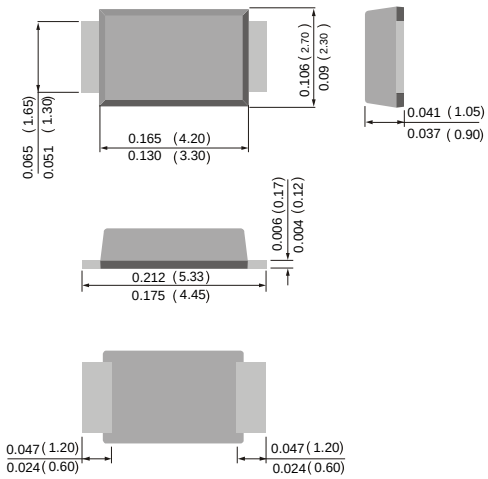
GS1AF~GS1MF

Glass Passivated General Purpose Rectifiers

VOLTAGE 50 to 1000 Volts CURRENT 1.0 Amperes

Green

SMAF Unit: inch (mm)



FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Low Forward Drop
- High temperature soldering : 260°C /10 seconds at terminals
- Glass Passivated Chip Junction
- Pb free product are available : 99% Sn above
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: JEDEC SMAF molded plastic
Terminals: Solder plated, solderable per MIL-STD-202G,Method 208
Polarity: Indicated by cathode band
Standard packaging: 12mm tape (EIA-481)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	GS1AF	GS1BF	GS1DF	GS1GF	GS1JF	GS1KF	GS1MF	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 Current	$I_{F(AV)}$	1							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Maximum Forward Voltage at 1A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5							μA
Typical Junction Capacitance Measured at 1MHz and applied V_R=4.0V	C_J	7							pF
Typical Junction Resistance (Note 1) (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	150 15							°C / W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +150							°C

NOTES:1. Measured at 1 MHz and applied V_r = 4.0 volts.
2. 8.0 mm^2 (.013mm thick) land areas.

GS1AF~GS1MF

RATING AND CHARACTERISTIC CURVES

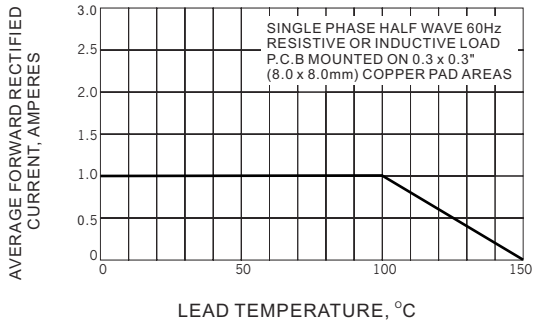


Fig.1 FORWARD CURRENT DERATING CURVE

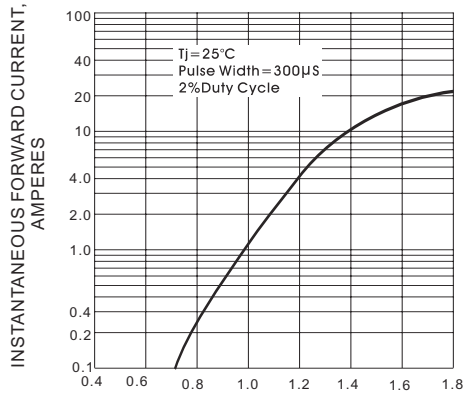


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

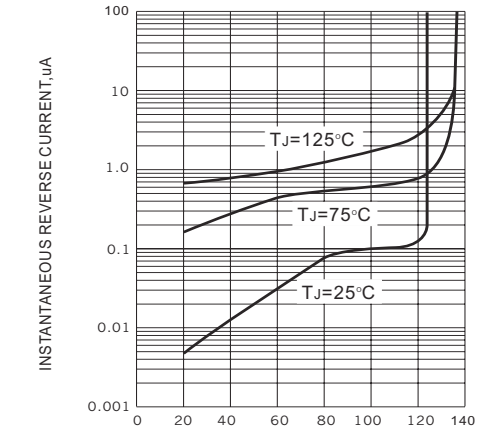


Fig.3 TYPICAL REVERSE CHARACTERISTICS

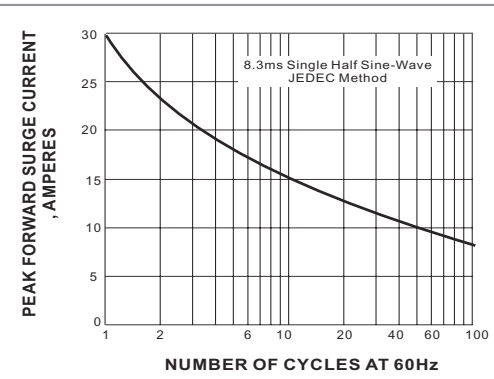


Fig.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

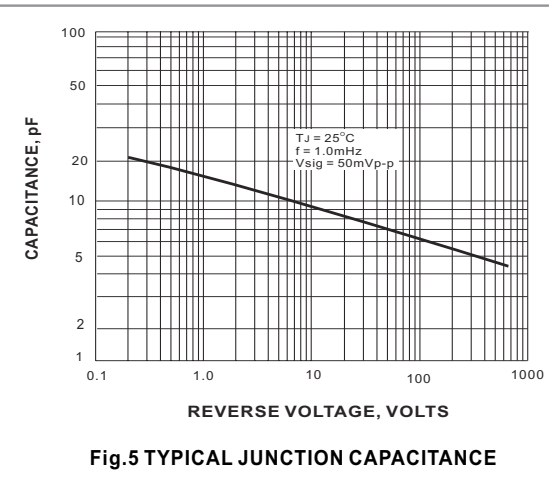


Fig.5 TYPICAL JUNCTION CAPACITANCE