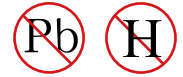




GPP SURFACE MOUNT RECTIFIER

VOLTAGE 50 to 1000 Volts CURRENT 1.0 Amperes



FEATURES

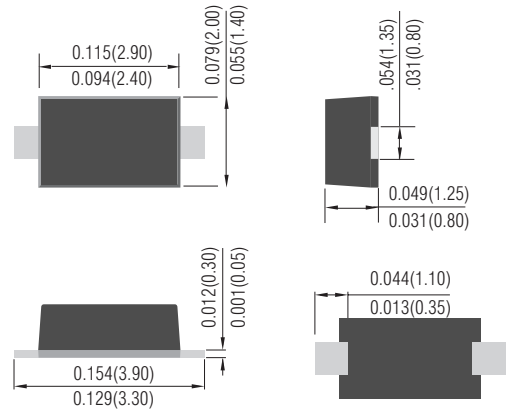
- For surface mounted applications
- Low profile package
- Ideal for automated placement
- High temperature soldering : 260°C /10 seconds at terminals
- Glass Passivated Chip Junction
- In compliance with EU RoHS 2002/95/EC directives
AEC-Q101 qualified

MECHANICAL DATA

Case:SOD-123S,Molded Plastic over passivated junction

- Terminals: Solderable per MIL-STD-750, Method 2026

SOD-123S Unit:inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GF1AS	GF1BS	GF1DS	GF1GS	GF1JS	GF1KS	GF1MS	UNIT
Marking Code		A1	A2	A3	A4	A5	A6	A7	
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 Current (Note 1)	$I_{F(AV)}$	1							A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	30 (60Hz)							A
Maximum Forward Voltage at 1.0A	V_F	1.1							V
Maximum DC Reverse Current at $T_A=25^\circ\text{C}$	I_R	10							uA
Rated DC Blocking Voltage $T_A=125^\circ\text{C}$		50							
Typical Junction Capacitance at 4.0V, 1MHz	C_J	4							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	65							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

NOTES:

- 1.Pulse test: 300u pulse width, 1% duty cycle.
- 2.Soldering land: 6mm x 6mm

DEVICE CHARACTERISTICS

GF1AS-A THRU GF1MS-A

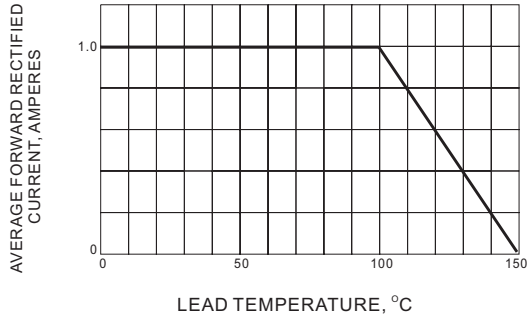


Fig.1 FORWARD CURRENT DERATING CURVE

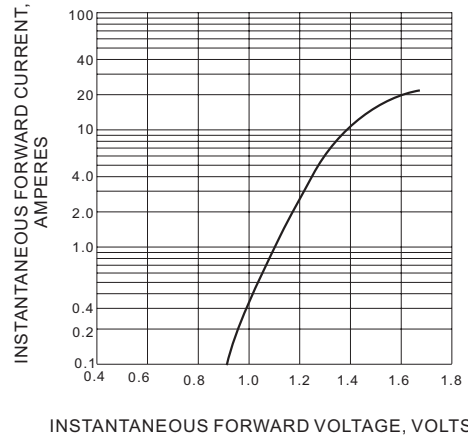


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

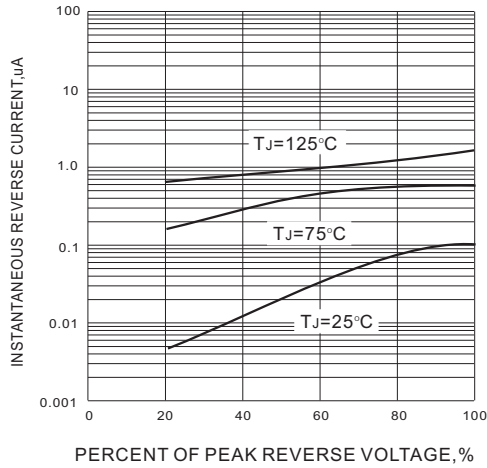


Fig.3 TYPICAL REVERSE CHARACTERISTICS

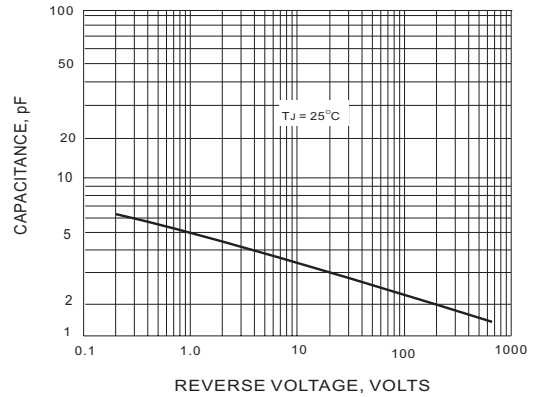


Fig.4 TYPICAL JUNCTION CAPACITANCE

MOUNTING PAD LAYOUT

SOD-123S Unit: inch (mm)

