SMD Genenal Purpose Rectifier

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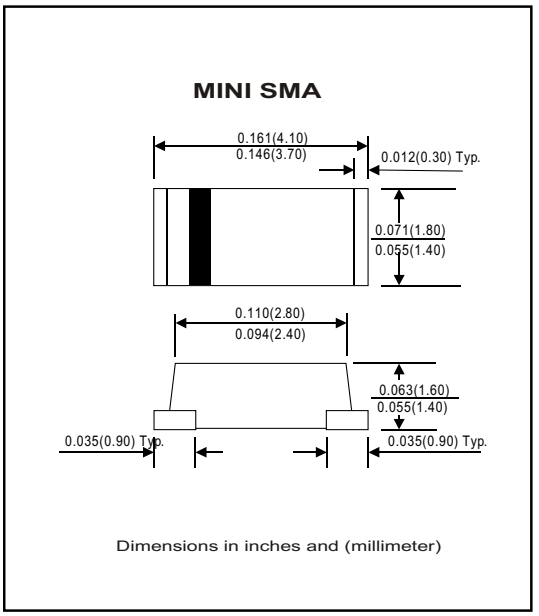
CGRM4001 Thru CGRM4007

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
- Exceeds environmental standard MIL-S-19500/228
- Low leakage current



Mechanical data

- Case: Mini SMA/SOD-123 molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight:0.04 gram

Maximum Ratings and Electrical Characterics

Parameter	Symbol	CGRM 4001	CGRM 4002	CGRM 4003	CGRM 4004	CGRM 4005	CGRM 4006	CGRM 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)	$R_{\theta JA}$	60							°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 (CGRM4001 Thru CGRM4007)

Fig. 1 - Reverse Characteristics

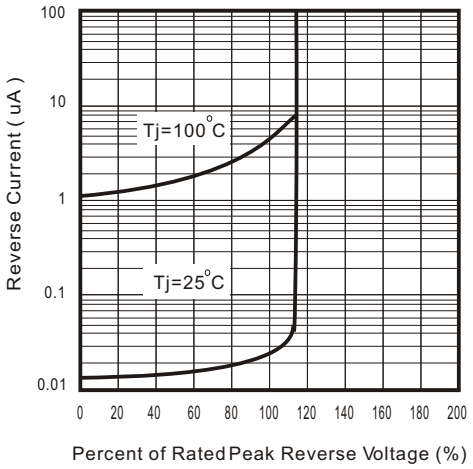


Fig.2 - Forward Characteristics

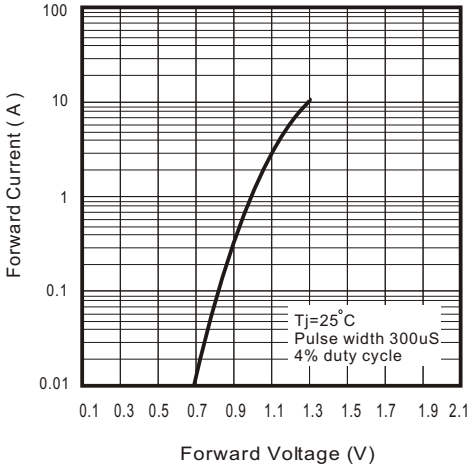


Fig. 3 - Junction Capacitance

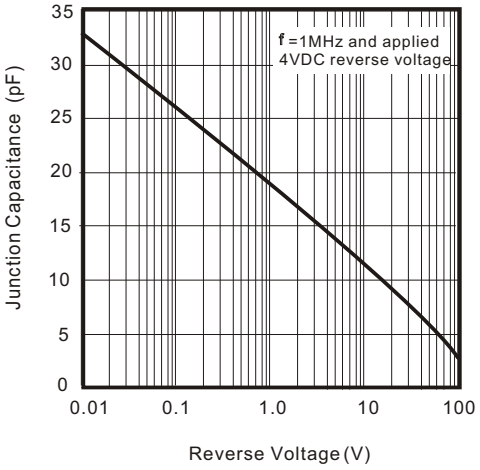


Fig. 4 - Current Derating Curve

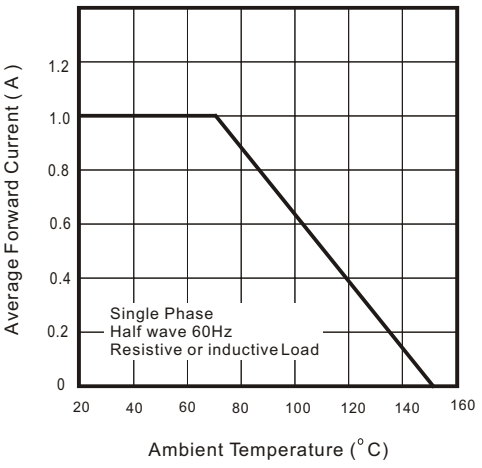


Fig. 5 - Non Repetitive Forward Surge Current