

# GS3A THRU GS3M

## SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE: 50 TO 1000V

CURRENT: 3.0A

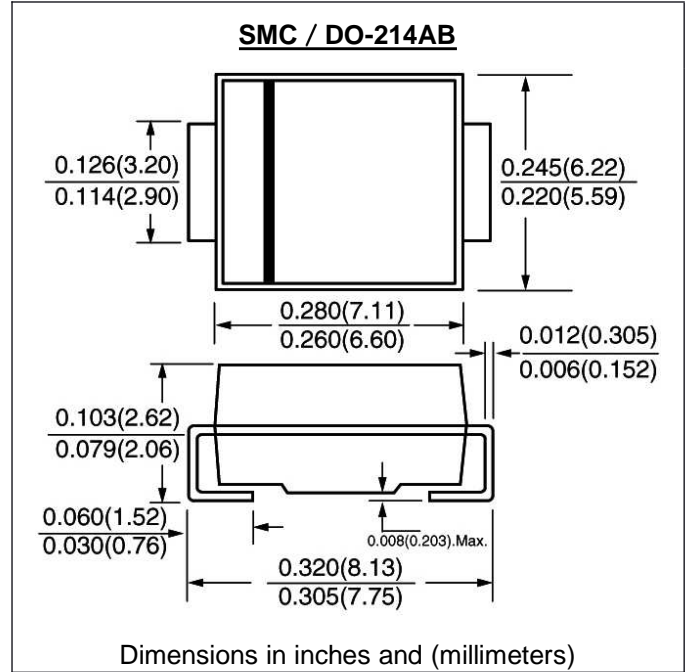


### FEATURE

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



### 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%)

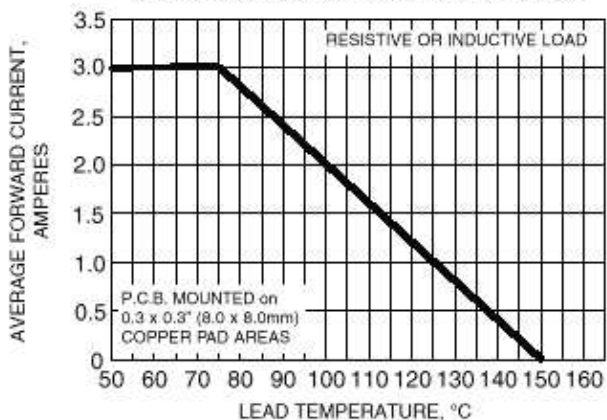
	SYMBOL	GS 3A	GS 3B	GS 3D	GS 3G	GS 3J	GS 3K	GS 3M	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at T <sub>L</sub> =75°C	I <sub>f(av)</sub>	3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	100.0							A
Maximum Forward Voltage at rated Forward current	V <sub>f</sub>	1.1							V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	5.0 250							uA
Typical Reverse Recovery Time (Note 1)	T <sub>rr</sub>	2.3							us
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	60.0							pF
Typical Thermal Resistance (Note 3)	R <sub>th(ja)</sub>	47.0							°C/W
	R <sub>th(jl)</sub>	13.0							
	R <sub>th(jc)</sub>	28.0							
Storage and Operating Temperature Range	T <sub>stg</sub>	-50 to +150							°C

Note:

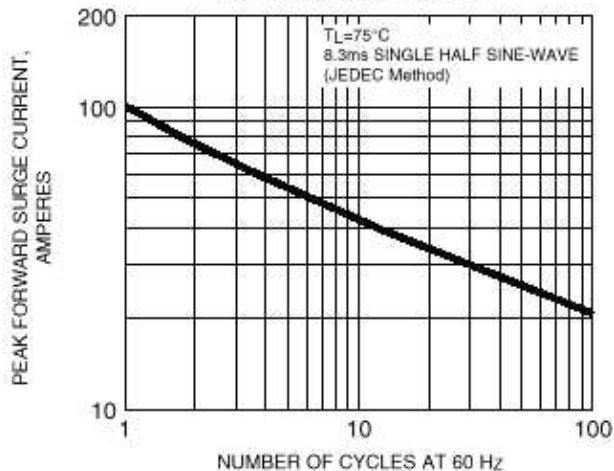
- Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
- Measured at 1.0 MHz and applied voltage of 4.0V<sub>dc</sub>
- Thermal Resistance from junction to ambient and from junction to lead mounted on 8×8mm copper pad area

