

# SMD General Purpose Rectifier

**COMCHIP**  
SMD DIODE SPECIALIST

CGRM4001-G Thru CGRM4007-G (RoHS Device)

**Glass Passivated Type**

**Reverse Voltage: 50~1000 Volts**

**Forward Current: 1.0 Amp**

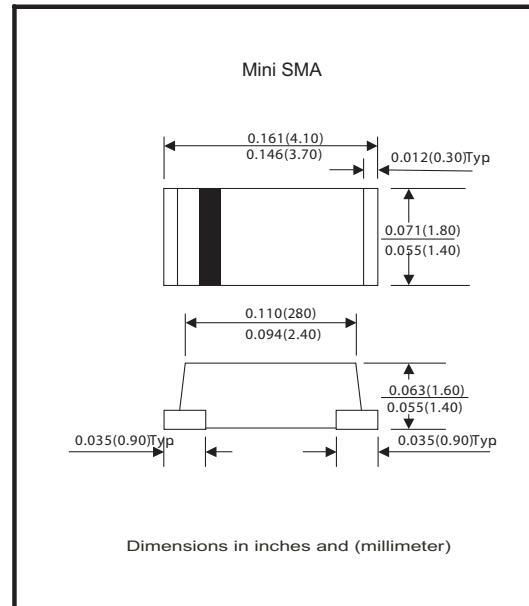


## Features:

- 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 Characteristics

Parameter	Symbol	CGRM 4001-G	CGRM 4002-G	CGRM 4003-G	CGRM 4004-G	CGRM 4005-G	CGRM 4006-G	CGRM 4007-G	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 half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30						A	
Max. Average Forward Current	I <sub>o</sub>	1.0						A	
Max. Instantaneous Forward Current at 1.0 A	V <sub>F</sub>	1.1						V	
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25°C Ta=100°C	I <sub>R</sub>	5 50						uA	
Max. Thermal Resistance (Note 1)	R <sub>θJA</sub>	60						°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.

"-G" suffix designates RoHS compliant version.

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## Rating and Characteristic Curves (CGRM4001-G Thru CGRM4007-G)

Fig. 1 - Reverse Characteristics

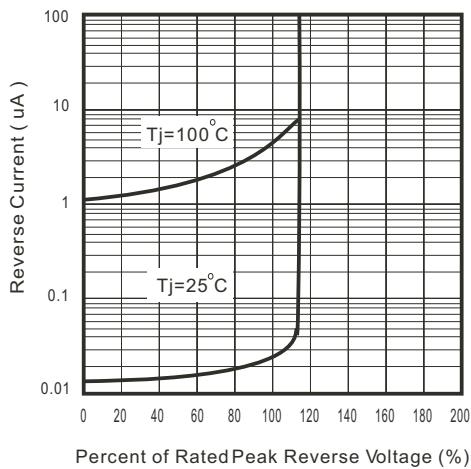


Fig. 2 - Forward Characteristics

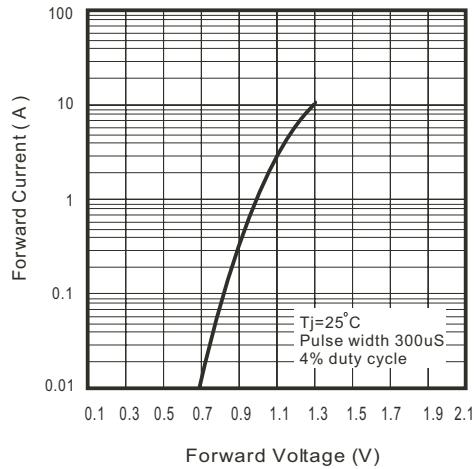


Fig. 3 - Junction Capacitance

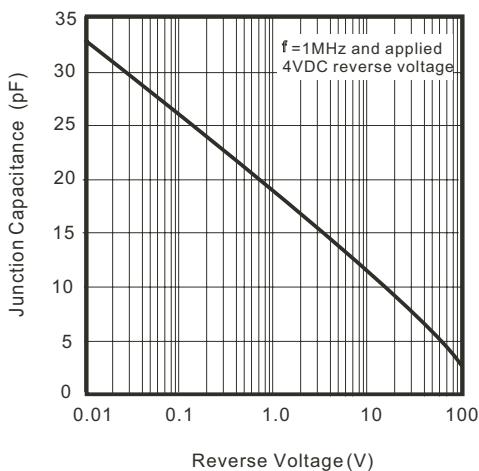


Fig. 4 - Current Derating Curve

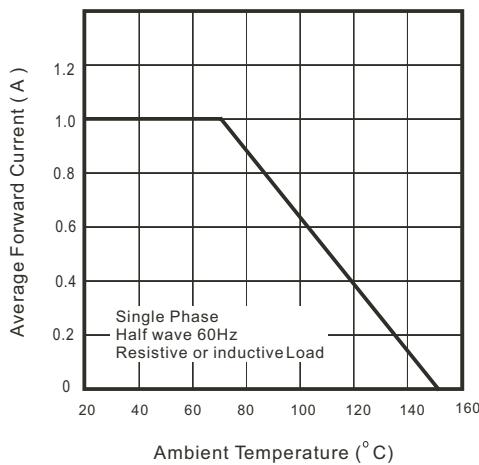
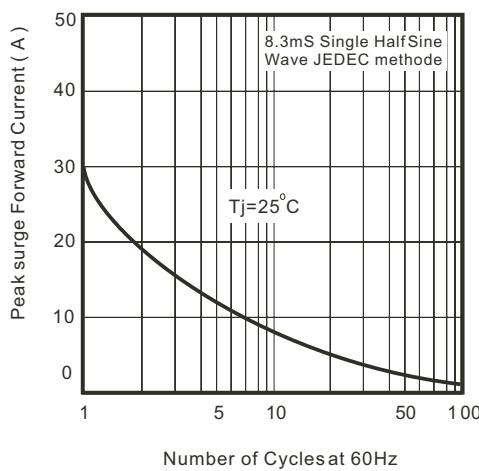


Fig. 5 - Non Repetitive Forward Surge Current



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