

CGRA4001-G Thru. CGRA4007-G

Glass Passivated Type

Reverse Voltage: 50 to 1000 Volts

Forward Current: 1.0 Amp

RoHS Device

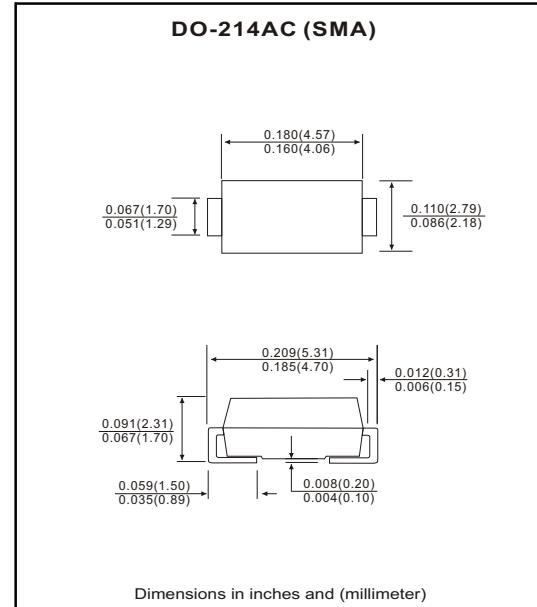


Features

- 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.
- Use in sensitive electronics protection against voltage transients induced by inductive load switching and lighting on ICs, MOSFET, signal lines of sensor units for consumer, computer, industrial, automotive and telecommunication.

Mechanical data

- Case: JEDEC DO-214AC, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Approx. weight: 0.063 grams



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CGR4001-G	CGR4002-G	CGR4003-G	CGR4004-G	CGR4005-G	CGR4006-G	CGR4007-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}					30			A
Max. average forward current	I _o					1.0			A
Max. instantaneous forward voltage at 1.0A	V _F					1.1			V
Max. DC reverse current at T _A =25°C rated DC blocking voltage T _A =100°C	I _R					5.0 50			µA
Max. thermal resistance (Note 1)	R _{θJA}			75			85		°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 terminals, unit mounted on P.C.B. with 5.0×5.0mm² copper pads.

SMD General Purpose Rectifiers

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RATING AND CHARACTERISTIC CURVES (CGRA4001-G thru CGRA4007-G)

Fig.1 Reverse Characteristics

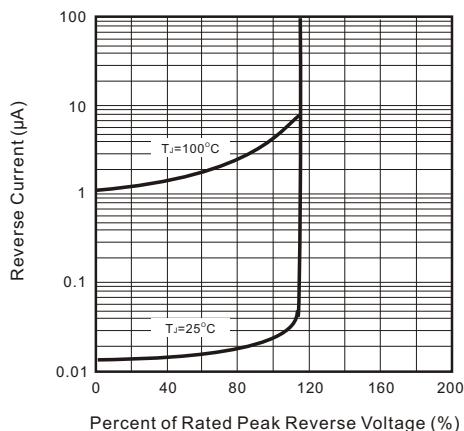


Fig.2 Forward Characteristics

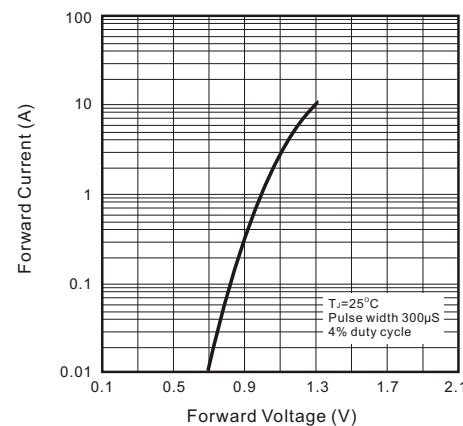


Fig.3 Junction Capacitance

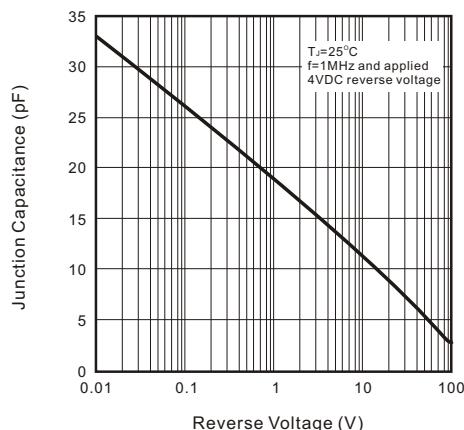


Fig.4 Current Derating Curve

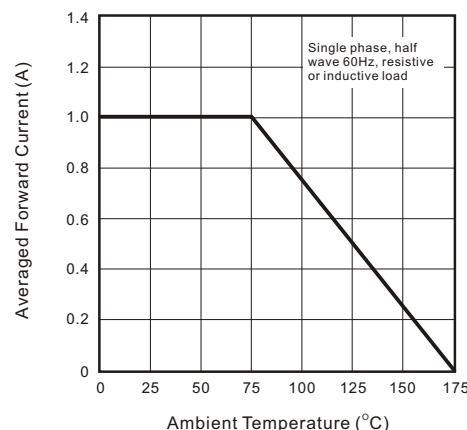
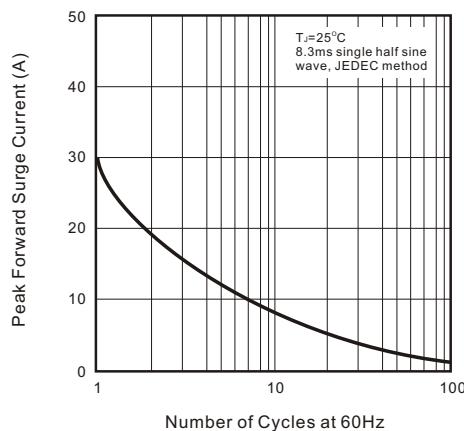


Fig.5 Non-repetitive Forward Surge Current



REV:B

QW-BG002

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