## RATINGS AND CHARACTERISTIC CURVES GS3A THRU GS3M

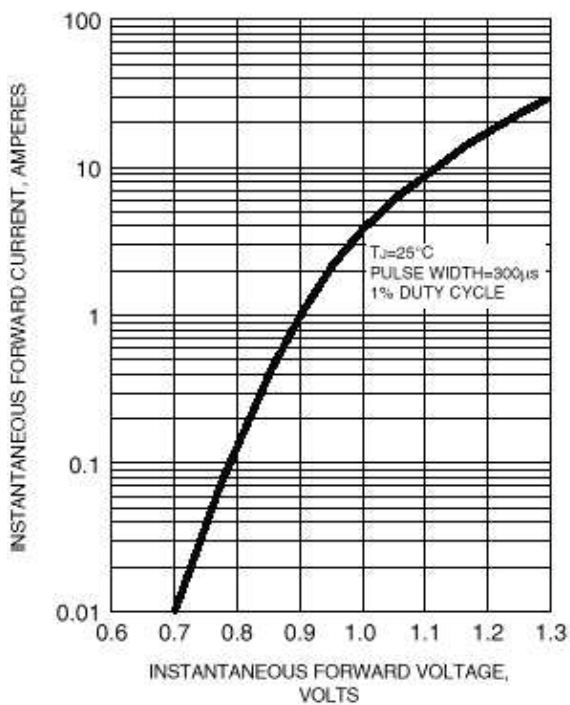
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



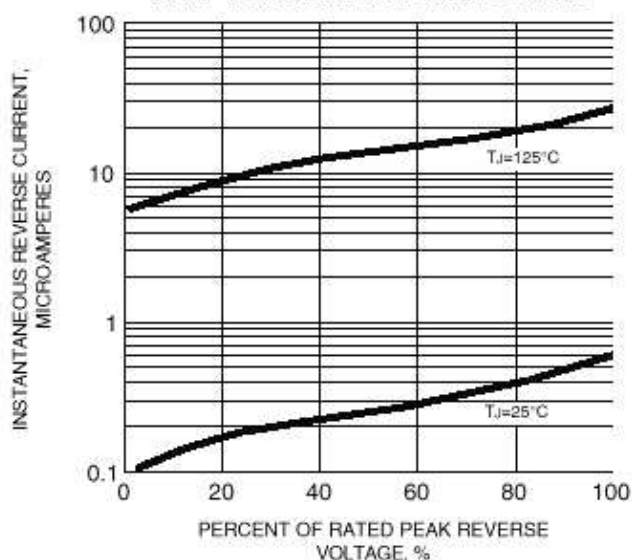
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



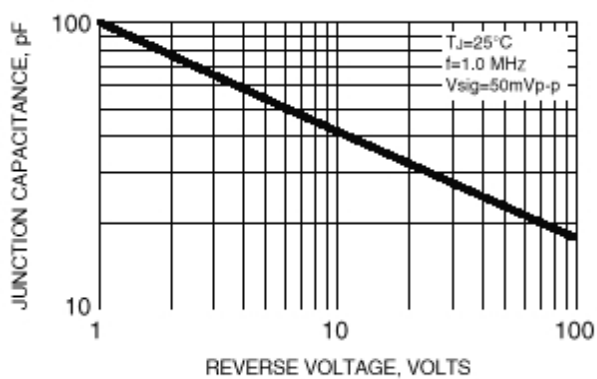
**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**



**FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE**

