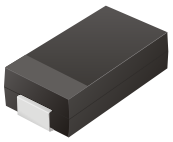
CDBC320-G Thru CDBC3100-G

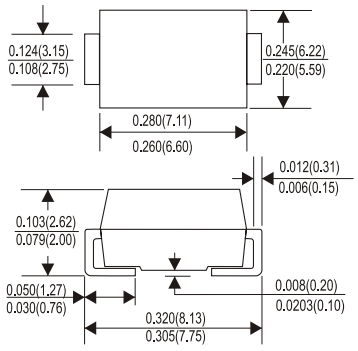
Reverse Voltage: 20 - 100 Volts
Forward Current: 3.0 Amp
RoHS Device



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

SMC/DO-214AB



Dimensions in inches and (millimeter)

Mechanical data

- Case: JEDEC DO-214AB molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.21 gram

Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBC320-G	CDBC340-G	CDBC360-G	CDBC380-G	CDBC3100-G	Unit
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 Current at 3.0 A	V_F	0.50		0.75	0.85		V
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25°C	I_R	0.5					mA
Ta=100°C		20		10			
Max. Thermal Resistance (Note 1)	$R_{\theta JA}$	50					°C/W
	$R_{\theta JL}$	10					
Max. Operating Junction Temperature	Tj	125					°C
Storage Temperature	T_{STG}	-65 to +150					°C

Note 1: Thermal resistance from junction to ambient and junction to to lead P.C.B. Mounted on 0.2 x 0.2 inch^2 copper pad areas

Rating and Characteristic Curves (CDBC320-G Thru CDBC3100-G)

Fig. 1 - Reverse Characteristics

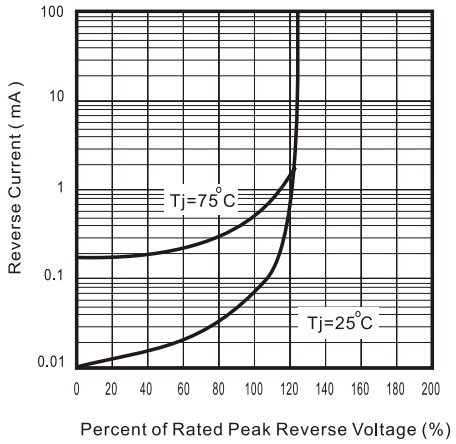


Fig.2 - Forward Characteristics

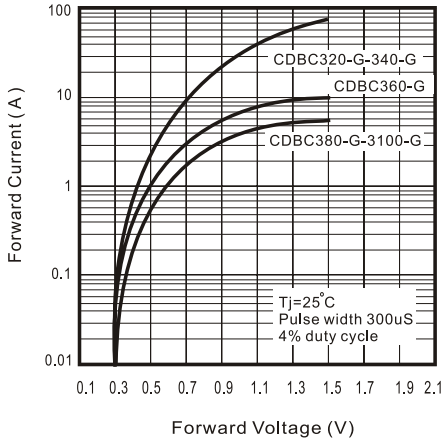


Fig. 3 - Junction Capacitance

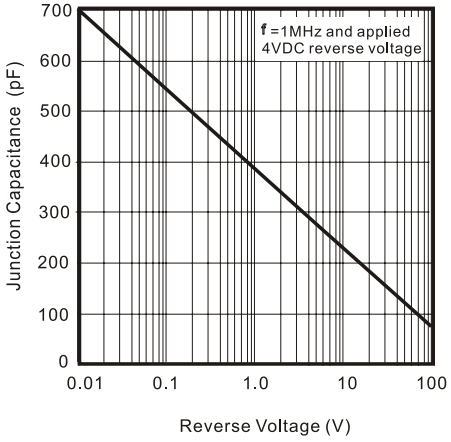


Fig. 4 - Current Derating Curve

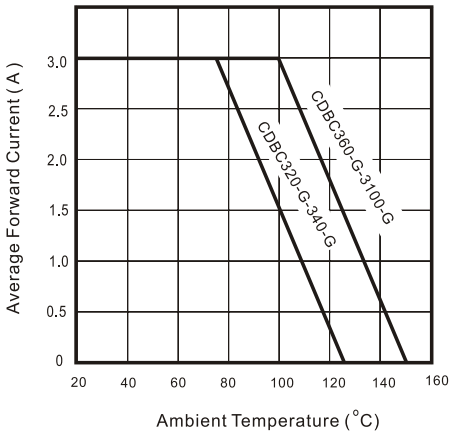


Fig. 5 - Non Repetitive Forward Surge Current