

## GS1GAFC-AU ~ GS1MAFC-AU Series

### Surface Mount General Purpose Rectifier

Voltage	400~1000 V	Current	1 A
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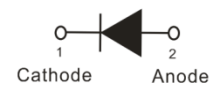
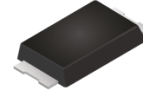
#### Features

- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

#### Mechanical Data

- Case : Molded plastic, SMAF-C
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0012 ounces, 0.034 grams

#### SMAF-C



### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

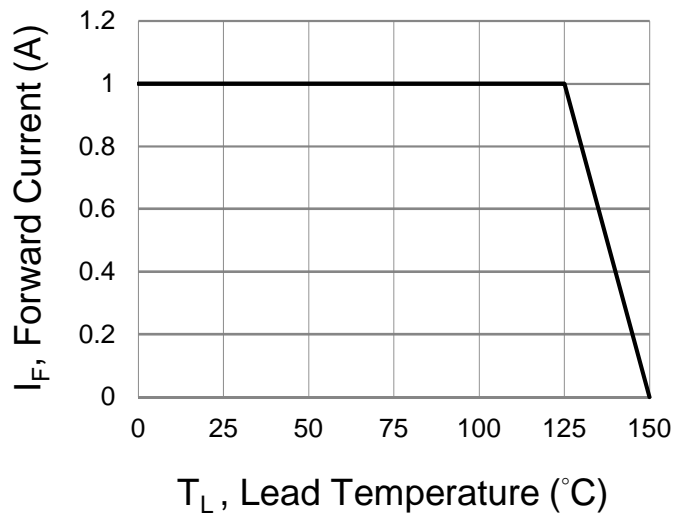
PARAMETER	SYMBOL	GS1GAFC-AU	GS1JAFC-AU	GS1KAFC-AU	GS1MAFC-AU	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>R</sub>	400	600	800	1000	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	1				A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	30				A
Forward Voltage at 1A	V <sub>F</sub>	1.1				V
Reverse Current	I <sub>R</sub>	1				µA
Typical Junction Capacitance Measured at 1 MHz And Applied V <sub>R</sub> = 4V	C <sub>J</sub>	7				pF
Typical Thermal Resistance	(Note 1) R <sub>θJL</sub>	20				°C/W
	(Note 2) R <sub>θJA</sub>	150				
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150				°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150				°C

#### NOTES:

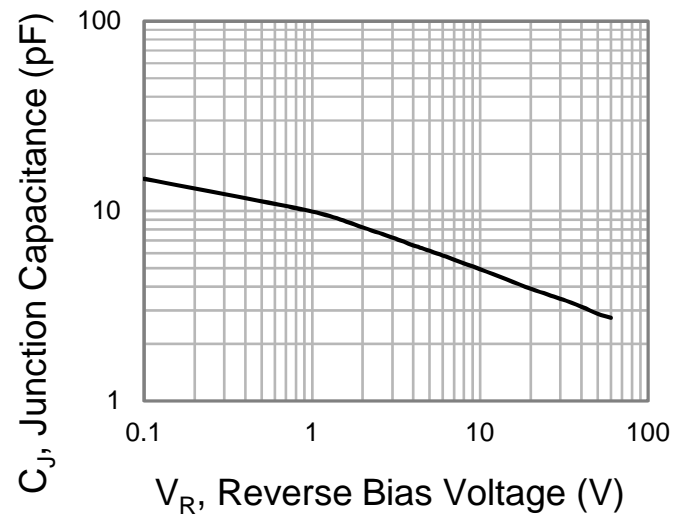
1. Mounted on 48cm<sup>2</sup> FR-4 PCB
2. Mounted on a FR4 PCB, single-sided copper, standard footprint

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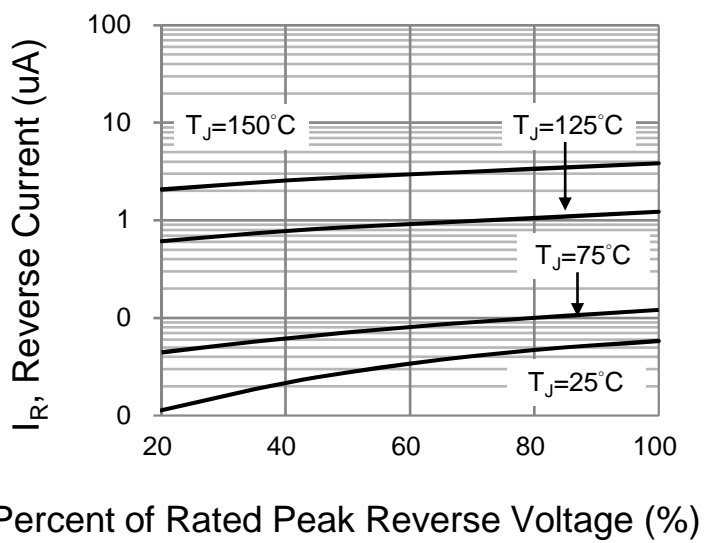
### TYPICAL CHARACTERISTIC CURVES



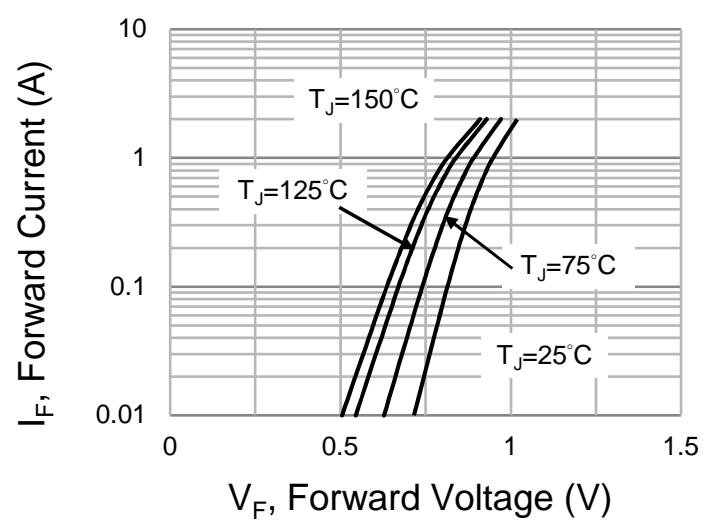
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



