

CDBC520-G Thru CDBC5100-G

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

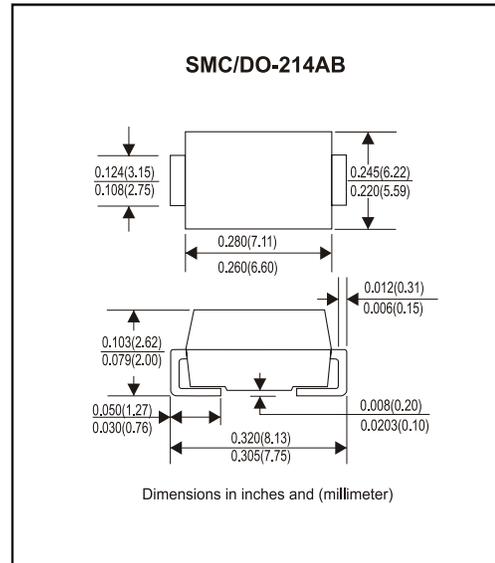


Features

- 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 $T_a=25^{\circ}C$	I_R	0.5					mA	
$T_a=100^{\circ}C$		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 inch² copper pad areas



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

Fig. 1 - Reverse Characteristics

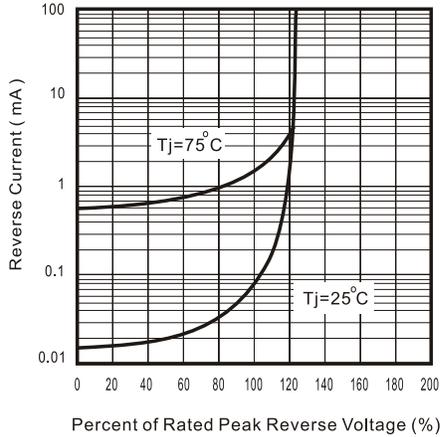


Fig. 2 - Forward Characteristics

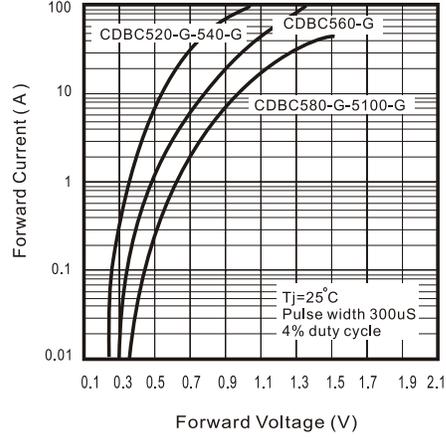


Fig. 3 - Junction Capacitance

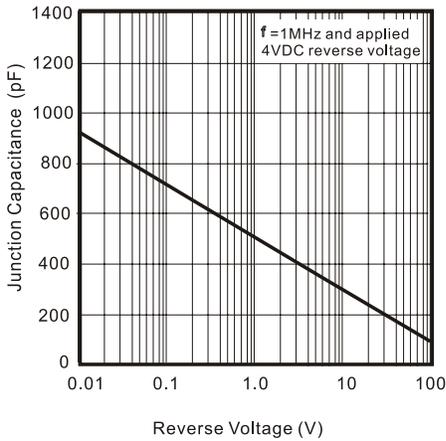


Fig. 4 - Current Derating Curve

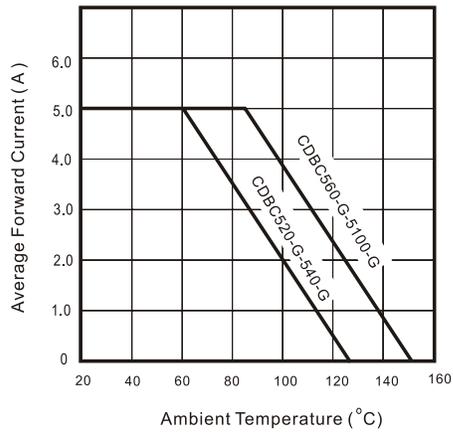


Fig. 5 - Non Repetitive Forward Surge Current

