SMD Genenal Purpose Rectifier

COMCHIP
www.comchiptech.com

CGRL4001 Thru CGRL4007

Glass Passivated Type
Reverse Voltage: 50 - 1000 Volts
Forward Current: 1.0 Amp

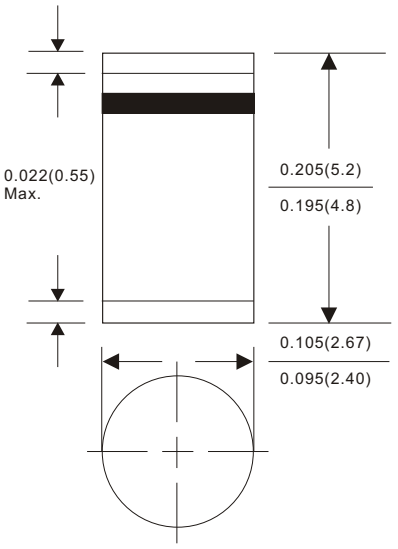
Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Built-in strain relief
- High surge current capability

Mechanical data

- Case: DO-213AB molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight:0.116 gram

DO-213AB (Plastic Melf)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characterics

Parameter	Symbol	CGRL 4001	CGRL 4002	CGRL 4003	CGRL 4004	CGRL 4005	CGRL 4006	CGRL 4007	Unit
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}	30							A
Max. Average Forward Current	I_o	1.0							A
Max. Instantaneous Forward Current at 1.0 A	V_F	1.1							V
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25°C Ta=100°C	I_R	5 50							uA
Max. Thermal Resistance (Note 1)	$R_{\theta JA}$	50							°C/W
Operating Junction Temperature	T_j	-55 to +150							°C
Storage Temperature	T_{STG}	-55 to +150							°C

Note 1: Thermal resistance from junction to ambient.

Rating and Characteristic Curves (CGRA4001 Thru CGRA4007)

Fig. 1 - Reverse Characteristics

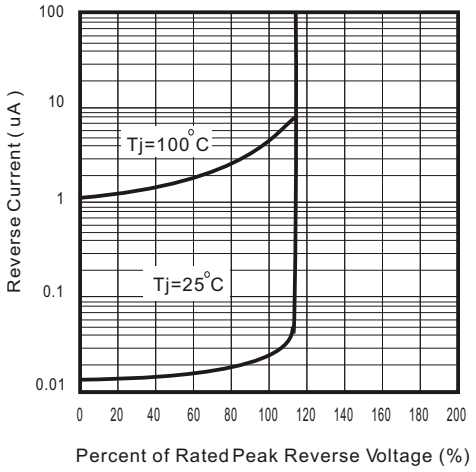


Fig.2 - Forward Characteristics

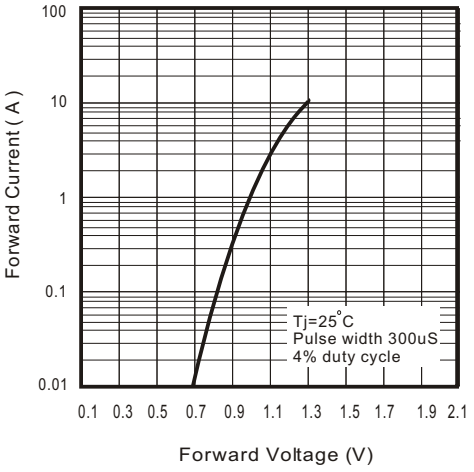


Fig. 3 - Junction Capacitance

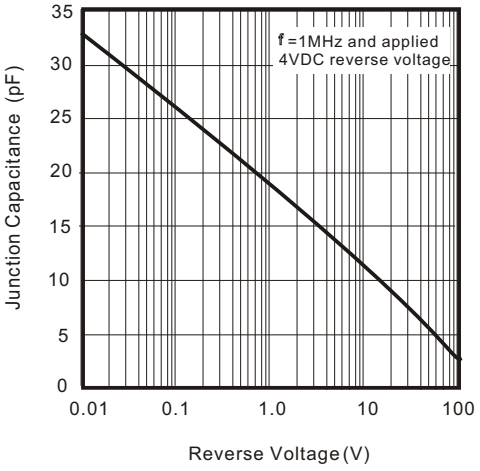


Fig. 4 - Current Derating Curve

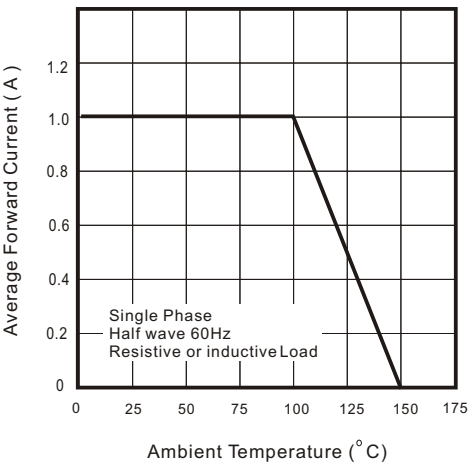


Fig. 5 - Non Repetitive Forward Surge Current