

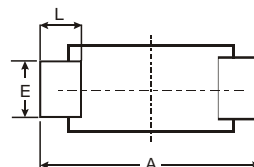
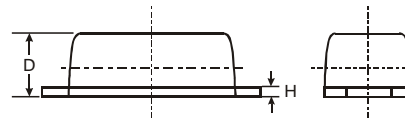
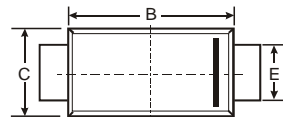
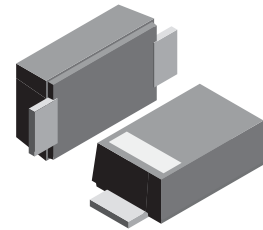
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 1.0 A**

### Features

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- High temperaturesoldering : 260°C /10 seconds at terminals
- Glass Passivated Chip Junction

### 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



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

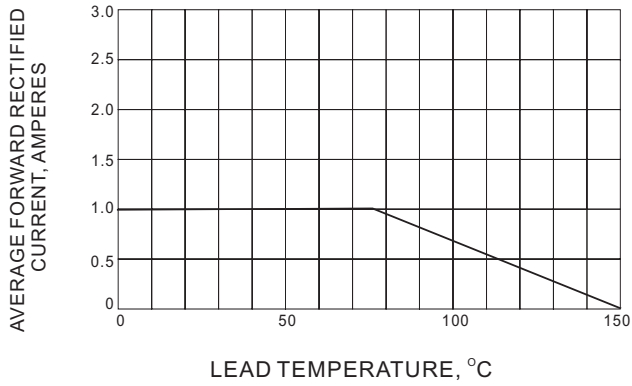
### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

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

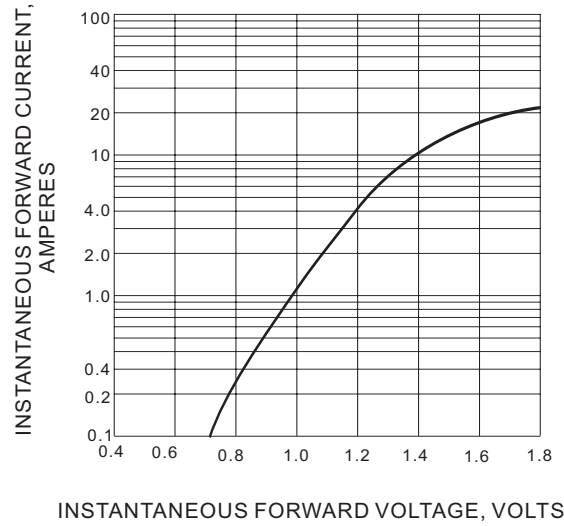
Characteristic	Symbol	GS1000F	GS1002F	GS1003F	GS1004F	GS1006F	GS1008F	GS1010F	Unit
	Marking	FA	FB	FD	FG	FJ	FK	FM	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at T <sub>A</sub> =65°C (NOTE 1)	I <sub>(AV)</sub>	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T <sub>L</sub> =25°C	I <sub>FSM</sub>	25.0							A
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	1.1							V
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =125°C	I <sub>R</sub>	10.0 50.0							μA
Typical junction capacitance (NOTE 2)	C <sub>J</sub>	4							pF
Typical thermal resistance (NOTE 3)	R <sub>θJA</sub>	65							K/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-50 to +150							°C

**Note:** 1. Averaged over any 20ms period.  
 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

**RATING AND CHARACTERISTIC CURVES**

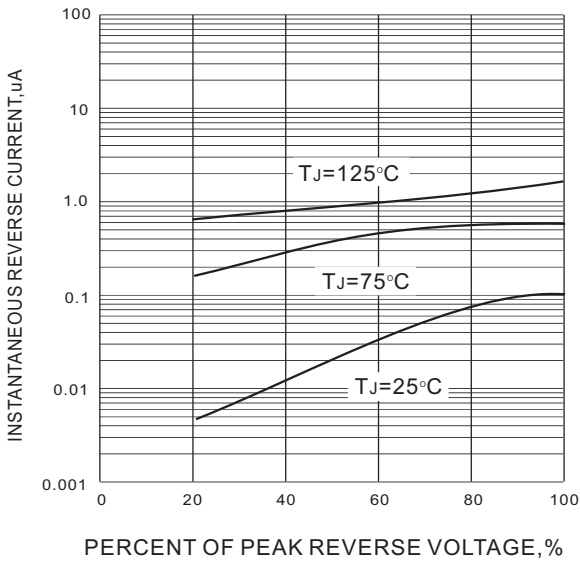


**Fig.1 FORWARD CURRENT DERATING CURVE**

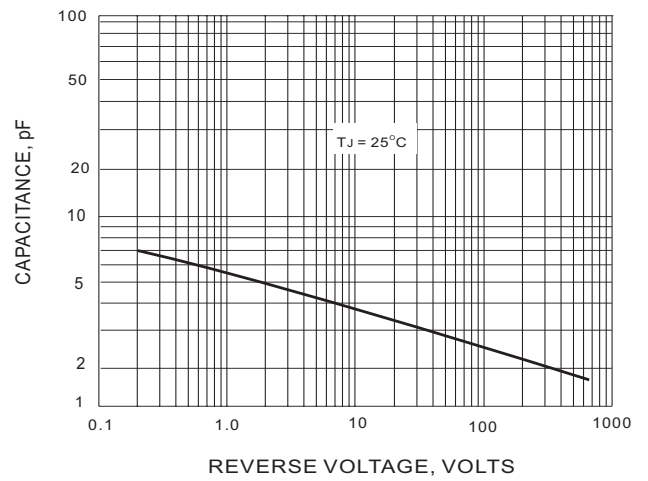


**INSTANTANEOUS FORWARD VOLTAGE, VOLTS**

**Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**Fig.3 TYPICAL REVERSE CHARACTERISTICS**



**Fig.4 TYPICAL JUNCTION CAPACITANCE**