



YEA SHIN TECHNOLOGY CO., LTD

G3A THRU G3M

SURFACE MOUNT GLASS RECOVERY RECTIFIER

VOLTAGE- 50 to 1000 Volts CURRENT - 3.0 Amperes



**Features**

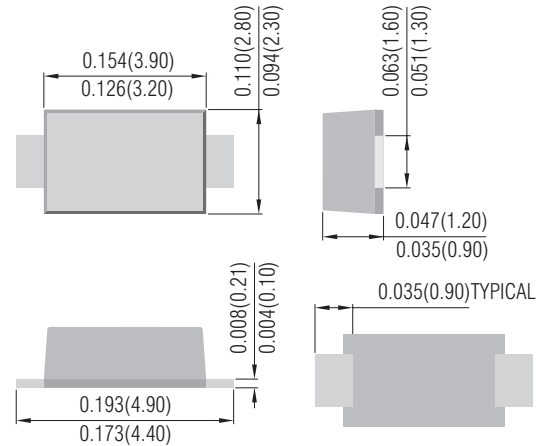
- For surface mounted application
- Low forward voltage drop
- High current capability
- High reliability
- Plastic Case Material has UL Flammability Classification Rating 94V- 0

**Mechanical Data**

- Case: Molded plastic SMF
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number

SMF

Unit:inch(mm)



**Maximum Ratings and Electrical Characteristics @T<sub>A</sub> =25 °C unless otherwise specified**

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	SYMBOL	G3A	G3B	G3D	G3G	G3J	G3K	G3M	Unit
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
Average Rectified Output Current @T <sub>L</sub> =90 °C	I <sub>F(AV)</sub>	3.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	80							A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	26.56							A <sup>2</sup> s
Forward Voltage @IF=3.0A	V <sub>F</sub>	1.0							V
Peak Reverse Current @T <sub>A</sub> =25 °C	I <sub>R</sub>	5.0							uA
At Rated DC Blocking Voltage @T <sub>A</sub> =125 °C		500							
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	15							pF
Typical Thermal Resistance Junction to Ambient (Note 2)	R <sub>θJA</sub>	65							°C /W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V.

2. Thermal Resistance from Junction to Ambient at 0.375(9.5mm) lead length.

# DEVICE CHARACTERISTICS

## G3A THRU G3M

FIG.1-TYPICAL FORWARD CURRENT  
DERATING CURVE

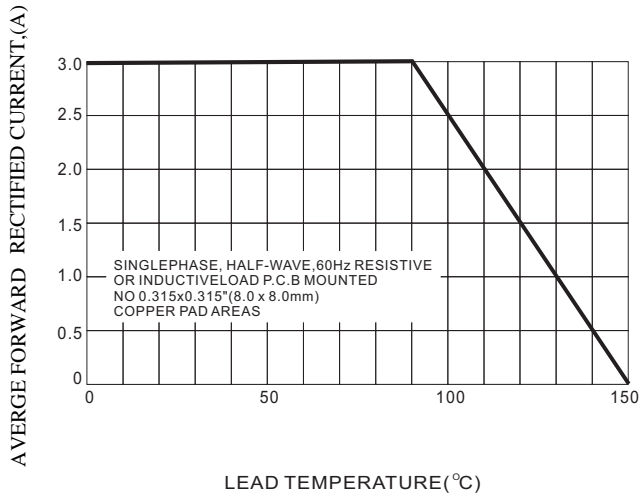


FIG.2-TYPICAL INSTANTANEOUS FORWARD  
CHARACTERISTICS

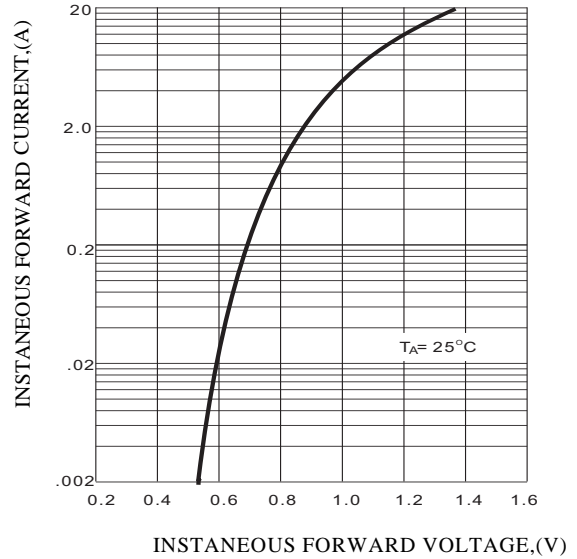


FIG.3-MAXIMUN NON-REPETITIVE  
FORWARD SURGE CURRENT

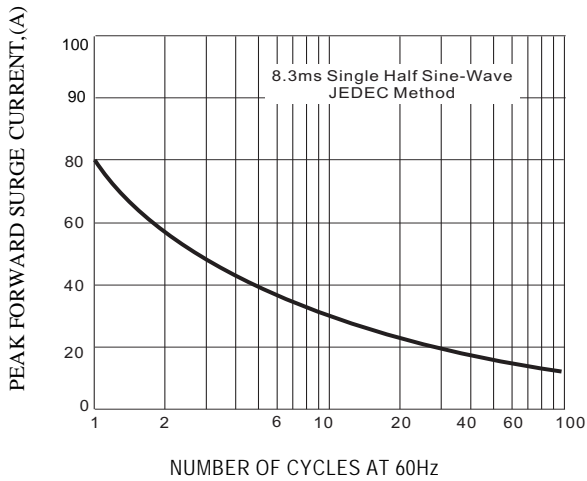


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

