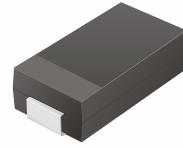


# SMD General Purpose Rectifier



## CGRC501 Thru CGRC507

Glass Passivated Type  
Reverse Voltage: 50 - 1000 Volts  
Forward Current: 5.0 Amp

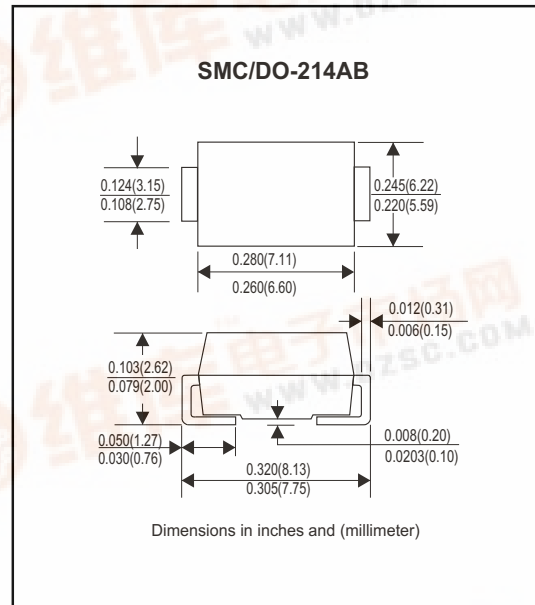


### Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Built-in strain relief
- 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
- Mounting position: Any
- Approx. Weight: 0.21 gram



### Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CGRC 501	CGRC 502	CGRC 503	CGRC 504	CGRC 505	CGRC 506	CGRC 507	Unit
Max. Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Max. DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Max. RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Peak Surge Forward Current 8.3ms single halfsine-wave superimposed on rate load (JEDEC method)	I <sub>FSM</sub>	100							A
Max. Average Forward Current	I <sub>o</sub>	5.0							A
Max. Instantaneous Forward Current at 5.0 A	V <sub>F</sub>	1.15							V
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25°C Ta=125°C	I <sub>R</sub>	10 250							uA
Max. Thermal Resistance (Note 1)	R <sub>θJA</sub>	50							°C/W
Operating Junction Temperature	T <sub>j</sub>	-55 to +150							°C
Storage Temperature	T <sub>STG</sub>	-55 to +150							°C

Note 1: Thermal resistance from junction to ambient.



## Rating and Characteristic Curves (CGRC501 Thru CGRC507)

Fig. 1 - Reverse Characteristics

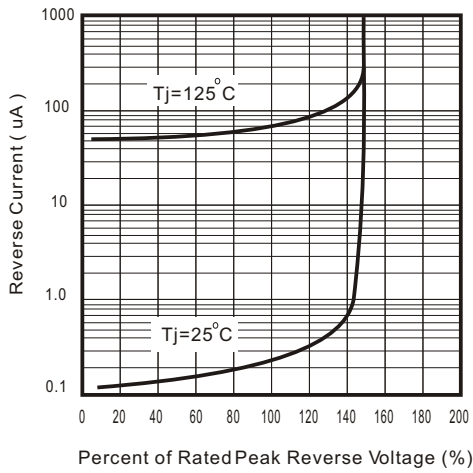


Fig. 2 - Forward Characteristics

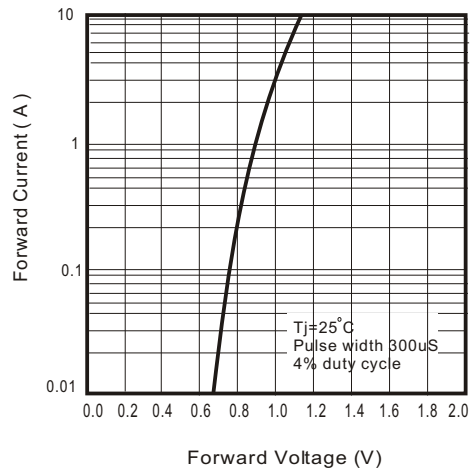


Fig. 3 - Non Repetitive Forward Surge Current

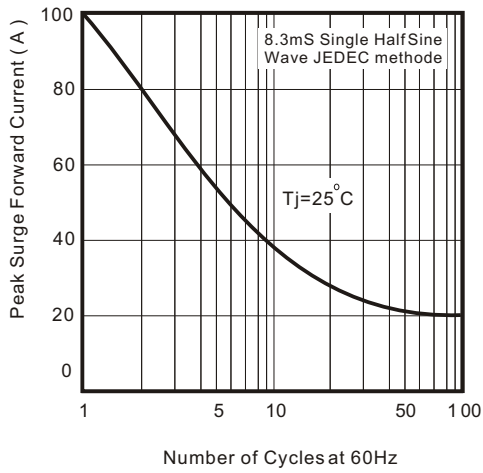


Fig. 4 - Current Derating Curve

