

# GS8KN-K-E

## SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE: 800V

CURRENT: 8.0A

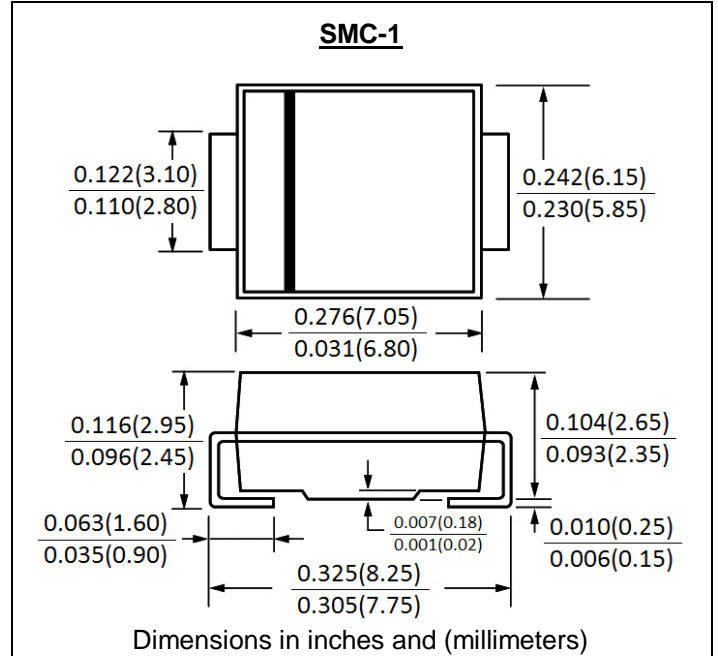


### FEATURE

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 leads solderable per J-STD-002  
Case: Molded with UL-94 class V-0 recognized Halogen Free Epoxy  
Polarity: color band denotes cathode



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

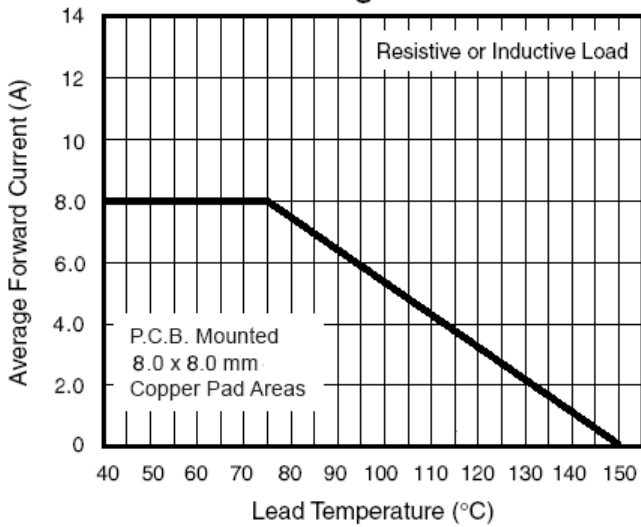
(single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	GS8KN-K-E	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	800	V
Maximum RMS Voltage	V <sub>rms</sub>	560	V
Maximum DC blocking Voltage	V <sub>dc</sub>	800	V
Maximum Average Forward Rectified Current 3/8" lead length at T <sub>L</sub> = 90°C	I <sub>f(av)</sub>	8.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	200	A
Maximum Forward Voltage at rated Forward current	V <sub>f</sub>	1.10	V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	5.0 300	μA
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	60.0	pF
Typical Thermal Resistance (Note 2)	R <sub>th(jl)</sub>	12.0	°C/W
(Note 3)	R <sub>th(jc)</sub>	11.0	
Storage and Operating Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

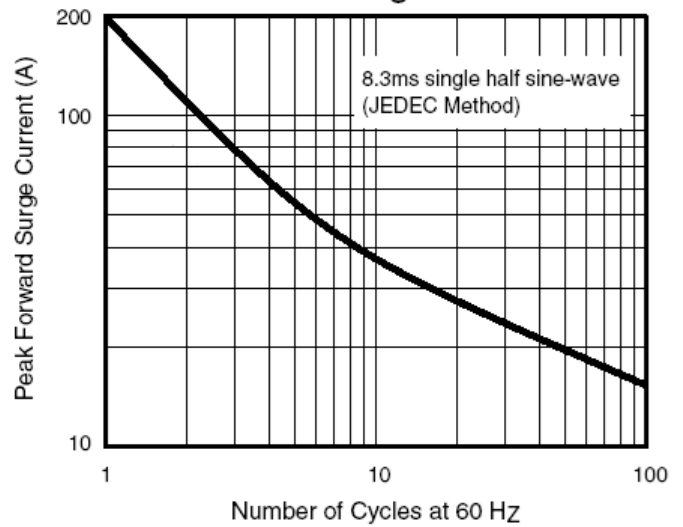
Note:

1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
2. Thermal Resistance from Junction to terminal mounted on 8x8mm copper pad area
3. Thermal Resistance from Junction to case mounted on 8x8mm copper pad area

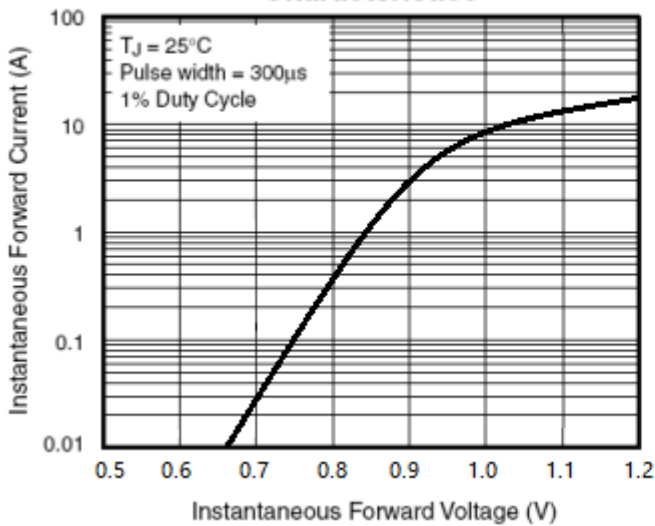
**Fig. 1 - Forward Current Derating Curve**



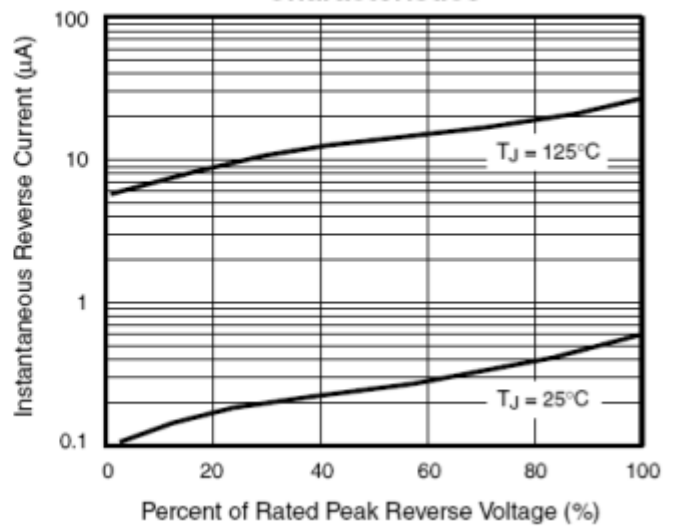
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 - Typical Instantaneous Forward Characteristics**



**Fig. 4 - Typical Reverse Characteristics**



**Fig. 5 - Typical Junction Capacitance**

