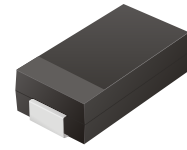


## CDBC520 Thru CDBC5100

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

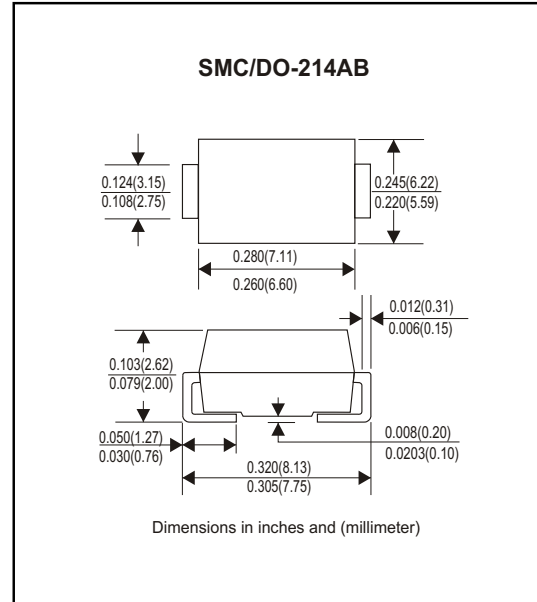


### Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Built-in strain relief
- 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
- Mounting position: Any
- Approx. Weight: 0.21 gram



### Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBC520	CDBC540	CDBC560	CDBC5100	Unit
Max. Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	60	100	V
Max. DC Blocking Voltage	V <sub>DC</sub>	20	40	60	100	V
Max. RMS Voltage	V <sub>RMS</sub>	14	28	42	70	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I <sub>FSM</sub>	100				A
Max. Average Forward Current	I <sub>O</sub>	5.0				A
Max. Instantaneous Forward Current at 5.0 A	V <sub>F</sub>	0.55		0.70	0.85	V
Max. DC Reverse Current at Rated DC Blocking Voltage T <sub>a</sub> =25°C	I <sub>R</sub>	1.0				mA
		20		10		
Max. Thermal Resistance (Note 1)	R <sub>θJA</sub>	50				°C/W
	R <sub>θJL</sub>	10				
Operating Junction temperature	T <sub>j</sub>	-50 to +125				°C
Storage Temperature	T <sub>STG</sub>	-65 to +150				°C

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

## Rating and Characteristic Curves (CDBC520 Thru CDBC5100)

Fig. 1 - Reverse Characteristics

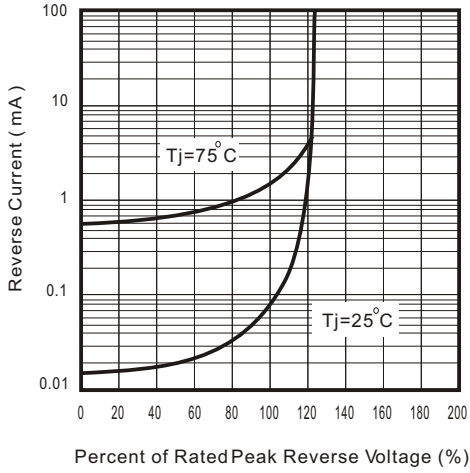


Fig.2 - Forward Characteristics

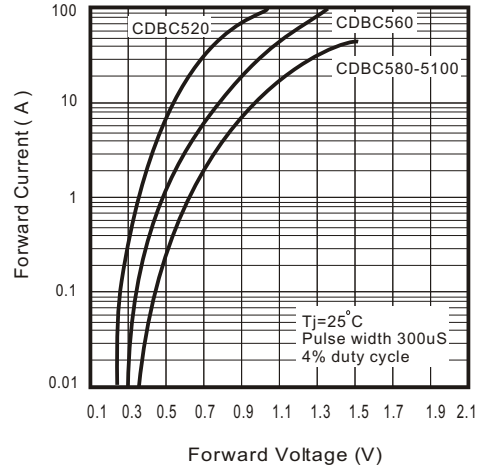


Fig. 3 - Junction Capacitance

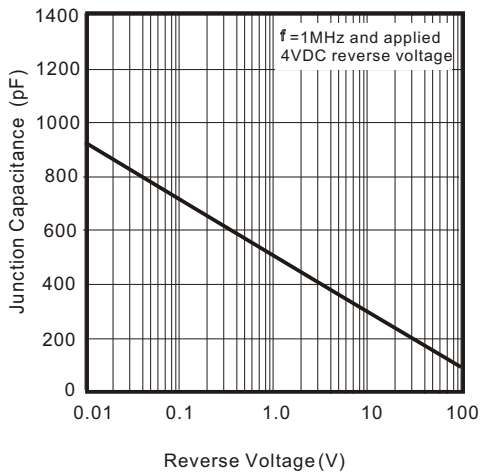


Fig. 4 - Current Derating Curve

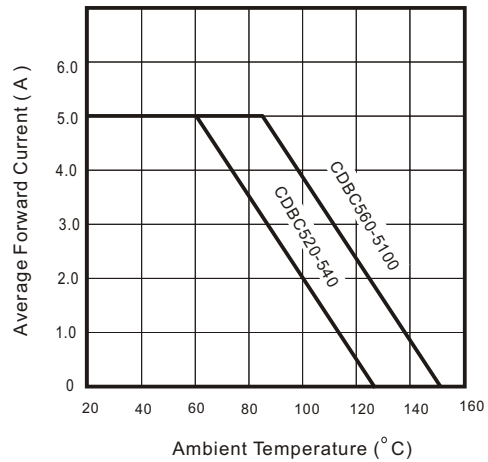


Fig. 5 - Non Repetitive Forward Surge Current

