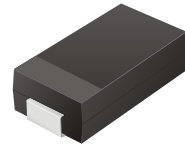


## CGRB301 Thru CGRB307

Glass Passivated Type

Reverse Voltage: 50 - 1000 Volts

Forward Current: 3.0 Amp

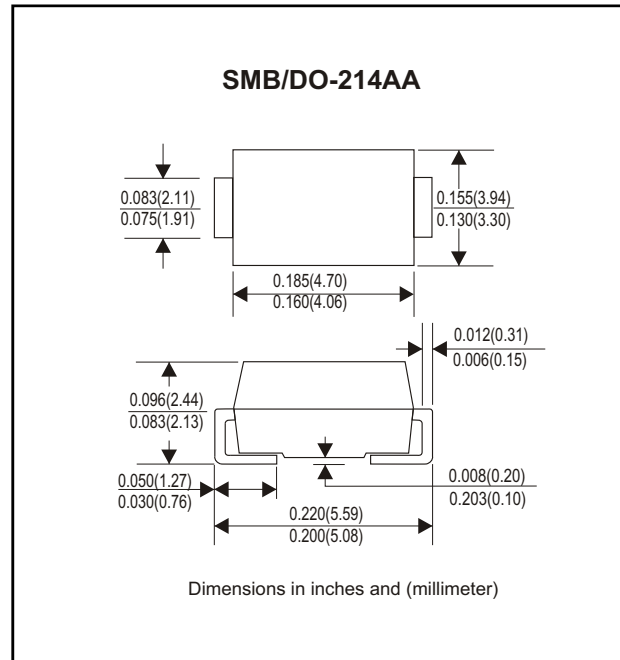


### Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Built-in strain relief
- High surge current capability

### Mechanical data

- Case: JEDEC DO-214AA molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight: 0.093 gram



### Maximum Ratings and Electrical Characteristics

| Parameter                                                                                                 | Symbol          | CGRB 301    | CGRB 302 | CGRB 303 | CGRB 304 | CGRB 305 | CGRB 306 | CGRB 307 | Unit          |
|-----------------------------------------------------------------------------------------------------------|-----------------|-------------|----------|----------|----------|----------|----------|----------|---------------|
| Max. Repetitive Peak Reverse Voltage                                                                      | $V_{RRM}$       | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V             |
| Max. DC Blocking Voltage                                                                                  | $V_{DC}$        | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V             |
| Max. RMS Voltage                                                                                          | $V_{RMS}$       | 35          | 70       | 140      | 280      | 420      | 560      | 700      | V             |
| Peak Surge Forward Current<br>8.3ms single halfsine-wave<br>superimposed on rate load<br>( JEDEC method ) | $I_{FSM}$       | 100         |          |          |          |          |          |          | A             |
| Max. Average Forward Current                                                                              | $I_o$           | 3.0         |          |          |          |          |          |          | A             |
| Max. Instantaneous Forward Current<br>at 3.0 A                                                            | $V_F$           | 1.1         |          |          |          |          |          |          | V             |
| Max. DC Reverse Current at Rated DC<br>Blocking Voltage<br>$T_a=25^{\circ}C$<br>$T_a=100^{\circ}C$        | $I_R$           | 5<br>50     |          |          |          |          |          |          | $\mu A$       |
| Max. Thermal Resistance (Note 1)                                                                          | $R_{\theta JA}$ | 50          |          |          |          |          |          |          | $^{\circ}C/W$ |
| Operating Junction Temperature                                                                            | $T_j$           | -55 to +150 |          |          |          |          |          |          | $^{\circ}C$   |
| Storage Temperature                                                                                       | $T_{STG}$       | -55 to +150 |          |          |          |          |          |          | $^{\circ}C$   |

Note 1: Thermal resistance from junction to ambient.

## Rating and Characteristic Curves (CGRB301 Thru CGRB307)

Fig. 1 - Reverse Characteristics

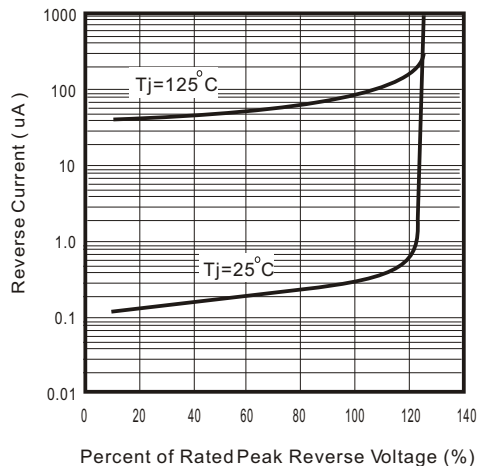


Fig.2 - Forward Characteristics

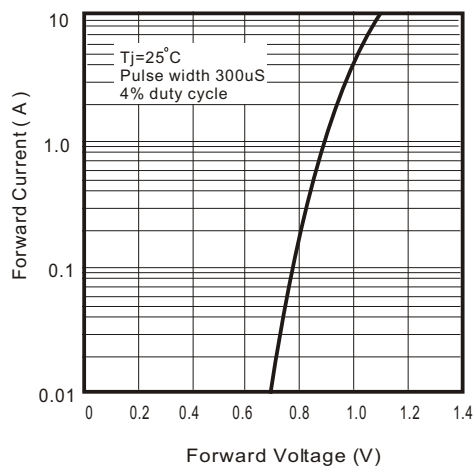


Fig. 3 - Jundion Capacitance

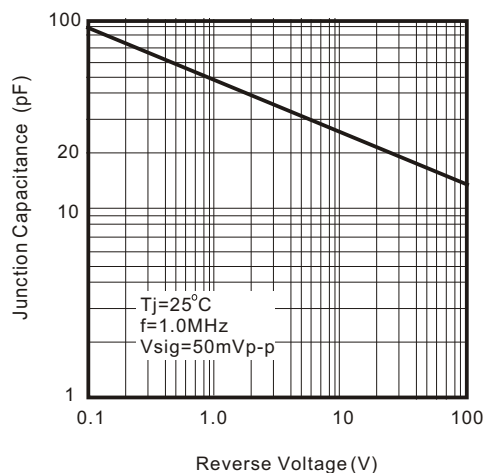


Fig. 4 - Current Derating Curve

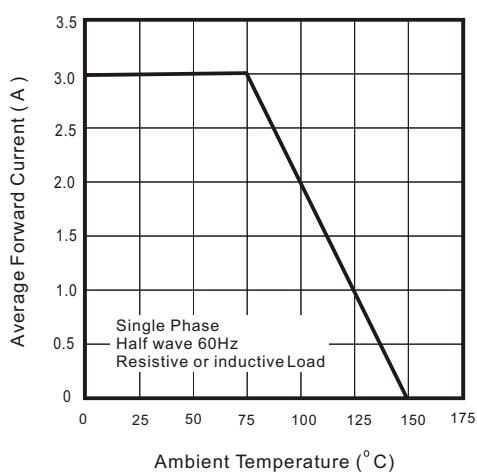


Fig. 5 - Non Repetitive Forward Surge Current

