



### **Surface Mount General Purpose Rectifier**

Voltage 400~1000 V Current 1 A

#### **Features**

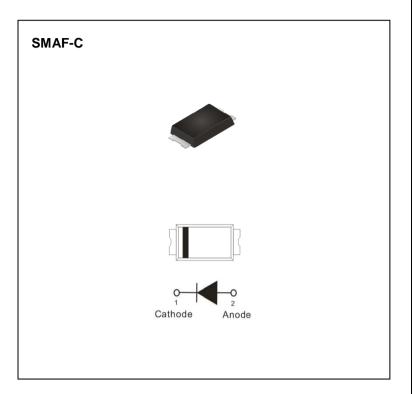
- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

#### **Mechanical Data**

• Case : Molded plastic, SMAF-C

• Terminals : Solderable per MIL-STD-750, Method 2026

• Approx. Weight: 0.0012 ounces, 0.034 grams



### 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	Vrrm	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	280	420	560	700	V
Maximum DC Blocking Voltage	VR	400	600	800	1000	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	1			А	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	30				А
Forward Voltage at 1A	V <sub>F</sub>	1.1				V
Reverse Current	I <sub>R</sub>	1				uA
Typical Junction Capacitance  Measured at 1 MHz And Applied $V_R = 4V$	Сл	7				pF
Typical Thermal Resistance (Note 1) (Note 2)	R <sub>0JL</sub> R <sub>0JA</sub>	20 150			°C/W	
Operating Junction Temperature Range	TJ	-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





# **TYPICAL CHARACTERISTIC CURVES**

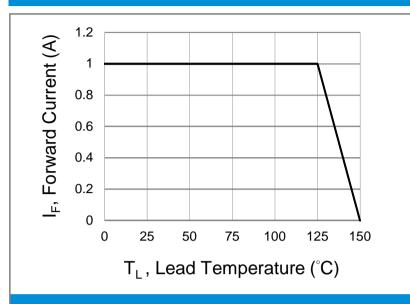
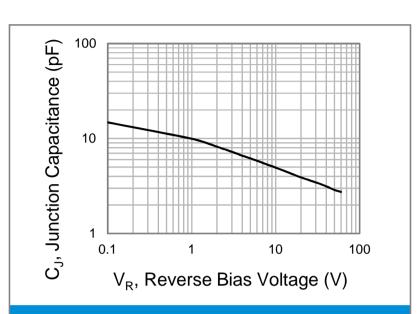
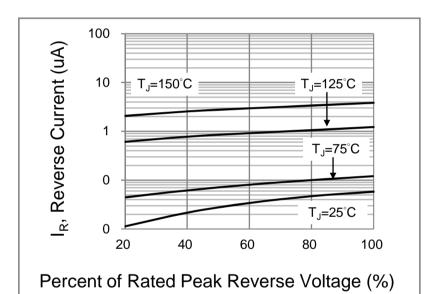


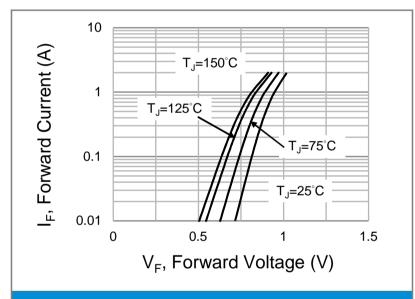
Fig.1 Forward Current Derating Curve



**Fig.2 Typical Junction Capacitance** 



**Fig.3 Typical Reverse Characteristics** 



**Fig.4 Typical Forward Characteristics** 

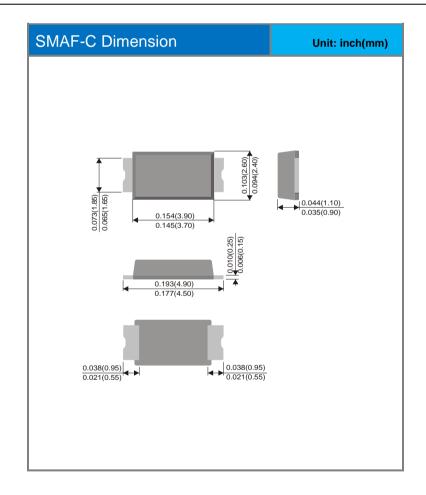


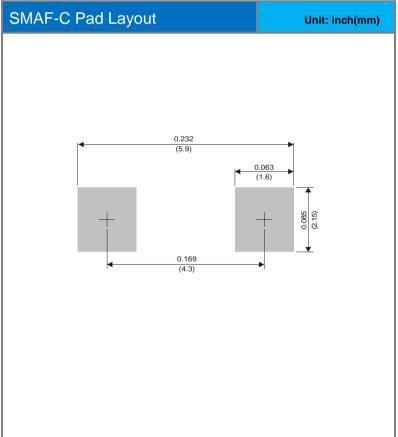


### Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
GS1GAFC-AU_R1_000A1	SMAF-C	3K pcs / 7" reel	GS1G	Halogen free
GS1JAFC-AU_R1_000A1	SMAF-C	3K pcs / 7" reel	GS1J	Halogen free
GS1KAFC-AU_R1_000A1	SMAF-C	3K pcs / 7" reel	GS1K	Halogen free
GS1MAFC-AU_R1_000A1	SMAF-C	3K pcs / 7" reel	GS1M	Halogen free

### **Packaging Information & Mounting Pad Layout**









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