

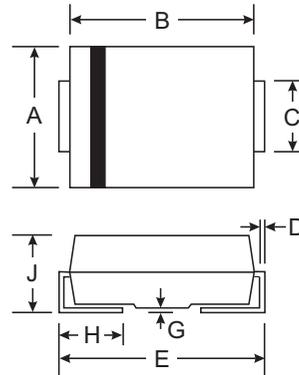
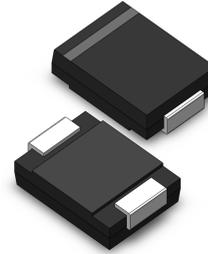
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 3.0 A**

### Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-0

### Mechanical Data

- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)



| SMC/DO-214AB         |      |      |
|----------------------|------|------|
| Dim                  | Min  | Max  |
| A                    | 5.59 | 6.22 |
| B                    | 6.60 | 7.11 |
| C                    | 2.75 | 3.18 |
| D                    | 0.15 | 0.31 |
| E                    | 7.75 | 8.13 |
| G                    | 0.10 | 0.20 |
| H                    | 0.76 | 1.52 |
| J                    | 2.00 | 2.62 |
| All Dimensions in 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%.

| Characteristic   | Symbol   | GS3A        | GS3B | GS3D | GS3G | GS3J | GS3K | GS3M | Unit |
|--|--|-------------|------|------|------|------|------|------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                             | V <sub>RRM</sub><br>V <sub>RWM</sub><br>V <sub>R</sub> | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | V    |
| RMS Reverse Voltage  | V <sub>R(RMS)</sub>                                    | 35          | 70   | 140  | 280  | 420  | 560  | 700  | V    |
| Average Rectified Output Current @T <sub>L</sub> = 75°C  | I <sub>O</sub>   | 3.0         |      |      |      |      |      |      | A    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I <sub>FSM</sub>                                       | 100         |      |      |      |      |      |      | A    |
| Forward Voltage @I <sub>F</sub> = 3.0A   | V <sub>FM</sub>  | 1.20        |      |      |      |      |      |      | V    |
| Peak Reverse Current @T <sub>A</sub> = 25°C<br>At Rated DC Blocking Voltage @T <sub>A</sub> = 125°C                | I <sub>RM</sub>  | 5.0<br>250  |      |      |      |      |      |      | μA   |
| Reverse Recovery Time (Note 1)   | t <sub>rr</sub>  | 2.5         |      |      |      |      |      |      | μS   |
| Typical Junction Capacitance (Note 2)  | C <sub>j</sub>   | 60          |      |      |      |      |      |      | pF   |
| Typical Thermal Resistance (Note 3)  | R <sub>θJL</sub>                                       | 13          |      |      |      |      |      |      | °C/W |
| Operating and Storage Temperature Range  | T <sub>j</sub> , T <sub>STG</sub>                      | -65 to +150 |      |      |      |      |      |      | °C   |

Note: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A,  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.  
 3. Mounted on P.C. Board with 8.0mm<sup>2</sup> land area.

