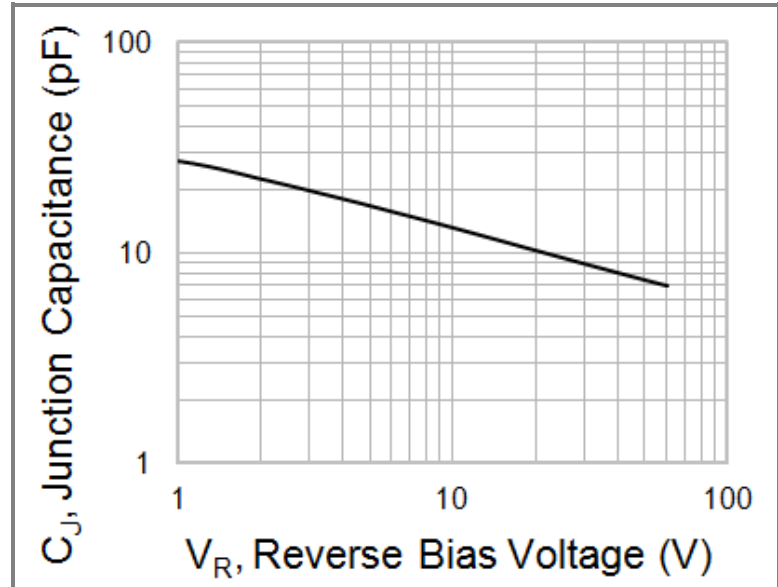


Fig.2 Typical Junction Capacitance

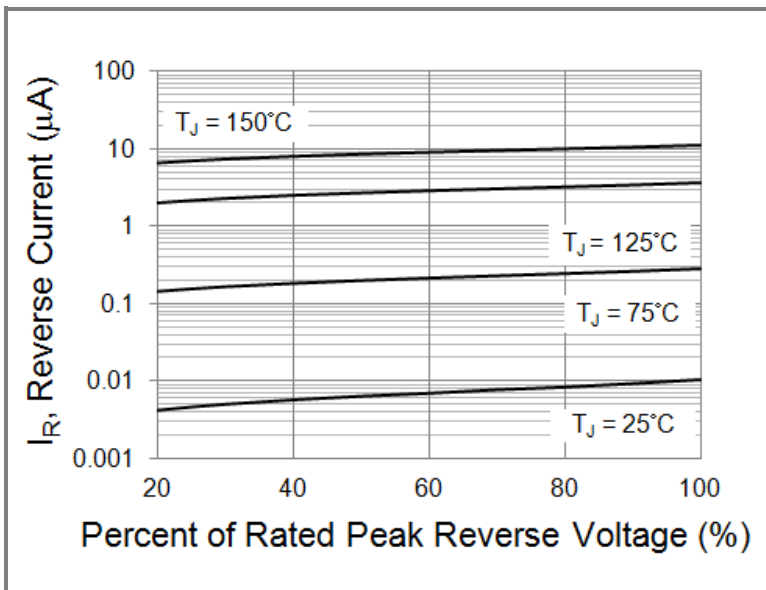


Fig.3 Typical Reverse Characteristics

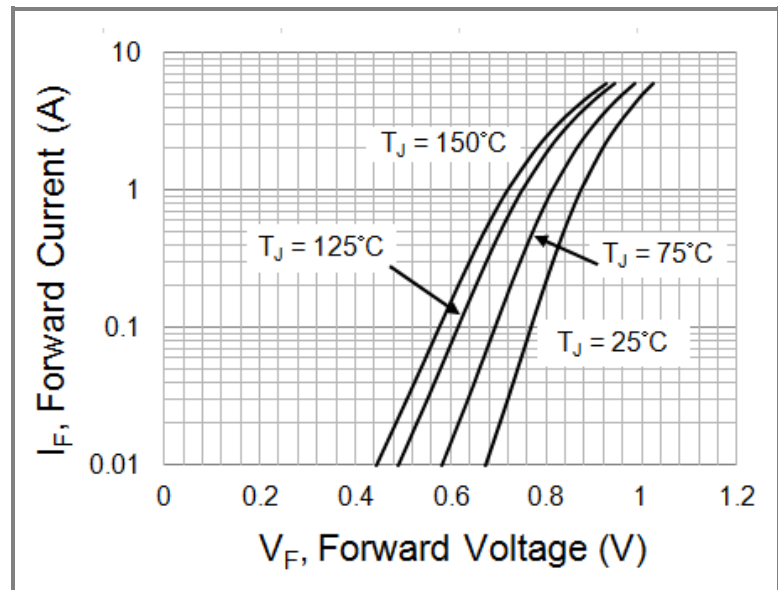


