



## GS1GAFC ~ GS1MAFC Series

### Surface Mount General Purpose Rectifier

<b>Voltage</b>	<b>400~1000 V</b>	<b>Current</b>	<b>1 A</b>
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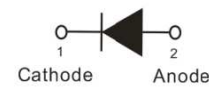
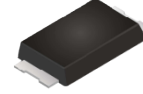
#### Features

- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- 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	GS1JAFC	GS1KAFC	GS1MAFC	UNIT
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
Instantaneous 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 <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

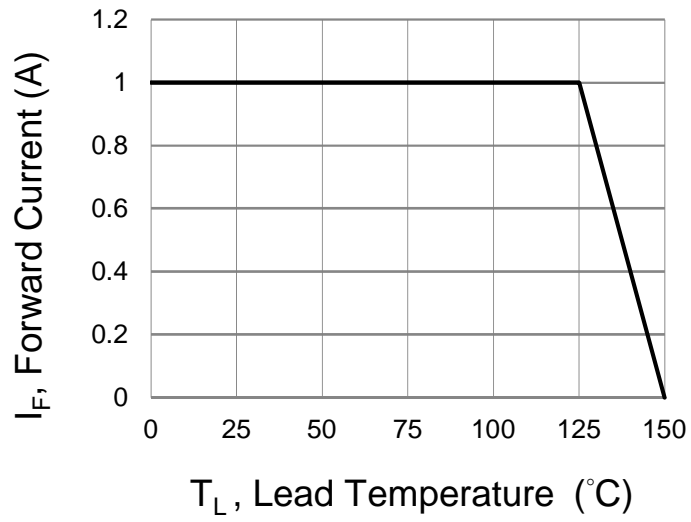
#### NOTES:

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

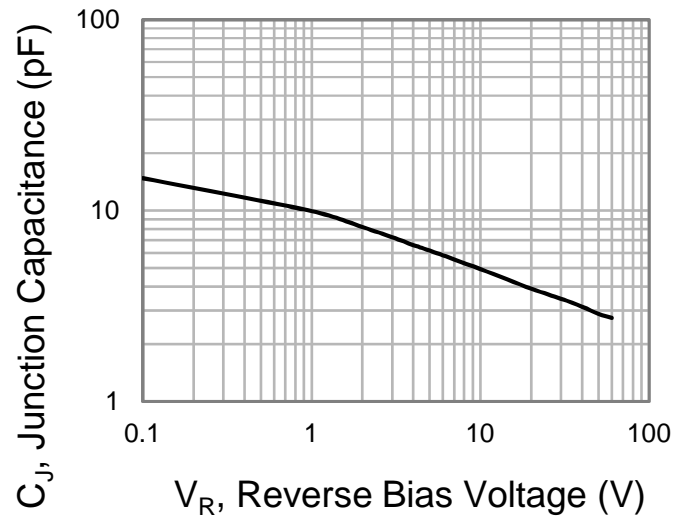


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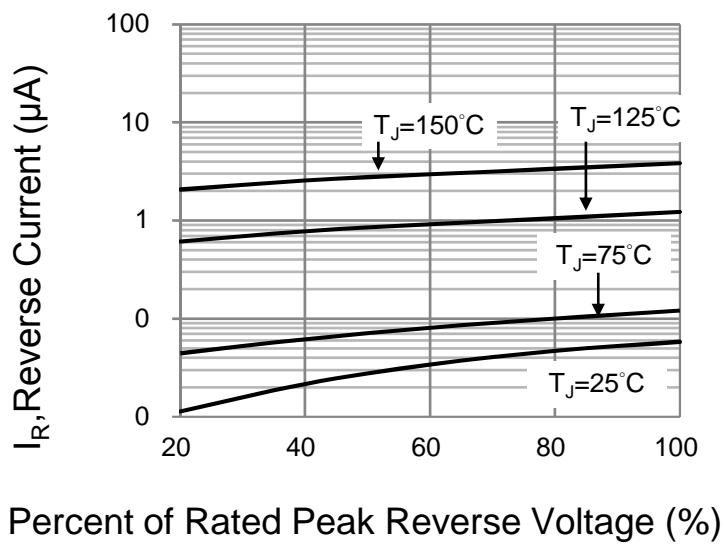
### TYPICAL CHARACTERISTIC CURVES



**Fig.1 Forward Current Derating Curve**

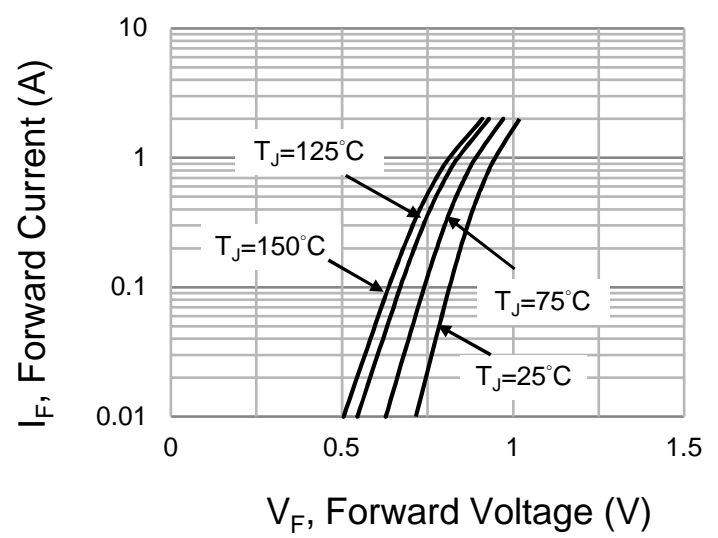


**Fig.2 Typical Junction Capacitance**



Percent of Rated Peak Reverse Voltage (%)

**Fig.3 Typical Reverse Characteristics**



Forward Voltage (V)

**Fig.4 Typical Forward Characteristics**



## GS1GAFC ~ GS1MAFC Series

### Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
GS1GAFC_R1_00001	SMAF-C	3K pcs / 7" reel	GS1G	Halogen free
GS1JAFC_R1_00001	SMAF-C	3K pcs / 7" reel	GS1J	Halogen free
GS1KAFC_R1_00001	SMAF-C	3K pcs / 7" reel	GS1K	Halogen free
GS1MAFC_R1_00001	SMAF-C	3K pcs / 7" reel	GS1M	Halogen free

### Packaging Information & Mounting Pad Layout

