

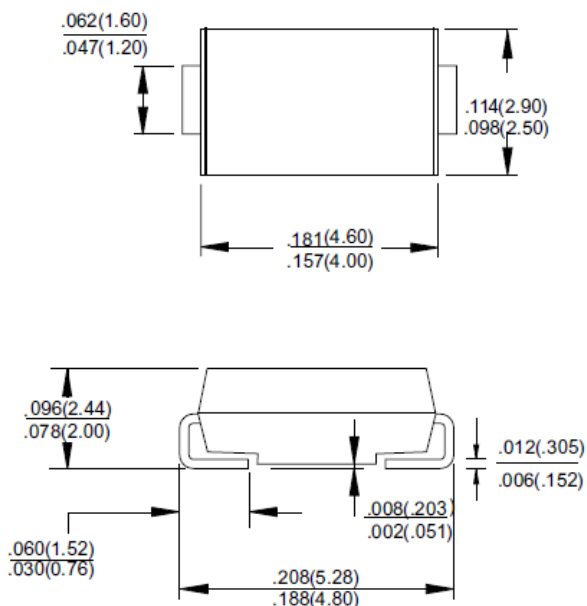
Features

- 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
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

Mechanical Data

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Indicated by cathode band
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.002 ounce, 0.064 gram

SMA/DO-214AC



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

	Symbols	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at @TL=75°C	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0							Amp
Maximum instantaneous forward voltage at 1.0 A (Note 1)	V_F	1.1							Volts
Maximum Reverse Current (Note 1) $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	I_R	5							μA
		100							
Maximum Reverse Recovery Time $T_J=25^\circ\text{C}$ (Note 1)	T_{RR}	2.5							μs
Typical Junction Capacitance (Note 2)	C_J	2.5							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	15							°C/W
Operating Temperature Range	T_J	-65 to +150							°C
Storage Temperature Range	T_{STG}	-65 to +150							°C

NOTES:

- 1.Reverse Recovery Test Conditions :IF=0.5A,IR=1.0A,IRR=0.25A.
- 2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. 8.0 mm² (.013mm thick) land areas.

RATINGS AND CHARACTERISTIC CURVES (GS1A THRU GS1M)