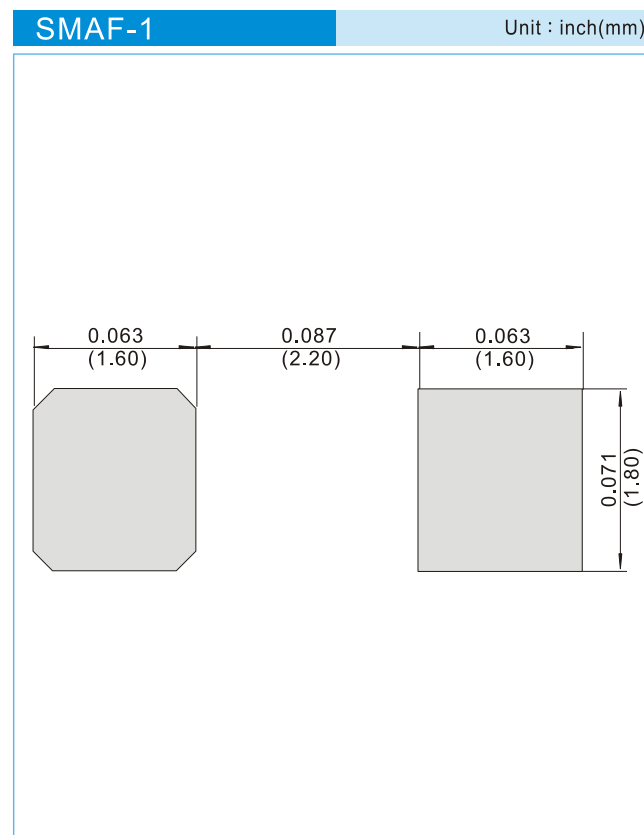
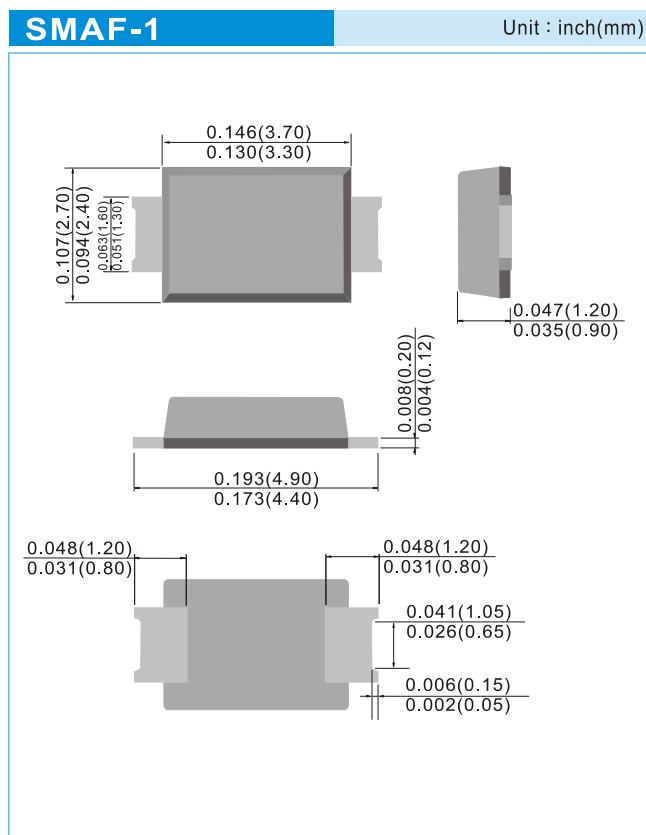
Fig.4 Typical Forward Characteristics

# 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

### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.