

GS3A THRU GS3M

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE: 50 TO 1000V

CURRENT: 3.0A



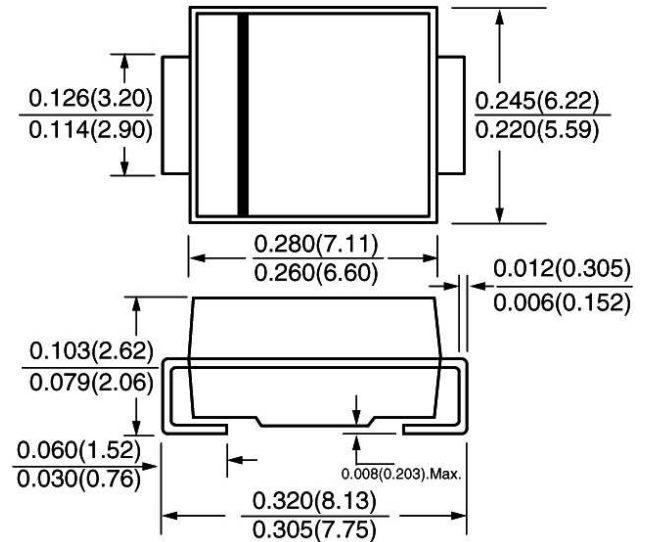
FEATURE

Ideal for surface mount pick and place application
Low profile package
Built-in strain relief
High surge capability
High temperature soldering guaranteed
260°C/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°C, unless otherwise stated,
for capacitive load, derate current by 20%)

	SYMBOL	GS 3A	GS 3B	GS 3D	GS 3G	GS 3J	GS 3K	GS 3M	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at T _L =75°C	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°C at rated DC blocking voltage Ta =125°C	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)	47.0							°C/W
	Rth(jl)	13.0							
	Rth(jc)	28.0							
Storage and Operating Temperature Range	Tstg	-50 to +150							°C

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =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 GS3A THRU GS3M

FIG. 1 - FORWARD CURRENT DERATING CURVE

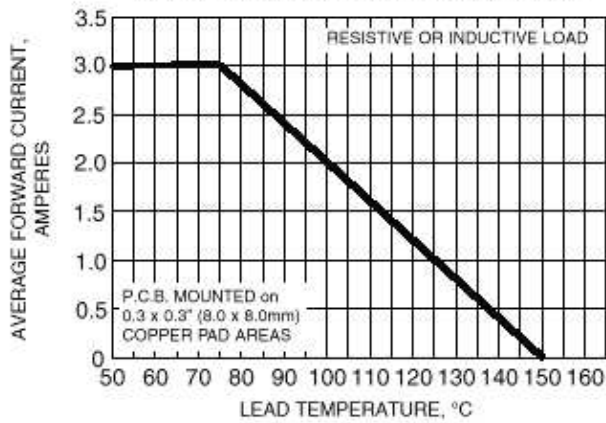


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

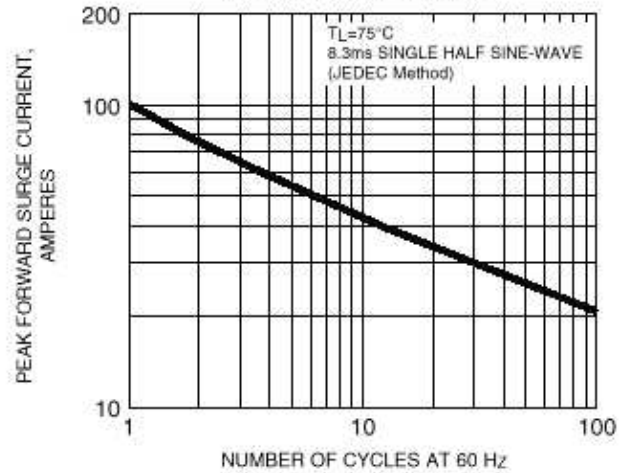


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

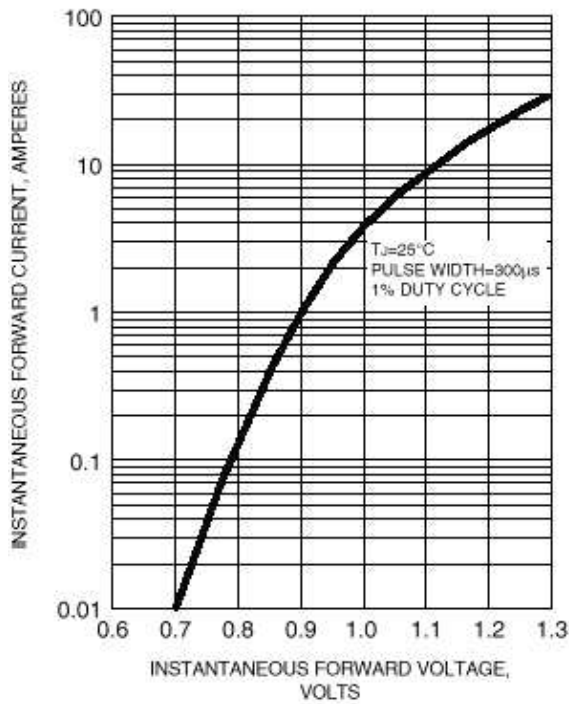


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

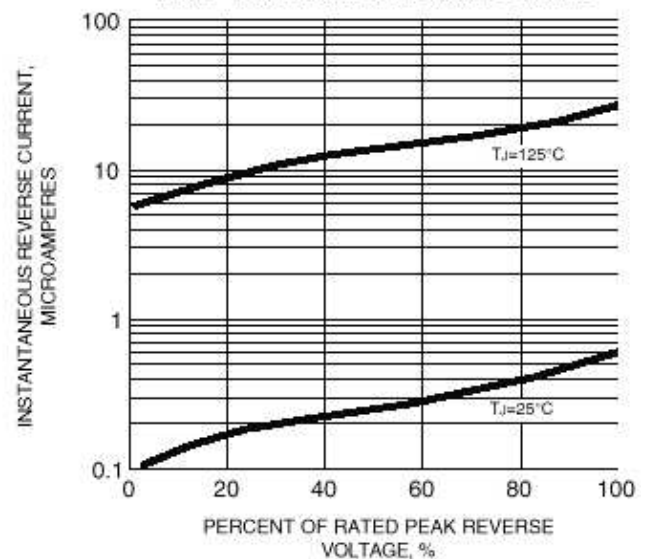


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

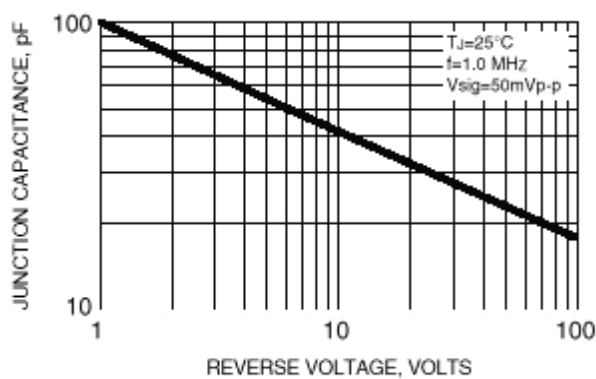


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

