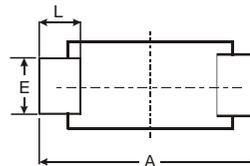
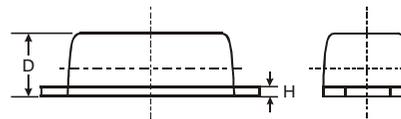
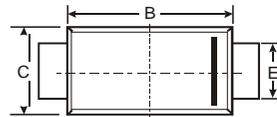
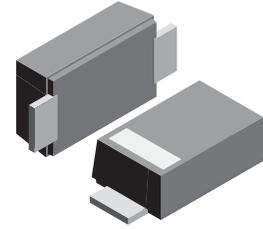


**VOLTAGE RANGE: 50 - 1000V**

**CURRENT: 1.0 A**

### Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-0



SMAF			
Dim	Min	Max	Typ
A	4.75	4.85	4.80
B	3.68	3.72	3.70
C	2.57	2.63	2.60
D	0.097	1.03	1.00
E	1.38	1.42	1.40
H	0.13	0.17	0.15
L	0.63	0.67	0.65
All Dimensions in mm			

### Mechanical Data

- Case: SMAF, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0018 ounce, 0.064 grams



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

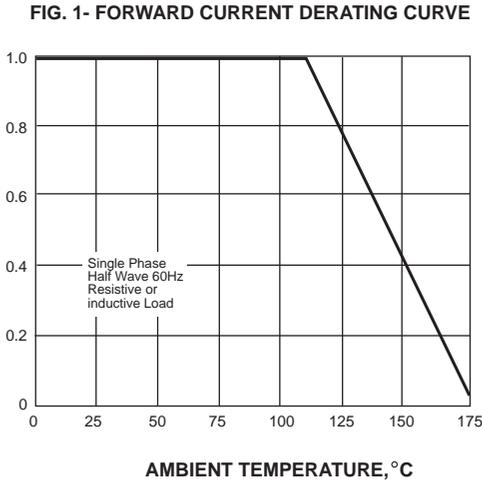
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GS1AF	GS1BF	GS1DF	GS1GF	GS1JF	GS1KF	GS1MF	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V <sub>RWM</sub>								
DC Blocking Voltage	V <sub>R</sub>								
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T <sub>L</sub> = 100°C	I <sub>O</sub>	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30							A
Forward Voltage @ I <sub>F</sub> = 1.0A	V <sub>FM</sub>	1.10							V
Peak Reverse Current @ T <sub>A</sub> = 25°C	I <sub>RM</sub>	5.0							μA
At Rated DC Blocking Voltage @ T <sub>A</sub> = 125°C		200							
Reverse Recovery Time (Note 1)	t <sub>rr</sub>	2.5							μS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	15							pF
Typical Thermal Resistance (Note 3)	R <sub>θJL</sub>	30							°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +175							°C

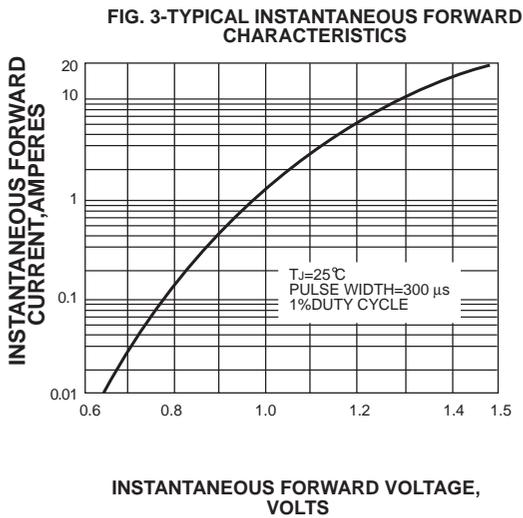
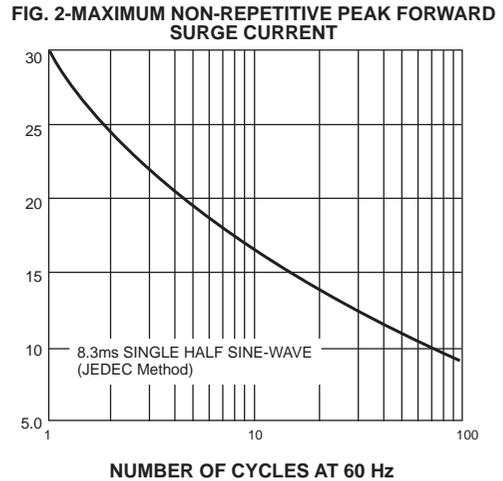
- Note: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A,  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.  
 3. Mounted on P.C. Board with 8.0mm<sup>2</sup> land area.

### RATINGS AND CHARACTERISTIC CURVES GS1AF THRU GS1MF

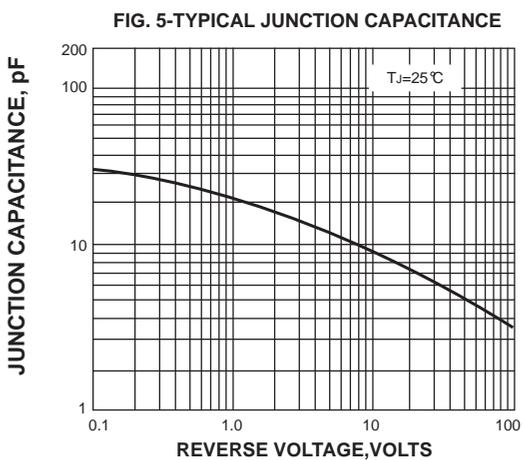
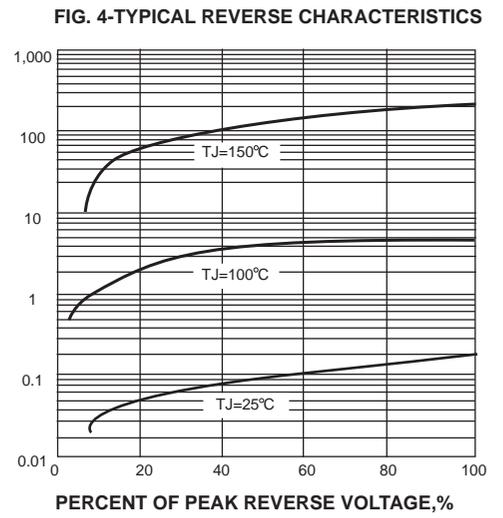
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



PEAK FORWARD SURGE CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



TRANSIENT THERMAL IMPEDANCE, °C/W

