GS3M-47L

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE：1000V **CURRENT： 3.0A**

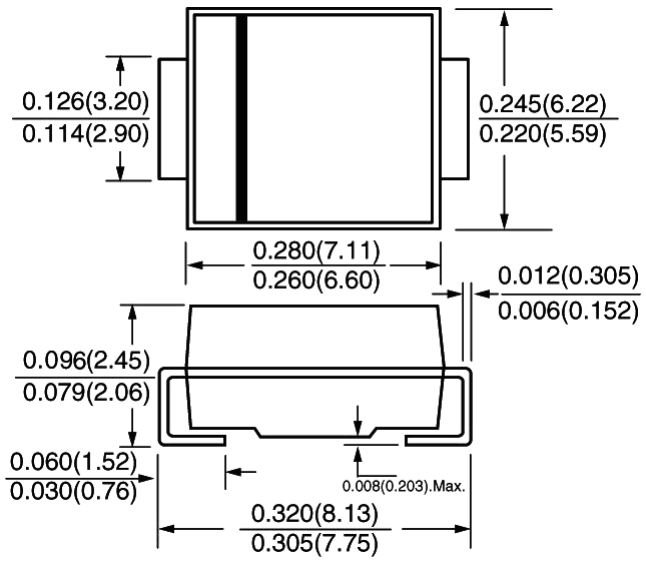
FEATURE

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

MECHANICAL DATA

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

SMC / DO-214AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	GS3M-47L	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1000	V
Maximum RMS Voltage	Vrms	700	V
Maximum DC blocking Voltage	Vdc	1000	V
Maximum Average Forward Rectified Current 3/8″lead length at T_L =75℃	If(av)	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	100.0	A
Maximum Forward Voltage at rated Forward current	Vf	1.1	V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	5.0 250	uA
Typical Reverse Recovery Time (Note 1)	Trr	2.3	us
Typical Junction Capacitance (Note 2)	Cj	60.0	pF
Typical Thermal Resistance (Note 3)	Rth(ja) Rth(jl) Rth(jc)	47.0 13.0 28.0	℃/W
Storage and Operating Temperature Range	Tstg	-50 to +150	℃

Note：
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied voltage of 4.0Vdc
3. Thermal Resistance from junction to ambient and from junction to lead mounted on 8×8mm copper pad area

RATINGS AND CHARACTERISTIC CURVES GS3M-47L

FIG. 1 - FORWARD CURRENT DERATING CURVE

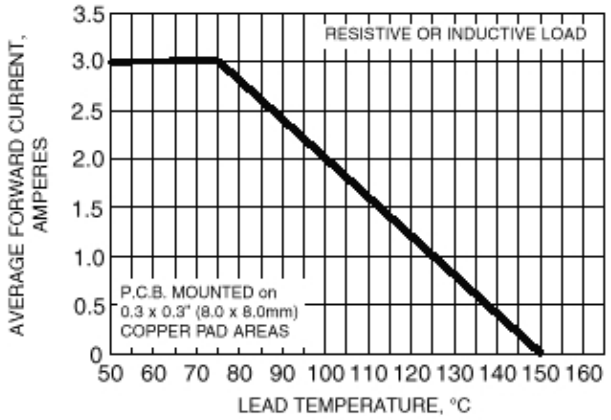


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

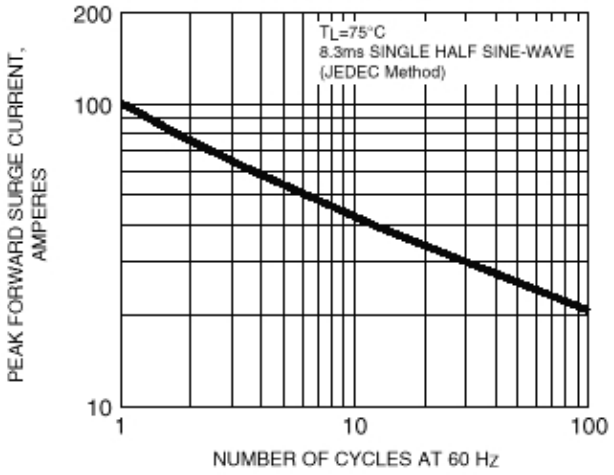


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

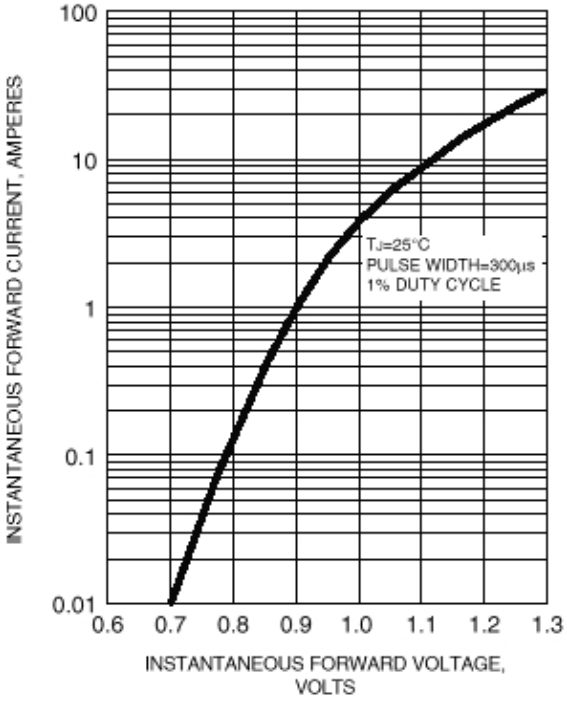


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

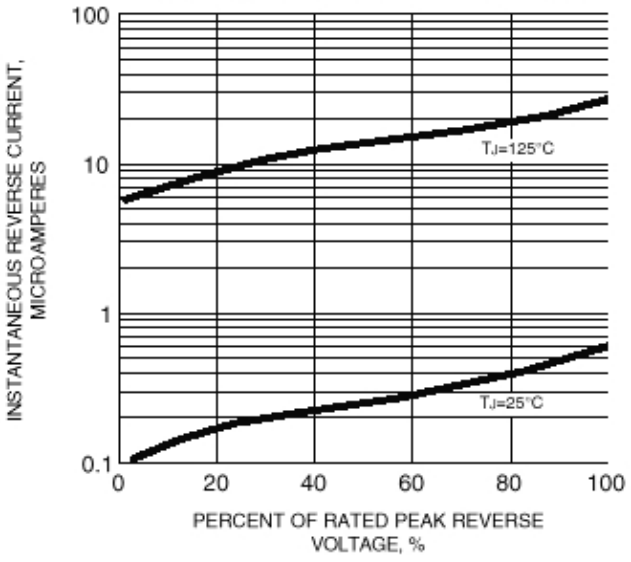


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

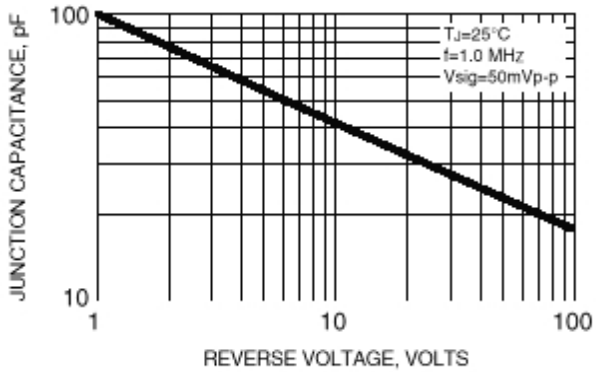


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE