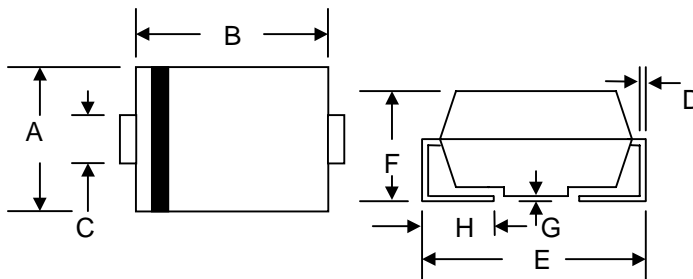


#### Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Surge Overload Rating to 100A Peak
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O



#### Mechanical Data

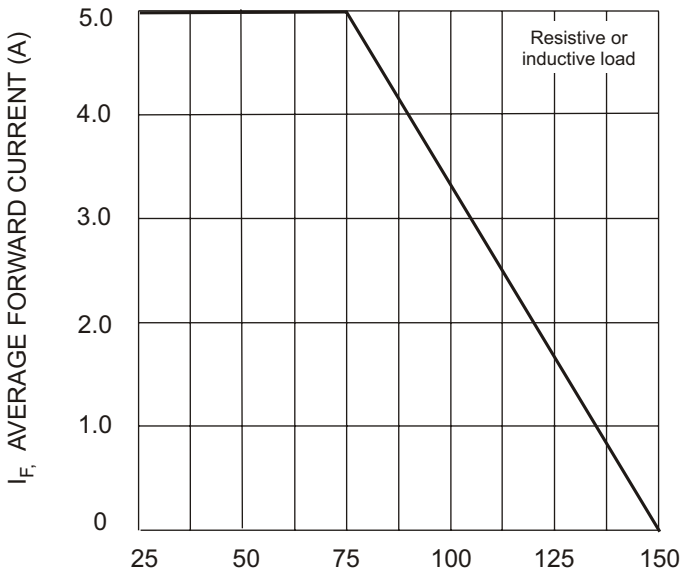
- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version**

| SMC/DO-214AB         |       |       |
|----------------------|-------|-------|
| Dim                  | Min   | Max   |
| A                    | 5.59  | 6.22  |
| B                    | 6.60  | 7.11  |
| C                    | 2.75  | 3.25  |
| D                    | 0.152 | 0.305 |
| E                    | 7.75  | 8.13  |
| F                    | 2.00  | 2.62  |
| G                    | 0.051 | 0.203 |
| H                    | 0.76  | 1.27  |
| All Dimensions in mm |       |       |

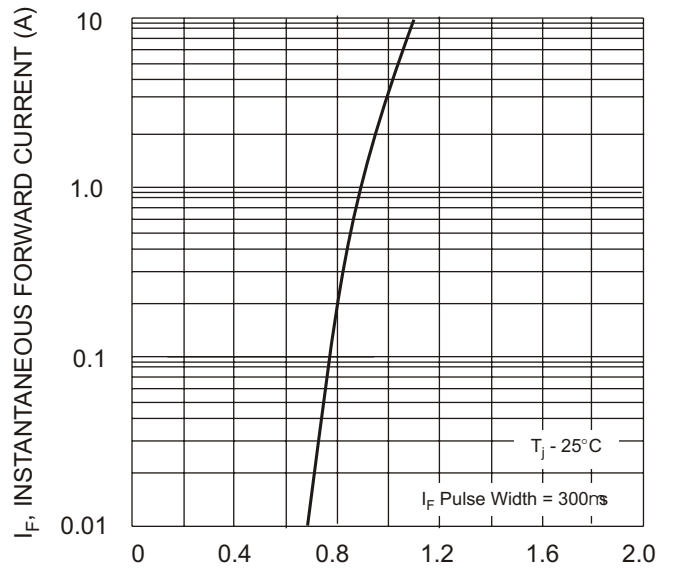
#### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

