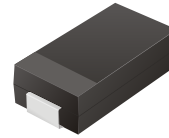


## CDBC520-G Thru CDBC5100-G

Reverse Voltage: 20 - 100 Volts  
Forward Current: 5.0 Amp  
RoHS Device

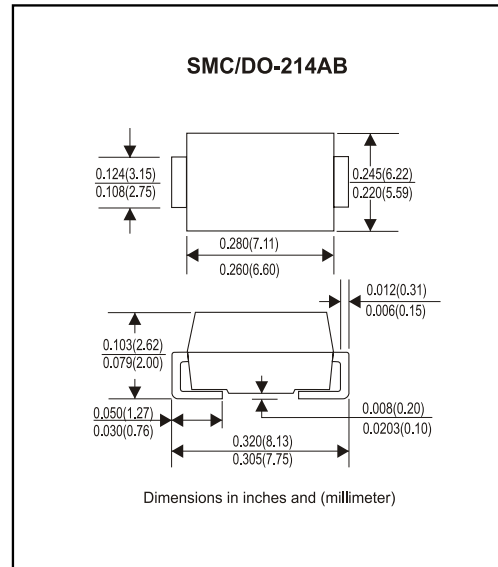


### Features

- 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-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	CDBC520-G	CDBC540-G	CDBC560-G	CDBC580-G	CDBC5100-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)	$I_{FSM}$	100					A
Max. Average Forward Current	$I_o$	5.0					A
Max. Instantaneous Forward Current at 5.0 A	$V_F$	0.55		0.75		0.85	V
Max. DC Reverse Current at Rated DC Blocking Voltage $T_a=25^{\circ}C$ $T_a=100^{\circ}C$	$I_R$	0.5					mA
		50					
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					$^{\circ}C$

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



## Rating and Characteristic Curves (CDBC520-G Thru CDBC5100-G)

Fig. 1 - Reverse Characteristics

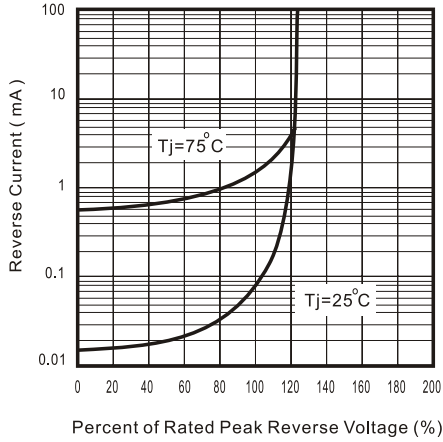


Fig. 2 - Forward Characteristics

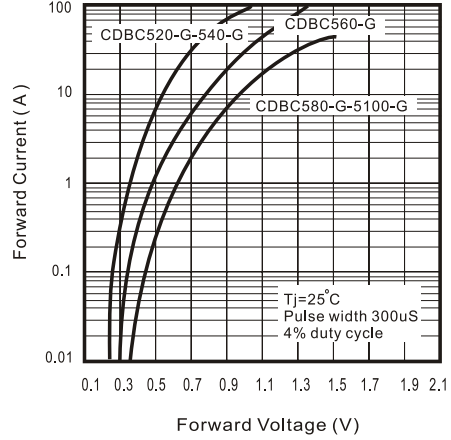


Fig. 3 - Junction Capacitance

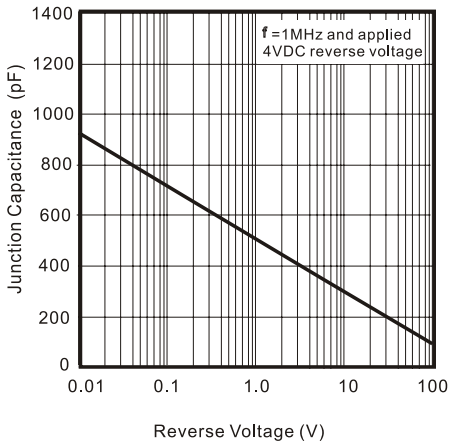


Fig. 4 - Current Derating Curve

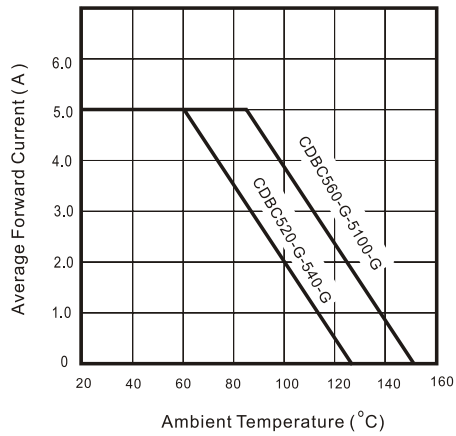


Fig. 5 - Non Repetitive Forward Surge Current

