

GS1J-E THRU GS1M-E

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE: 600V to 1000V

CURRENT: 1.0A

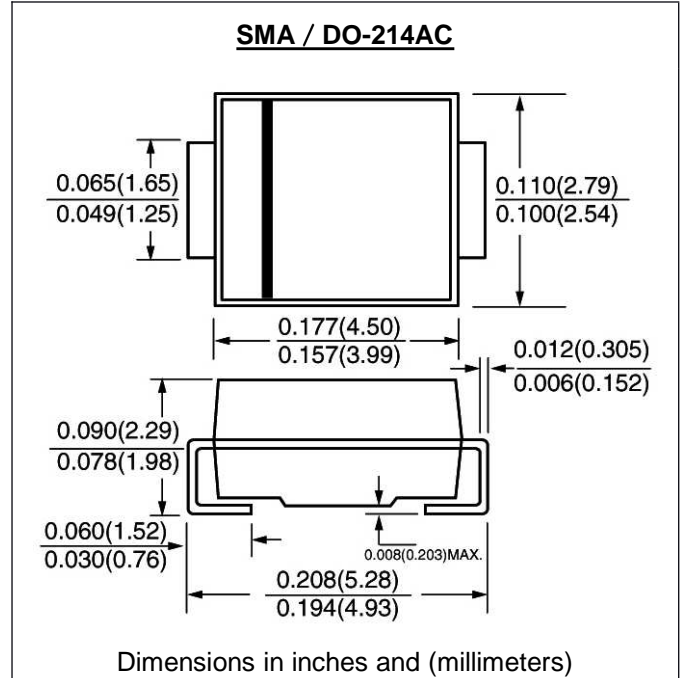


FEATURE

Ideal for surface mount pick and place application
 Low profile package
 Built-in strain relief
 High surge capability
 High temperature soldering guaranteed
 260°C/10sec/at terminals
 Halogen Free

MECHANICAL DATA

Terminal: Plated axial leads solderable per
 MIL-STD 202E, method 208C
 Case : Molded with UL-94 class V-0 recognized Halogen
 Free Epoxy
 Polarity: color band denotes cathode



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated,
 for capacitive load, derate current by 20%)

	SYMBOL	GS1J-E	GS1K-E	GS1M-E	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	600	800	1000	V
Maximum RMS Voltage	V _{rms}	420	560	700	V
Maximum DC blocking Voltage	V _{dc}	600	800	1000	V
Maximum Average Forward Rectified Current 3/8" lead length	I _{f(av)}	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	30.0			A
Maximum Instantaneous Forward Voltage at rated Forward current	V _f	1.1			V
Maximum DC Reverse Current at rated DC blocking voltage	I _r	5.0 200.0			μ A
Typical Junction Capacitance (Note 1)	C _j	15.0			pF
Typical Thermal Resistance (Note 2)	R _{th(jl)}	30			°C/W
(Note 3)	R _{th(jc)}	50			
Storage and Operating Junction Temperature	T _j , T _{stg}	-50 to +150			°C

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0V_{dc}
2. Thermal Resistance from Junction to terminal mounted on 5x5mm copper pad area
3. Junction to Case