| Characteristic                                                                                                     | Symbol                          | GF5A        | GF5B | GF5D | GF5G | GF5J | GF5K | GF5M | Unit               |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------|------|------|------|------|------|------|--------------------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                             | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | V                  |
| RMS Reverse Voltage                                                                                                | $V_{R(RMS)}$                    | 35          | 70   | 140  | 280  | 420  | 560  | 700  | V                  |
| Average Rectified Output Current @ $T_L = 75^\circ\text{C}$                                                        | $I_O$                           | 5.0         |      |      |      |      |      |      | A                  |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$                       | 100         |      |      |      |      |      |      | A                  |
| Forward Voltage @ $I_F = 5.0\text{A}$                                                                              | $V_{FM}$                        | 1.15        |      |      |      |      |      |      | V                  |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$        | $I_{RM}$                        | 10<br>250   |      |      |      |      |      |      | $\mu\text{A}$      |
| Typical Junction Capacitance (Note 1)                                                                              | $C_j$                           | 40          |      |      |      |      |      |      | pF                 |
| Typical Thermal Resistance (Note 2)                                                                                | $R_{\theta JL}$                 | 10          |      |      |      |      |      |      | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range                                                                            | $T_j, T_{STG}$                  | -55 to +150 |      |      |      |      |      |      | $^\circ\text{C}$   |

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.  
2. Mounted on P.C. Board with 8.0mm<sup>2</sup> land area.



$T_T$ , TERMINAL TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics

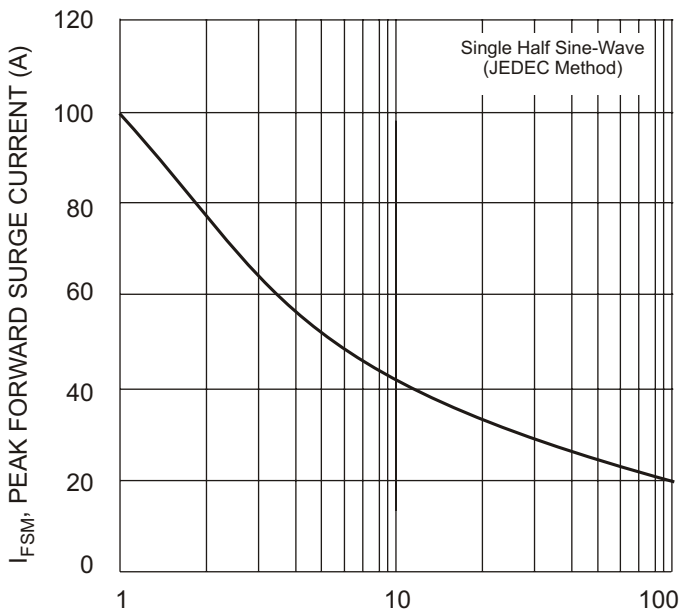


Fig. 3 Forward Surge Current Derating Curve

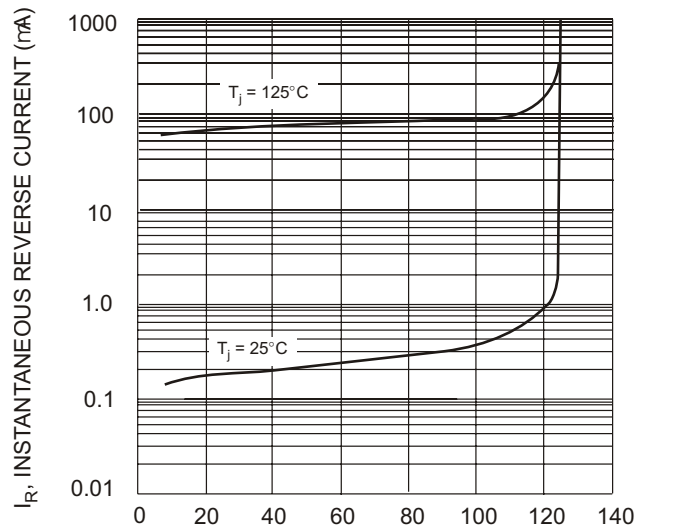


Fig. 4 Typical Reverse Characteristics