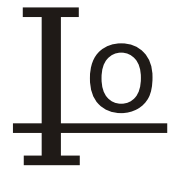


# GF1AS THRU GF1MS



## 1.0 AMP SILICON RECTIFIERS



### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Lead Free Finish/RoHS Compliant

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.0092 grams

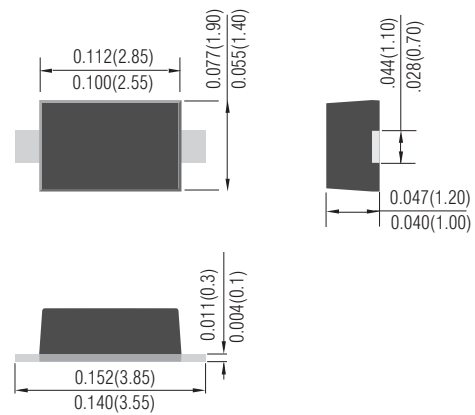
### VOLTAGE RANGE

50 to 1000 Volts

### CURRENT

1.0 Ampere

#### SOD-123FL



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	GF1AS	GF1BS	GF1DS	GF1GS	GF1JS	GF1KS	GF1MS	UNITS	
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
MARKING CODE	A1	A2	A3	A4	A5	A6	A7		
	S1A	S1B	S1D	S1G	S1J	S1K	S1M		
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=75°C								1.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								30	A
Maximum Instantaneous Forward Voltage at 1.0A								1.0	V
Maximum DC Reverse Current Ta=25°C								5.0	uA
at Rated DC Blocking Voltage Ta=100°C								50	uA
Typical Junction Capacitance (Note 1)								4	pF
Typical Thermal Resistance R JA (Note 2)								65	°C/W
Operating and Storage Temperature Range Tj, TSTG								-65— +150	°C

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Soldering land: 6mm x 6mm

## RATING AND CHARACTERISTIC CURVES (GF1AS THRU GF1MS)

Fig.1 FORWARD CURRENT DERATING CURVE

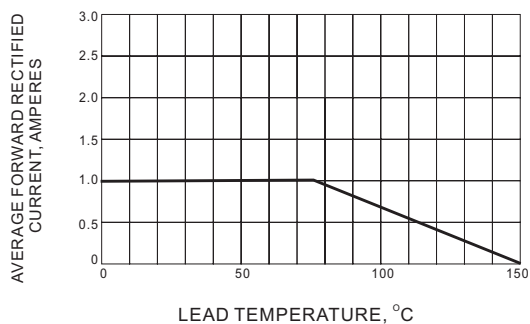


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

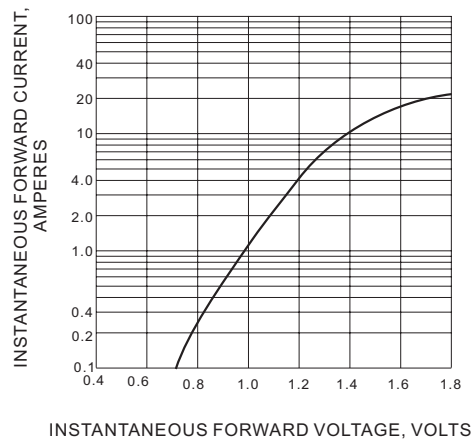


Fig.3 TYPICAL REVERSE CHARACTERISTICS

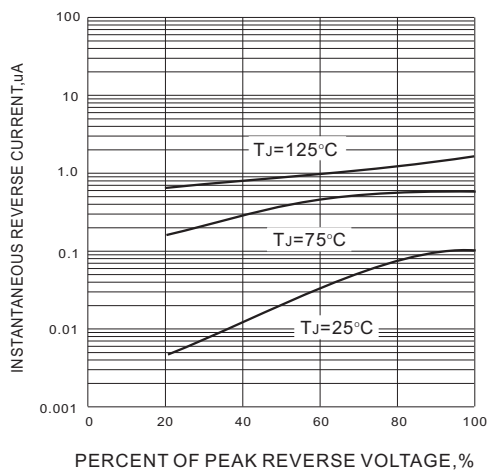
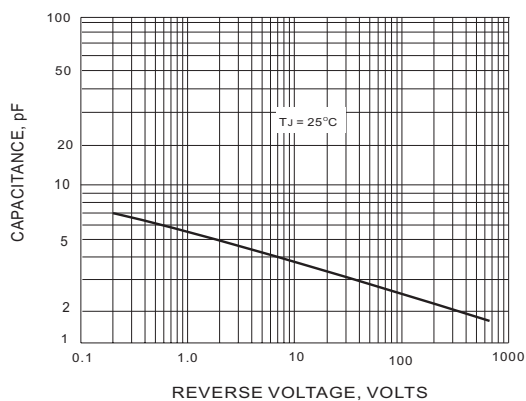


Fig.4 TYPICAL JUNCTION CAPACITANCE



### MOUNTING PAD LAYOUT

SOD-123FL Unit: inch ( mm )