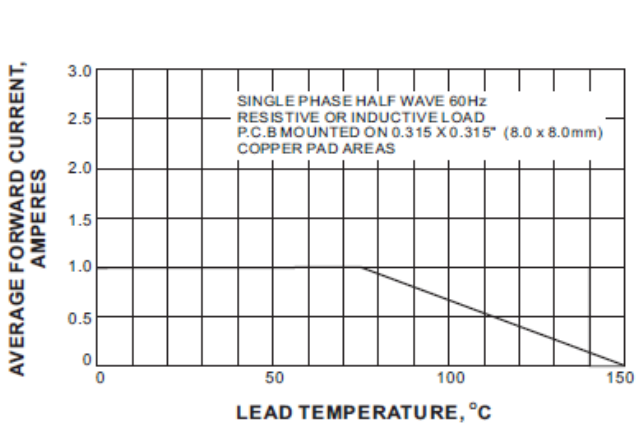


Fig.1-FORWARD CURRENT DERATING CURVE

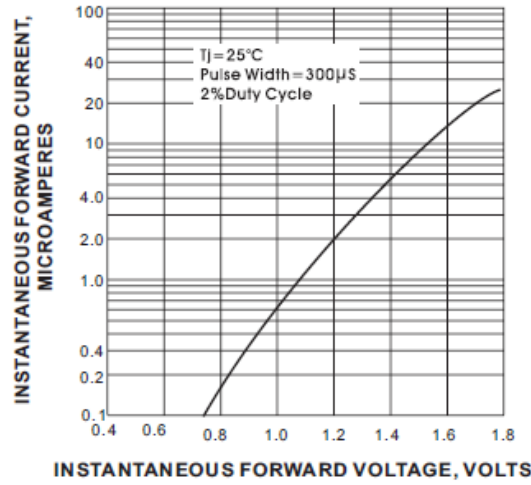


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

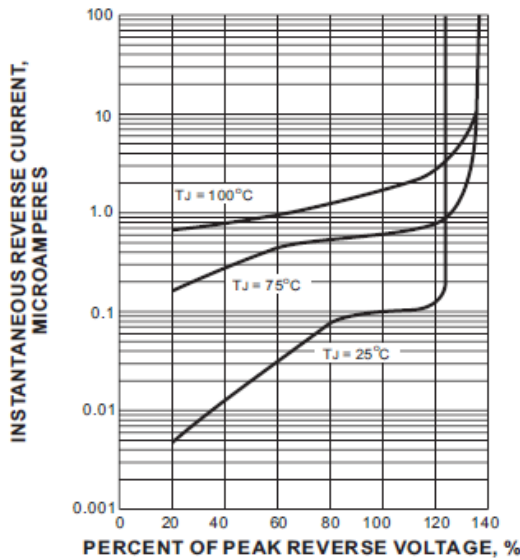


Fig.3-TYPICAL REVERSE CHARACTERISTICS

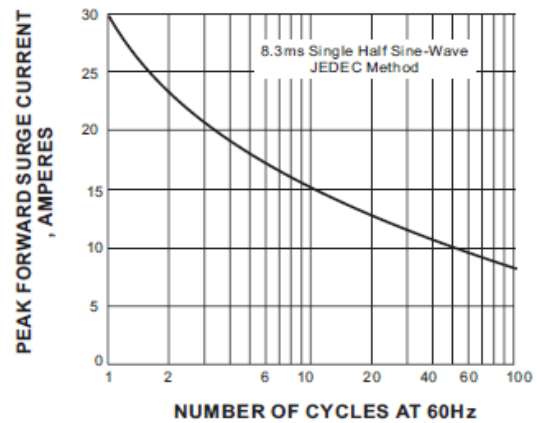


Fig.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

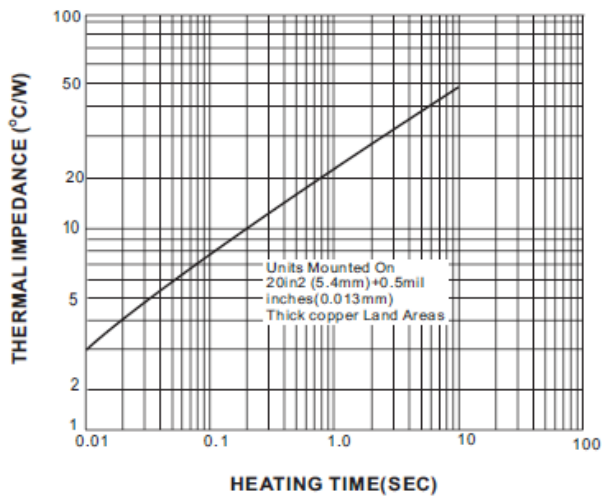


Fig.5-TRANSIENT THERMAL IMPEDANCE

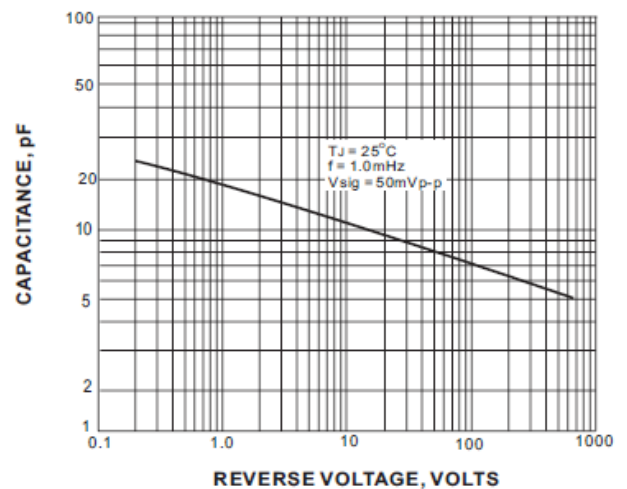


Fig.6-TYPICAL JUNCTION CAPACITANCE