

# SMD General Purpose Rectifiers



## CGRC501-G Thru. CGRC507-G

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

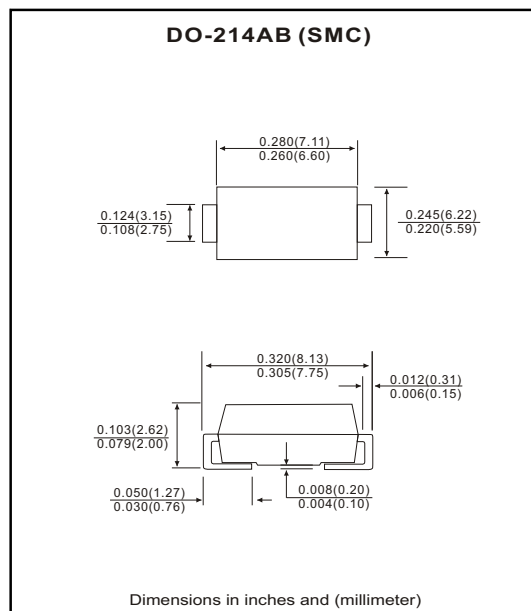


### Features

- 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



### 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 $T_A=25^{\circ}C$ rated DC blocking voltage $T_A=125^{\circ}C$	$I_R$	10 250							$\mu A$
Max. thermal resistance (Note 1)	$R_{\theta JA}$	50							$^{\circ}C/W$
Max. operating junction temperature	$T_J$	150							$^{\circ}C$
Storage temperature	$T_{STG}$	-55 to +150							$^{\circ}C$

Notes: 1. Thermal resistance from junction to terminal mounted on P.C.B. with 5.0x5.0 mm<sup>2</sup> square (0.13mm thick) land area.

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

Fig.1 Reverse Characteristics

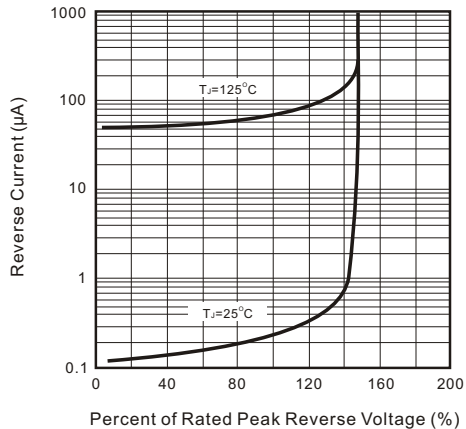


Fig.2 Forward Characteristics

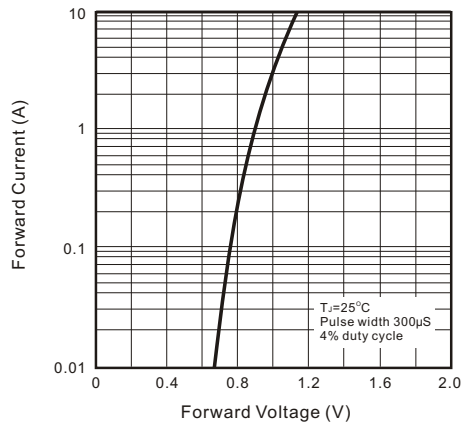


Fig.3 Non-repetitive Forward Surge Current

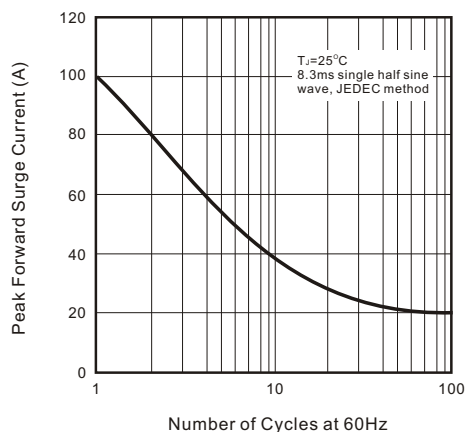


Fig.4 Current Derating Curve

