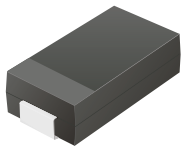
# CGRC501-G Thru. CGRC507-G

## Glass Passivated Type
## Reverse Voltage: 50 to 1000 Volts
## Forward Current: 5.0 Amp
## RoHS Device



### Features

-Ideal for surface mount applications.

-Easy pick and place.

-Plastic package has Underwriters Lab. flammability classification 94V-0.

-Built in strain relief.

-Low forward voltage drop.

### Mechanical data

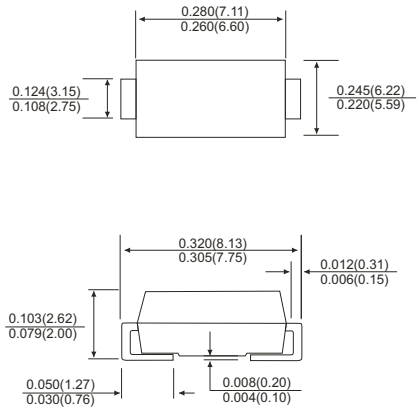
-Case: JEDEC DO-214AB, molded plastic.

-Terminals: solderable per MIL-STD-750, method 2026.

-Polarity: Color band denotes cathode end.

-Approx. weight: 0.21 grams

**DO-214AB (SMC)**




Dimensions in inches and (millimeter)

## Maximum Ratings and Electrical Characteristics

| Parameter | Symbol | CGRC 501-G | CGRC 502-G | CGRC 503-G | CGRC 504-G | CGRC 505-G | CGRC 506-G | CGRC 507-G | Units |
|---|---|---|---|---|---|---|---|---|---|
| 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, 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | $I_{FSM}$ | 100 | | | | | | | A |
| Max. average forward current | $I_O$ | 5.0 | | | | | | | A |
| Max. instantaneous forward voltage at 5.0A | $V_F$ | 1.15 | | | | | | | V |
| Max. DC reverse current at $T_A$=25 °C<br>rated DC blocking voltage $T_A$=125 °C | $I_R$ | 10<br>250 | | | | | | | μA |
| Max. thermal resistance (Note 1) | $R_{\theta JA}$ | 50 | | | | | | | °C/W |
| Max. operating junction temperature | $T_J$ | 150 | | | | | | | °C |
| Storage temperature | $T_{STG}$ | -55 to +150 | | | | | | | °C |

Notes: 1. Thermal resistance from junction to terminal mounted on P.C.B. with 5.0×5.0 mm square$^2$(0.13mm thick) land area.

## RATING AND CHARACTERISTIC CURVES (CGRC501-G thru CGRC507-G)

Fig.1 Reverse Characteristics

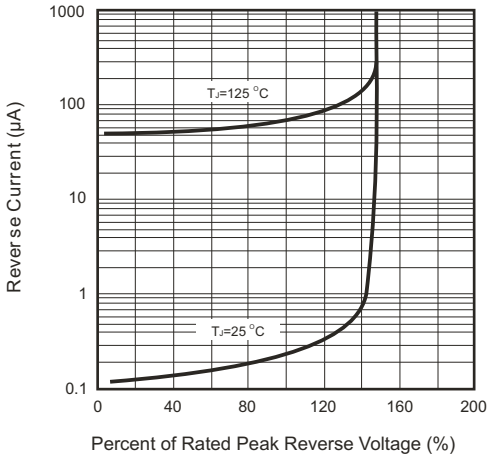



Fig.2 Forward Characteristics

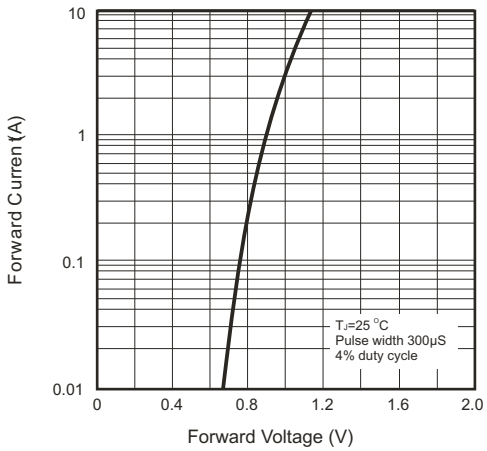



Fig.3 Non-repetitive Forward Surge Current

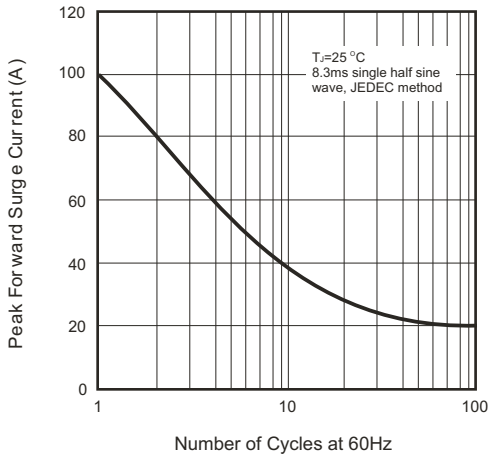



Fig.4 Current Derating Curve