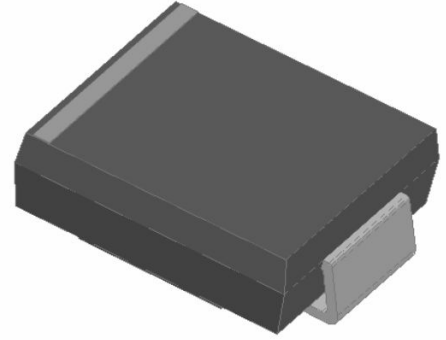


# GS3A THRU GS3M

## General Purpose Rectifier

### Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 265 °C max.10 s, per JESD 22-B106

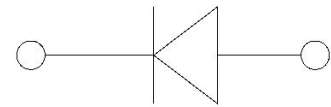


### Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

### Mechanical Data

- Package: SMC
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color band denotes cathode end



### ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

| PARAMETER   | Symbol            | Unit             | GS3        |     |     |     |     |     |      |
|---|-------------------|------------------|------------|-----|-----|-----|-----|-----|------|
|   |                   |                  | A          | B   | D   | G   | J   | K   | M    |
| Maximum Repetitive Peak Reverse Voltage   | V <sub>RRM</sub>  | V                | 50         | 100 | 200 | 400 | 600 | 800 | 1000 |
| Maximum RMS Voltage   | V <sub>RMS</sub>  | V                | 35         | 70  | 140 | 280 | 420 | 560 | 700  |
| Maximum DC blocking Voltage   | V <sub>DC</sub>   | V                | 50         | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average Forward Current<br>@Half-sine wave, Resistance load, T <sub>c</sub> (Fig.1) | I <sub>o</sub>    | A                | 3          |     |     |     |     |     |      |
| Forward Surge Current (Non-repetitive)<br>@60HZ sine wave, 1 cycle, Ta=25°C         | I <sub>FSM</sub>  | A                | 125        |     |     |     |     |     |      |
| Current squared time<br>@1ms≤t <sub>8.3</sub> ≤ms Ta=25°C, Rating of per diode      | I <sup>2</sup> t  | A <sup>2</sup> s | 64.8       |     |     |     |     |     |      |
| Thermal Resistance(Typical)<br>@Between junction and ambient                        | R <sub>θJ-A</sub> | °C/W             | 47         |     |     |     |     |     |      |
| Storage Temperature   | T <sub>stg</sub>  | °C               | -55 ~ +150 |     |     |     |     |     |      |
| Junction Temperature  | T <sub>j</sub>    | °C               | -55 ~ +150 |     |     |     |     |     |      |

### ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

| PARAMETER            | Symbol           | Unit | Conditions                    | GS3  |   |   |   |   |   |
|----------------------|------------------|------|-------------------------------|------|---|---|---|---|---|
|                      |                  |      |                               | A    | B | D | G | J | K |
| Peak Forward Voltage | V <sub>FM</sub>  | V    | I <sub>F</sub> =3.0A          | 0.98 |   |   |   |   |   |
| Peak Reverse Current | I <sub>RRM</sub> | μA   | VR =V <sub>DC</sub> @Ta=25°C  | 10   |   |   |   |   |   |
|                      |                  |      | VR =V <sub>DC</sub> @Ta=125°C | 250  |   |   |   |   |   |