Fig. 1 – Forward Current Derating Curve

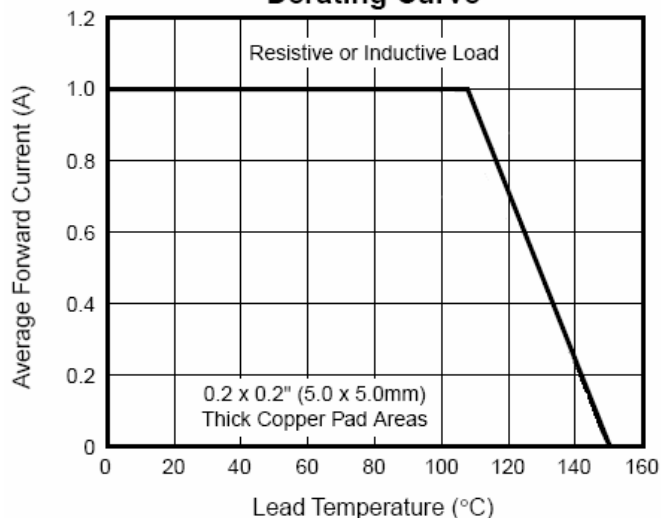


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

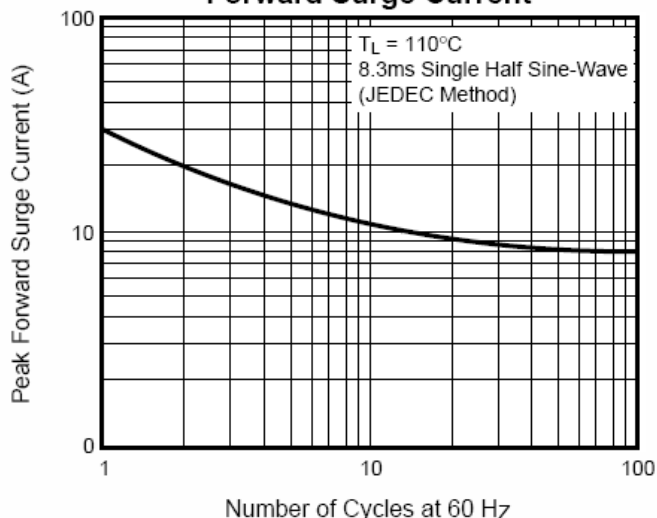


Fig. 3 – Typical Instantaneous Forward Characteristics

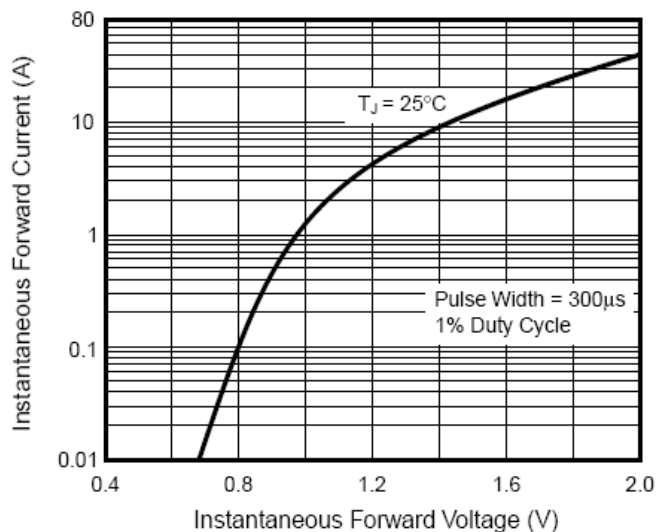


Fig. 4 – Typical Reverse Leakage Characteristics

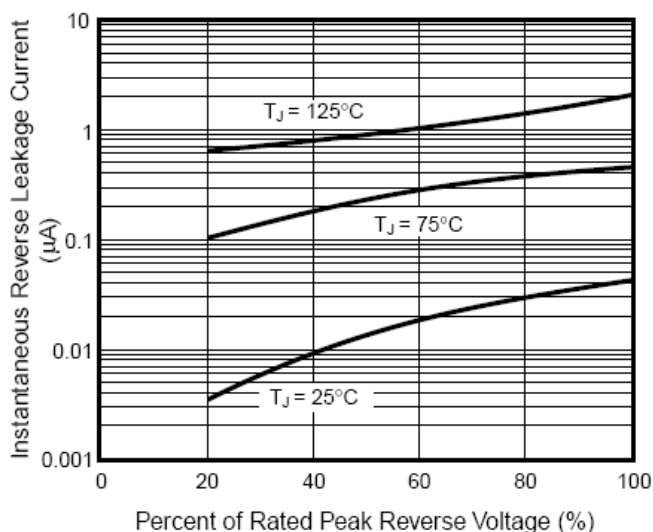


Fig. 5 – Typical Junction Capacitance

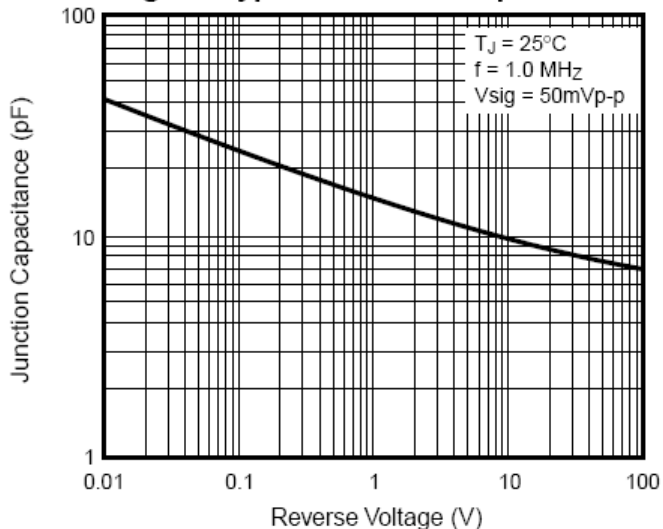


Fig. 6 – Transient Thermal Impedance