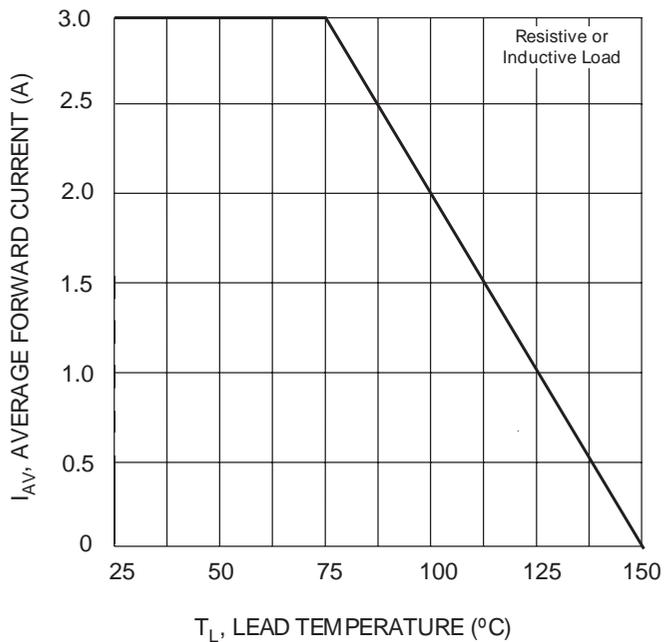


Fig. 1 Forward Current Derating Curve

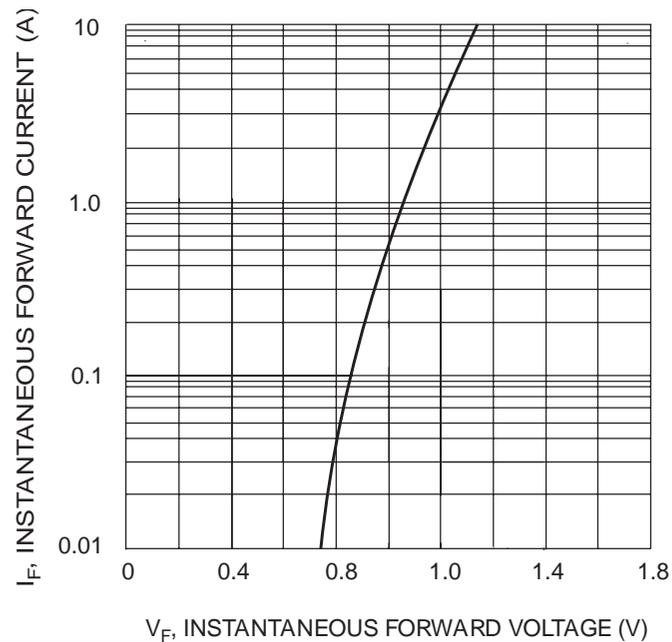


Fig. 2 Typical Forward Characteristics

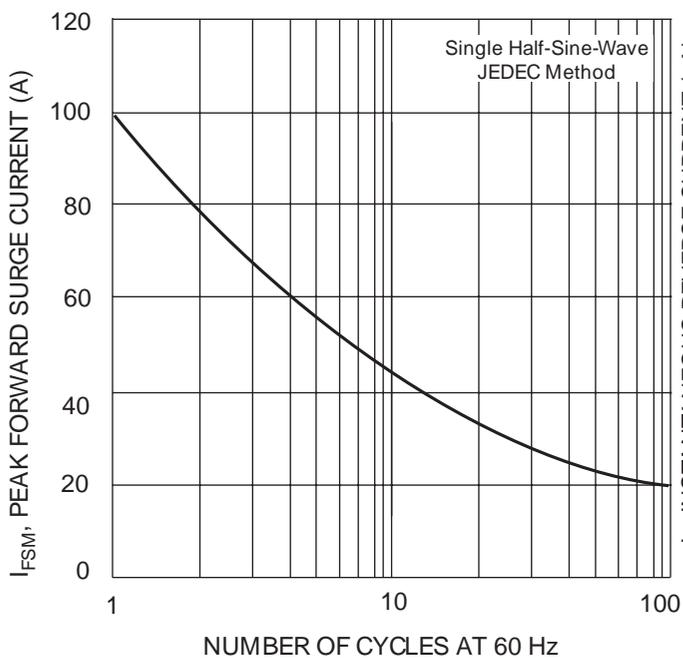


Fig. 3 Forward Surge Current Derating Curve

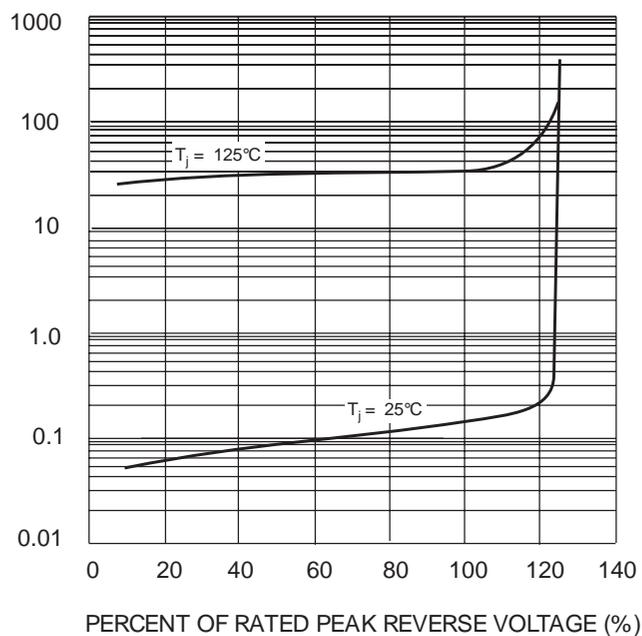


Fig. 4 Typical Reverse Characteristics