

SMD Schottky Barrier Rectifiers



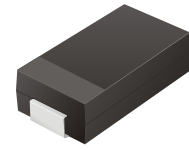
SMD Diodes Specialist

CDBA320-G Thru. CDBA3100-G

Reverse Voltage: 20 to 100 Volts

Forward Current: 3.0 Amp

RoHS Device

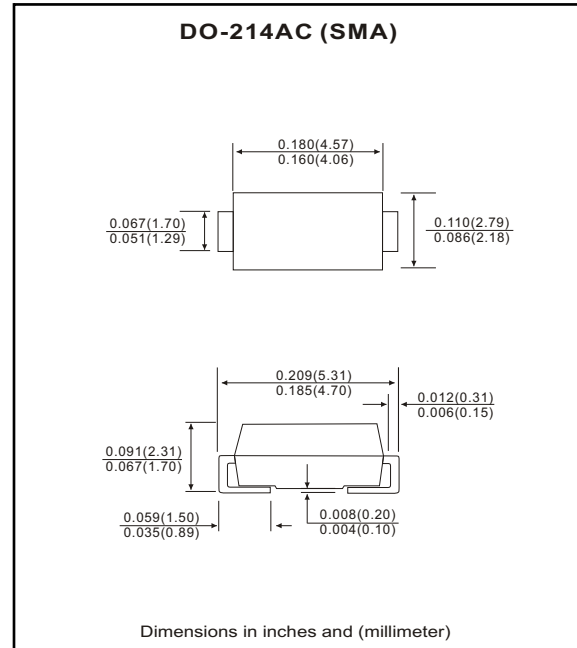


Features

- Ideal for surface mount applications.
- Easy pick and place.
- Plastic package has Underwriters Lab. flammability classification 94V-0.
- Built-in strain relief.
- Low forward voltage drop.

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	CDBA 320-G	CDBA 340-G	CDBA 360-G	CDBA 380-G	CDBA 3100-G	Units
Max. repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	V
Max. DC blocking voltage	V_{DC}	20	40	60	80	100	V
Max. RMS voltage	V_{RMS}	14	28	42	56	70	V
Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	80					A
Max. average forward current	I_o	3.0					A
Max. instantaneous forward voltage at 3.0A	V_F	0.50		0.70	0.85		V
Max. DC reverse current at $T_A=25^{\circ}C$ rated DC blocking voltage $T_A=100^{\circ}C$	I_R	0.5					mA
		20			10		
Max. thermal resistance (Note 1)	$R_{\theta JA}$	50					$^{\circ}C/W$
	$R_{\theta JL}$	10					
Max. operating junction temperature	T_J	125					$^{\circ}C$
Storage temperature	T_{STG}	-65 to +150					$^{\circ}C$

Notes: 1. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2x0.2 inch² copper pad area.

RATING AND CHARACTERISTIC CURVES (CDBA320-G thru CDBA3100-G)

Fig.1 Reverse Characteristics

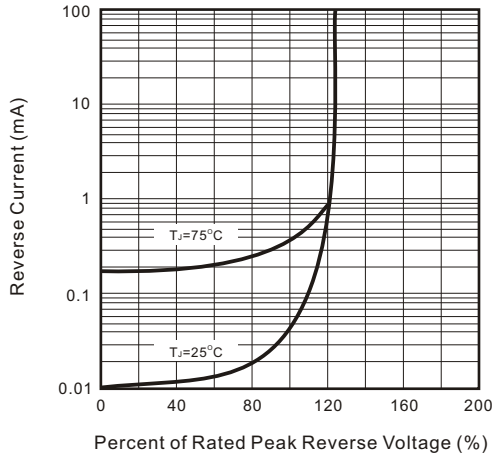


Fig.2 Forward Characteristics

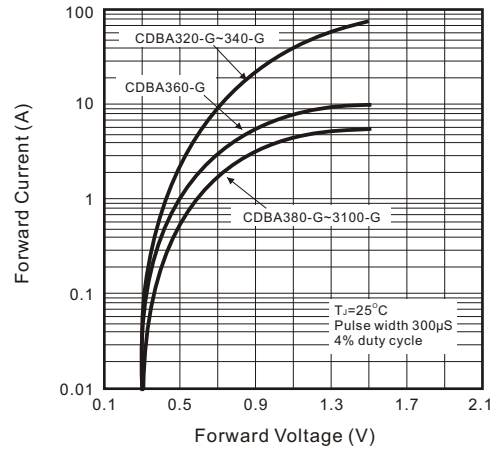


Fig.3 Junction Capacitance

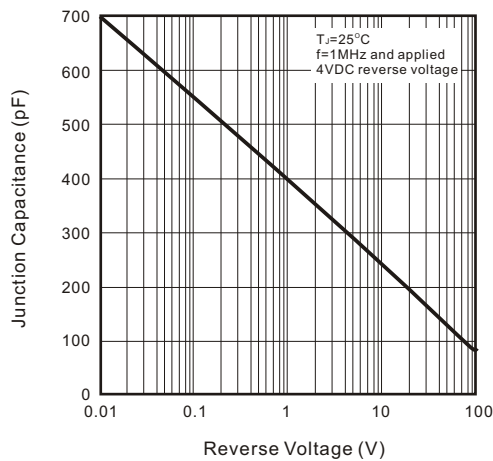


Fig.4 Current Derating Curve

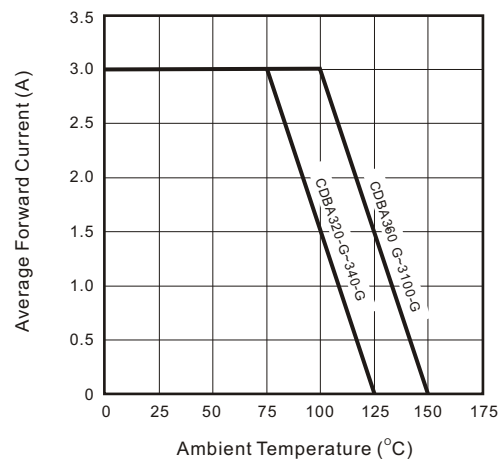


Fig.5 Non-repetitive Forward Surge Current