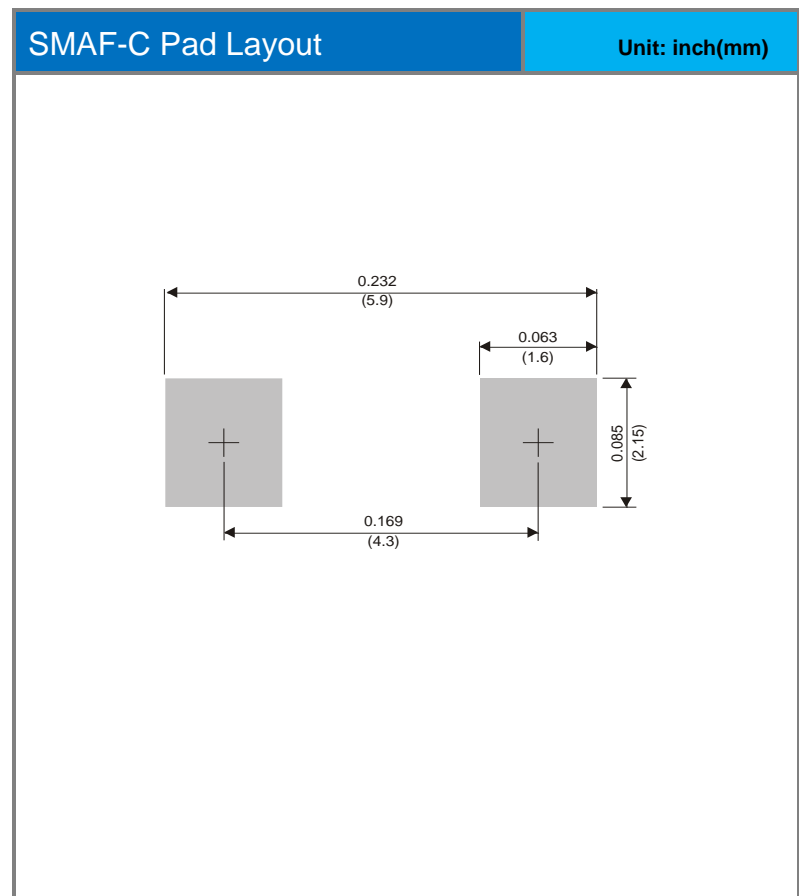
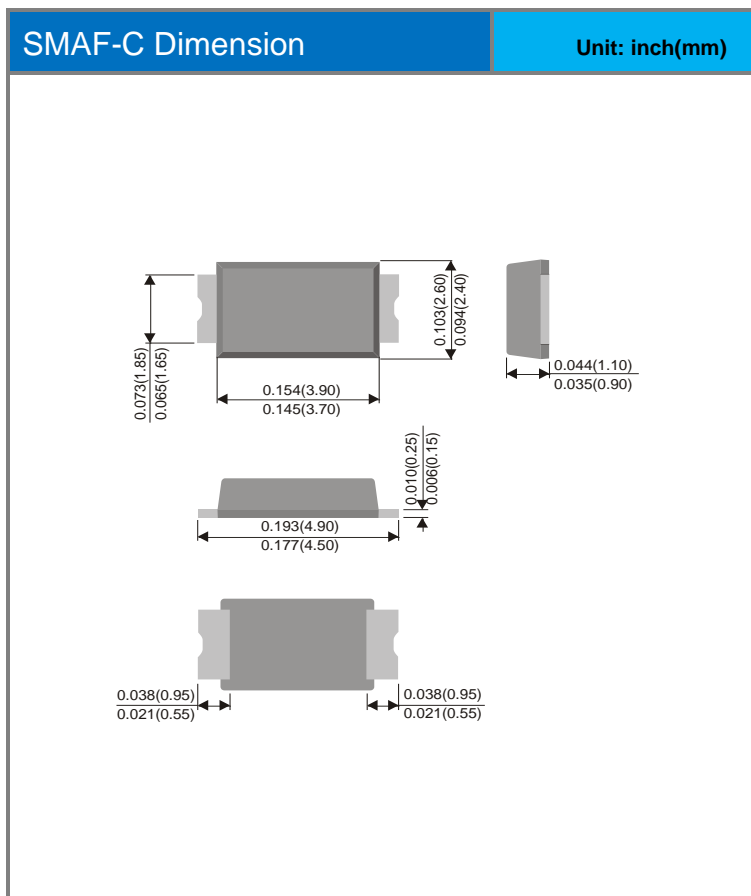
**Fig.4 Typical Forward Characteristics**

## GS1GAFC-AU ~ GS1MAFC-AU Series

### Product and Packing Information

Part No.	Package Type	Packing Type	Marking
GS1GAFC-AU	SMAF-C	3K pcs / 7" reel	GS1G
GS1JAFC-AU	SMAF-C	3K pcs / 7" reel	GS1J
GS1KAFC-AU	SMAF-C	3K pcs / 7" reel	GS1K
GS1MAFC-AU	SMAF-C	3K pcs / 7" reel	GS1M

### Packaging Information & Mounting Pad Layout



## GS1GAFC-AU ~ GS1MAFC-AU Series

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