# GS3A THRU GS3M

## ■ Characteristics (Typical)

FIG.1: Io-TL Curve

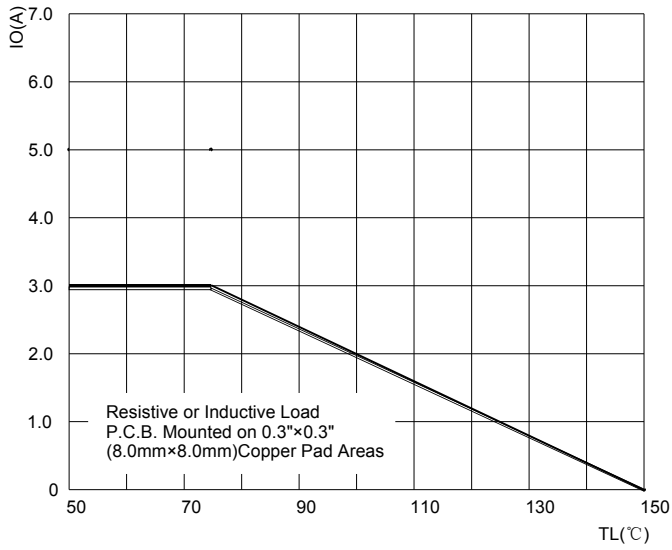


FIG.2: Forward Surge Current Capability

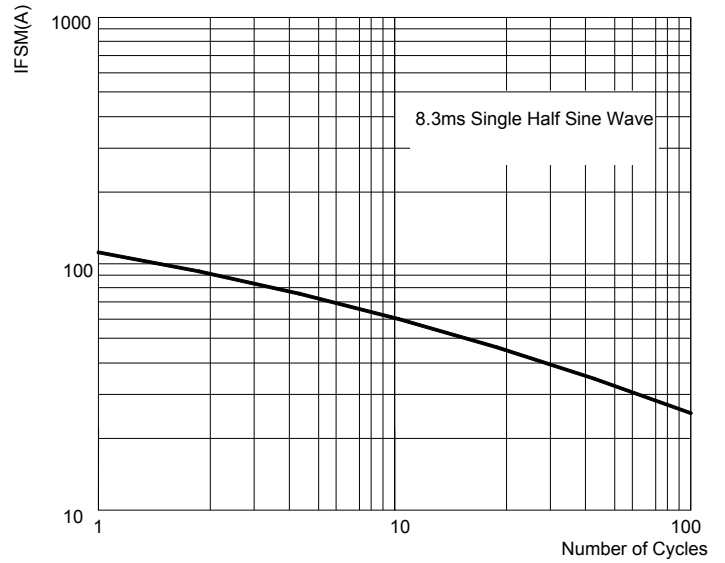


FIG.3: Forward Voltage

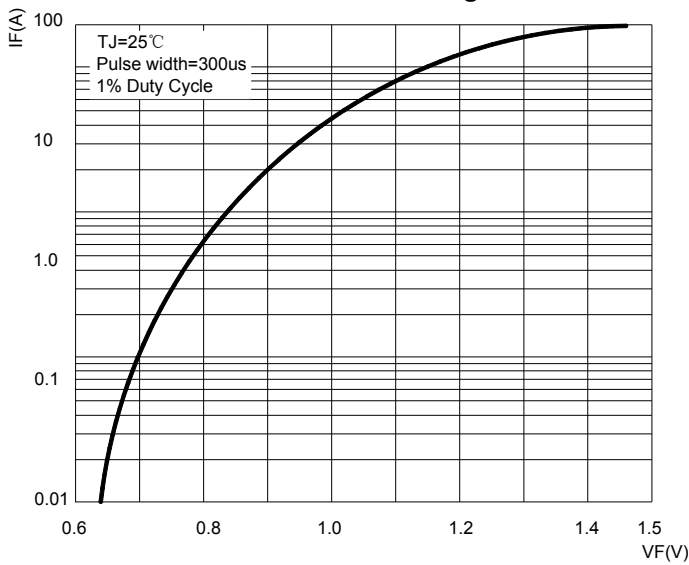
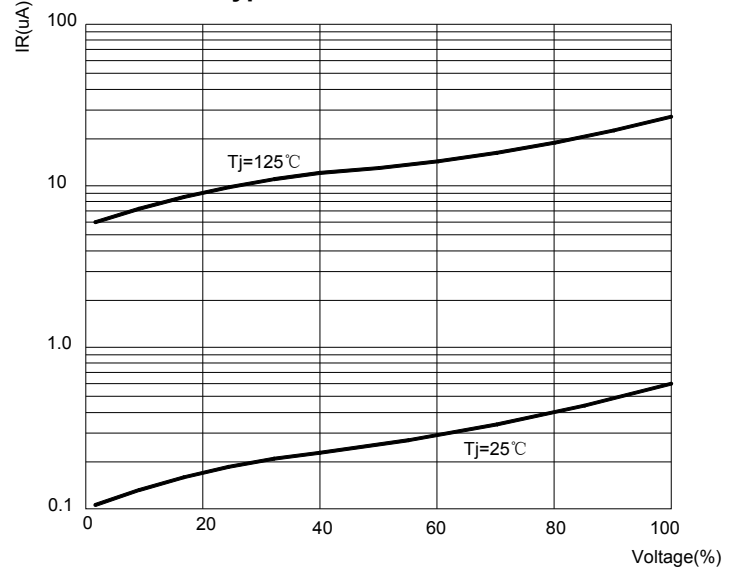


FIG.4: Typical Reverse Characteristics



## GS3A THRU GS3M

### ■ Ordering Information (Example)

| PREFERED       | PACKAGE CODE | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|----------------|--------------|----------------------|-------------------------|----------------------------|---------------|
| GS3A THRU GS3M | SMC          | 3000                 | 6000                    | 42000                      | 13" reel      |

### ■ Outline Dimensions

