SMD General Purpose Rectifiers

COMCHIP
SMD Diodes Specialist

CGRB301-G Thru. CGRB307-G

Glass Passivated Type
Reverse Voltage: 50 to 1000 Volts
Forward Current: 2.0 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.

-High surge current capability.

Mechanical data

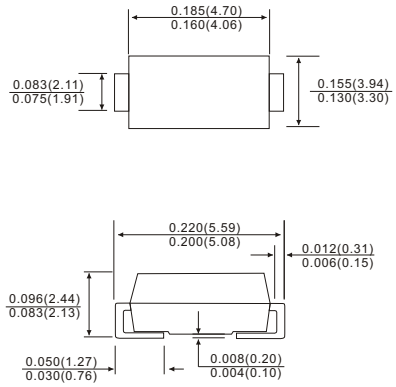
-Case: JEDEC DO-214AA, molded plastic.

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

-Polarity: Color band denotes cathode end.

-Approx. weight: 0.093 grams

DO-214AA (SMB)



Dimensions in inches and (millimeter)

Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CGRB 301-G	CGRB 302-G	CGRB 303-G	CGRB 304-G	CGRB 305-G	CGRB 306-G	CGRB 307-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	3.0							A
Max. instantaneous forward voltage at 3.0A	V_F	1.1							V
Max. DC reverse current at T_A=25°C rated DC blocking voltage T_A=125°C	I_R	5.0 150							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^2 square (0.13mm thick) land area.

RATING AND CHARACTERISTIC CURVES (CGRB301-G thru CGRB307-G)

Fig.1 Reverse Characteristics

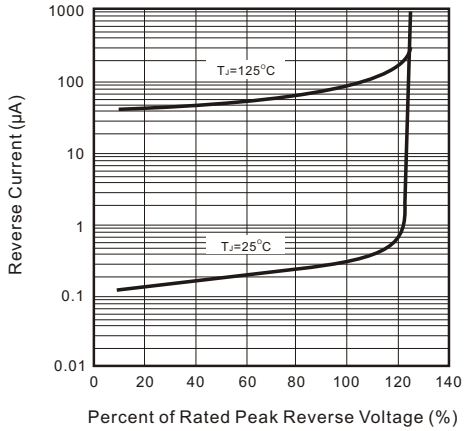


Fig.2 Forward Characteristics

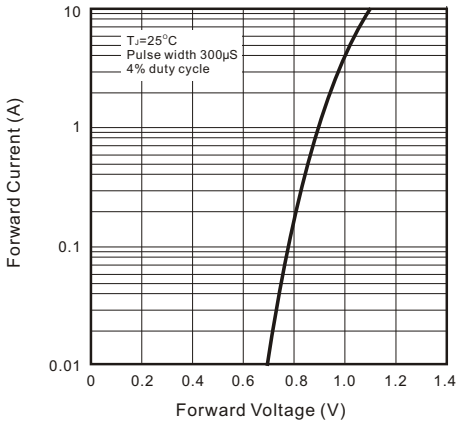


Fig.3 Junction Capacitance

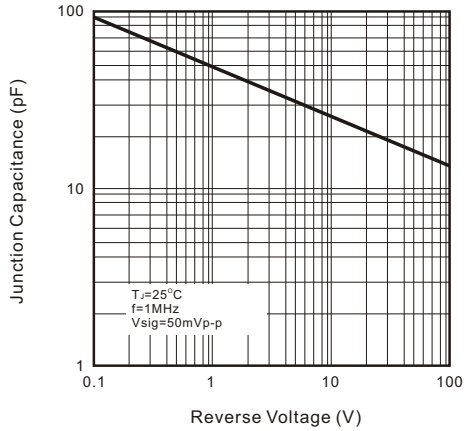


Fig.4 Current Derating Curve

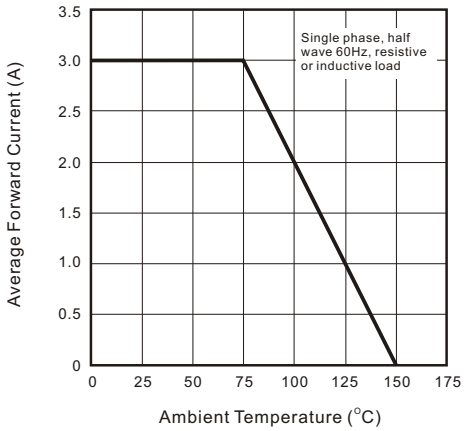


Fig.5 Non-repetitive Forward Surge Current