

SMD General Purpose Rectifiers



SMD Diodes Specialist

CGRC501-G Thru. CGRC507-G

Glass Passivated Type

Reverse Voltage: 50 to 1000 Volts

Forward Current: 5.0 Amp

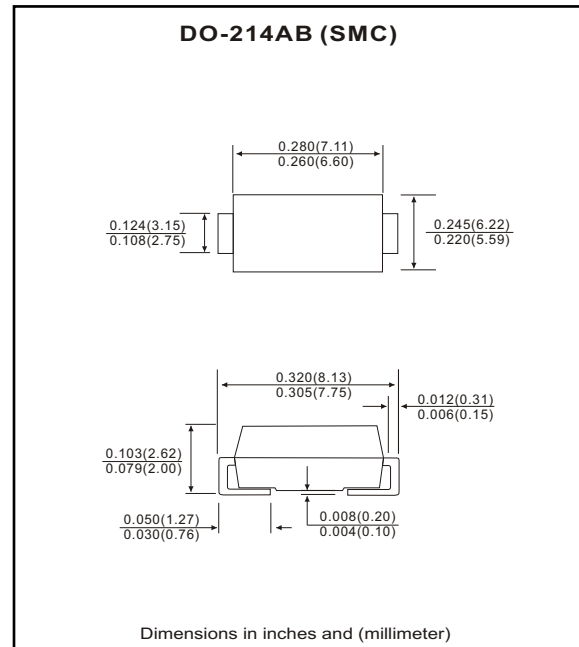
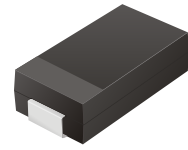
RoHS Device

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							μA
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 5.0×5.0 mm² square (0.13mm thick) land area.

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

Fig.1 Reverse Characteristics

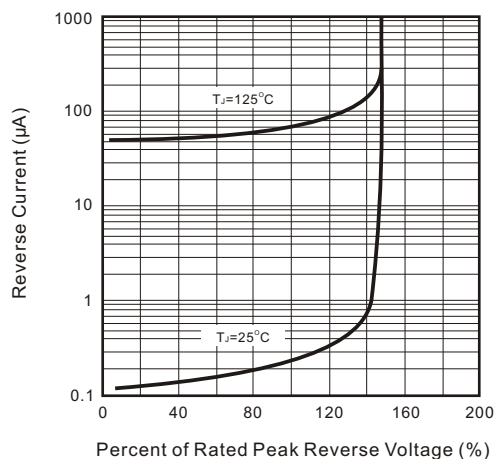


Fig.2 Forward Characteristics

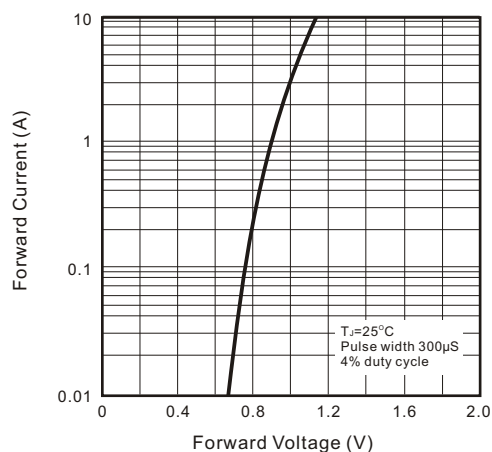


Fig.3 Non-repetitive Forward Surge Current

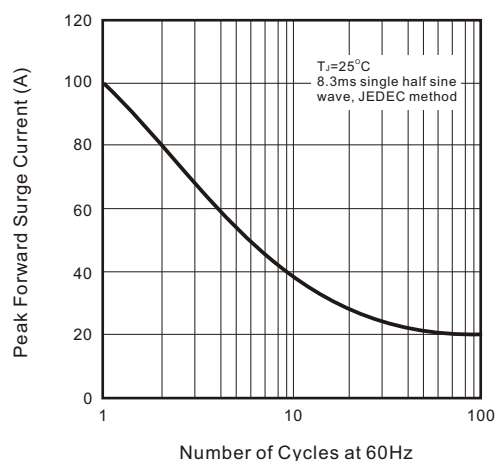
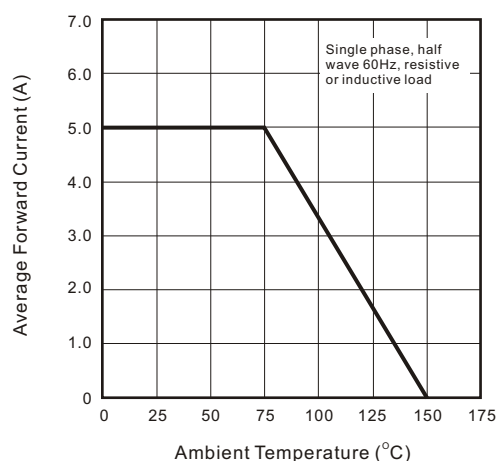


Fig.4 Current Derating Curve



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