

SMD General Purpose Rectifier

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CGRC301 Thru CGRC307

Glass Passivated Type

Reverse Voltage: 50 - 1000 Volts

Forward Current: 2.0 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

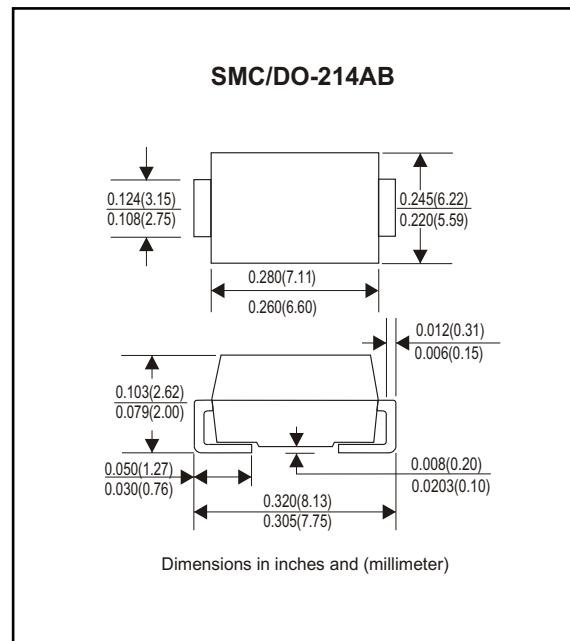
Case: JEDEC DO-214AB molded plastic

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

Polarity: Color band denotes cathode end

Mounting position: Any

Approx. Weight: 0.21 gram



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CGRC 301	CGRC 302	CGRC 303	CGRC 304	CGRC 305	CGRC 306	CGRC 307	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 halfsine-wave superimposed on rateload (JEDEC method)	I _{FSM}				100				A
Max. Average Forward Current	I _o				3.0				A
Max. Instantaneous Forward Current at 3.0 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				μA
Max. Thermal Resistance (Note 1)	R _{θJA}				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 (CGRC301 Thru CGRC307)

Fig. 1 - Reverse Characteristics

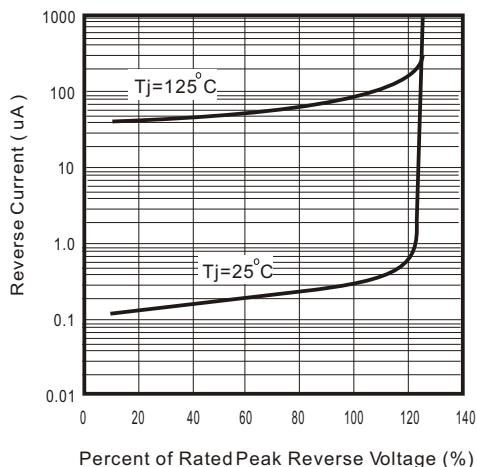


Fig.2 - Forward Characteristics

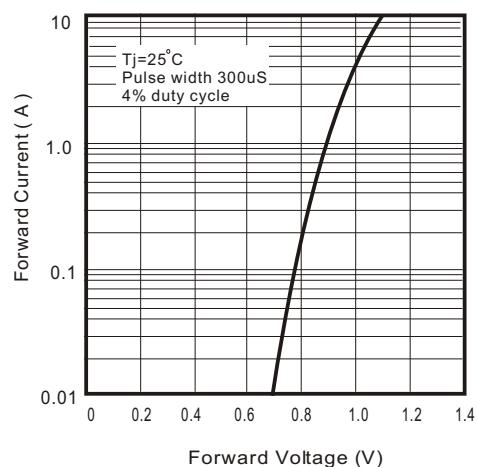


Fig. 3 - Junction Capacitance

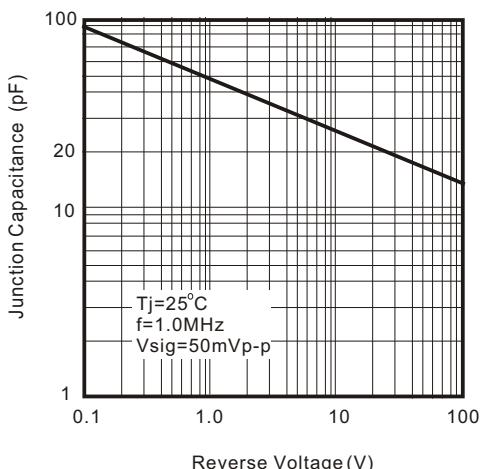


Fig. 4 - Current Derating Curve

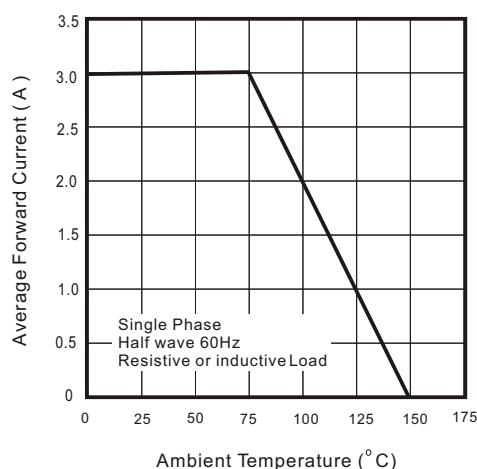


Fig. 5 - Non Repetitive Forward Surge Current

