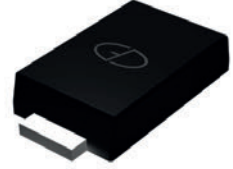


GS2AS thru GS2MS

Surface Mount General Purpose Rectifiers
 Reverse Voltage 50V-1000V Forward Current 2A

Features

- Plastic package has underwriters laboratory flammability classification 94V-0
- Construction utilizes void-free molded plastic technique
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



SMAF

Mechanical Data

- Case: SMAF molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end



Maximum Ratings and Electrical Characteristics

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate by 20%.)

Parameters	Symbols	GS 2AS	GS 2BS	GS 2DS	GS 2GS	GS 2JS	GS 2KS	GS 2MS	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	2.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Maximum Instantaneous Forward Voltage at 2.0A ¹	V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage	$T_J=25^{\circ}C$	5.0							μA
	$T_J=125^{\circ}C$	100							
Typical Thermal Resistance, Junction to Ambient ²	$R_{\theta JA}$	75							$^{\circ}C/W$
Typical Thermal Resistance, Junction to Lead ²	$R_{\theta JL}$	27							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}C$

Notes:

1. Pulse test: 300 μs pulse width.
2. Thermal resistance from junction to ambient and from junction to lead, mounted on PCB with 0.2X0.2" (5.0X5.0mm) copper pad areas.

Ratings and Characteristics Curves

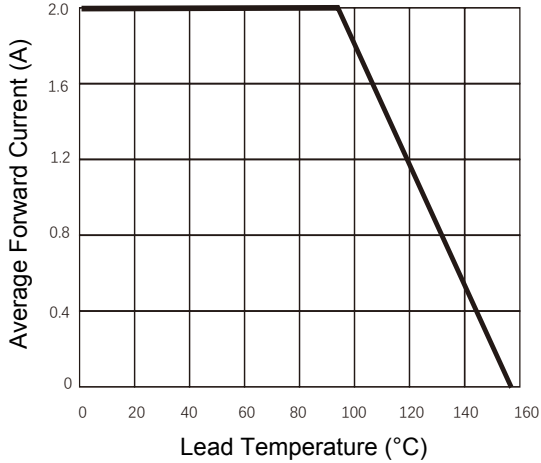


Figure 1. Forward Current Derating Curve

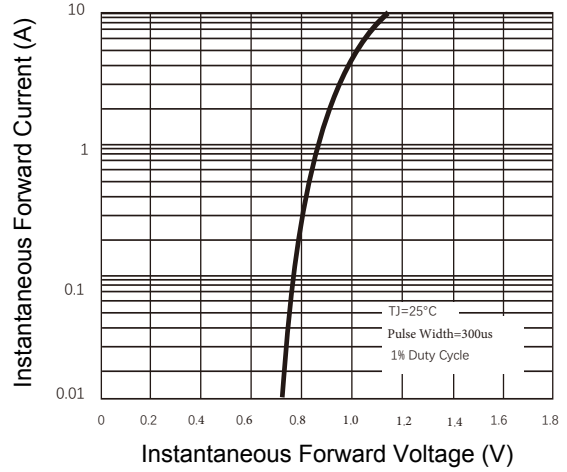


Figure 2. Typical Instantaneous Forward Characteristics

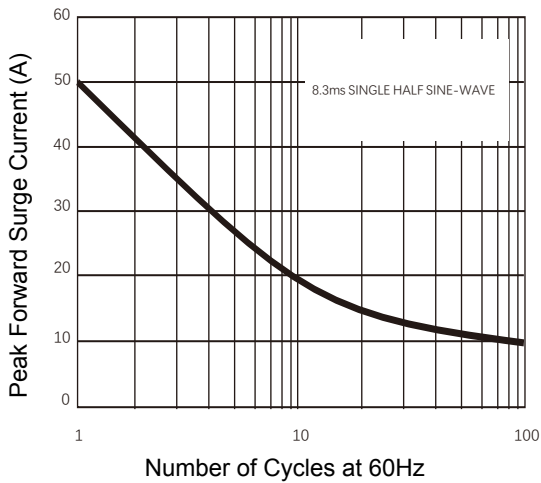


Figure 3. Maximum Non-Repetitive Peak Forward Surge Current

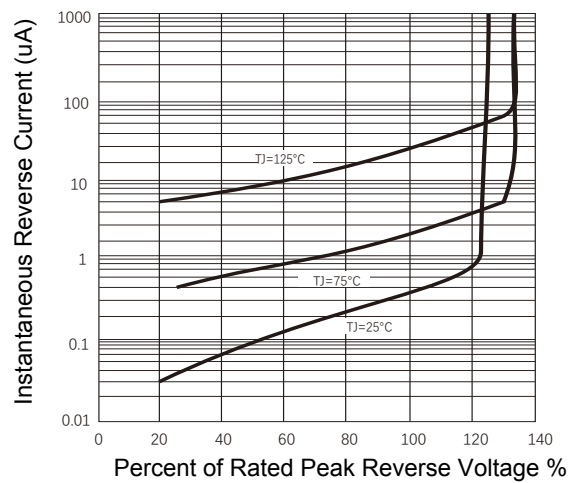
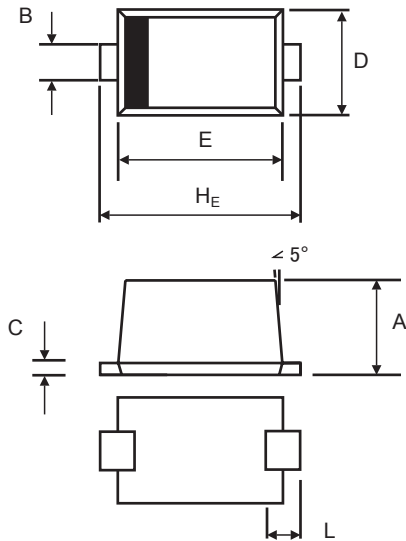


Figure 4. Typical Reverse Characteristics

GS2AS thru GS2MS

Surface Mount General Purpose Rectifiers
 Reverse Voltage 50V-1000V Forward Current 2A

Package Outline Dimensions (SMAF)



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.90	1.50	0.035	0.059
B	1.30	1.60	0.051	0.063
C	0.10	0.30	0.004	0.012
D	2.40	2.80	0.094	0.110
E	3.25	3.70	0.128	0.146
HE	4.35	4.90	0.171	0.193
L	0.60	1.20	0.024	0.047

Order Information

Device	Package	Marking	Quantity	HSF Status
GS2AS	SMAF	S2AS	3,000pcs / Reel	RoHS Compliant
GS2BS	SMAF	S2BS	3,000pcs / Reel	RoHS Compliant
GS2DS	SMAF	S2DS	3,000pcs / Reel	RoHS Compliant
GS2GS	SMAF	S2GS	3,000pcs / Reel	RoHS Compliant
GS2JS	SMAF	S2JS	3,000pcs / Reel	RoHS Compliant
GS2KS	SMAF	S2KS	3,000pcs / Reel	RoHS Compliant
GS2MS	SMAF	S2MS	3,000pcs / Reel	RoHS Compliant

For more information, please contact us at: inquiry@goodarksemi.com