

CDBC520 Thru CDBC5100

Reverse Voltage: 20 - 100 Volts

Forward Current: 5.0 Amp

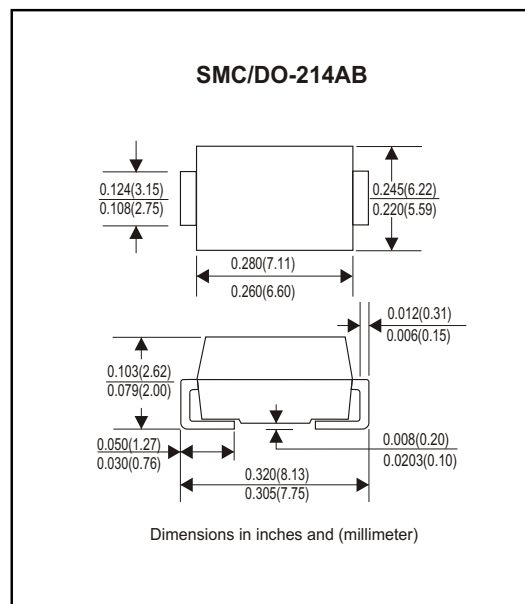


Features

- 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_{RRM}	20	40	60	100	V
Max. DC Blocking Voltage	V_{DC}	20	40	60	100	V
Max. RMS Voltage	V_{RMS}	14	28	42	70	V
Peak Surge Forward Current 8.3ms single halfsine-wave superimposed on rateload (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		0.70	0.85	V
Max. DC Reverse Current at Rated DC Blocking Voltage $T_a=25^{\circ}C$ $T_a=100^{\circ}C$	I_R	1.0				mA
		20			10	
Max. Thermal Resistance(Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	50 10				$^{\circ}C/W$
Operating Junction temperature	T_j	-50 to +125				$^{\circ}C$
Storage Temperature	T_{STG}	-65 to +150				$^{\circ}C$

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

Rating and Characteristic Curves (CDBC520 Thru CDBC5100)

Fig. 1 - Reverse Characteristics

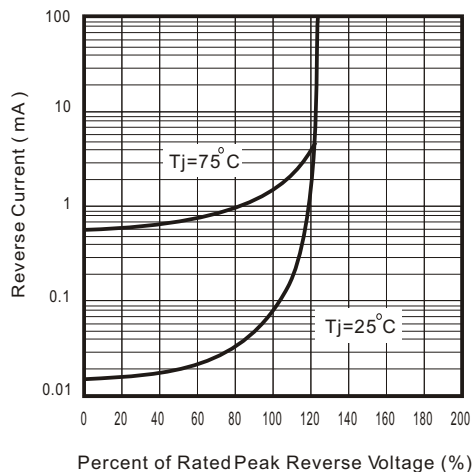


Fig.2 - Forward Characteristics

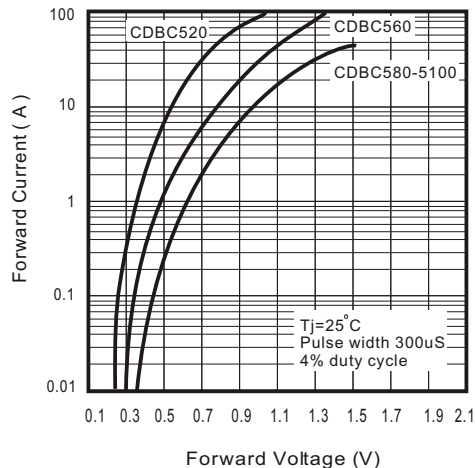


Fig. 3 - Junction Capacitance

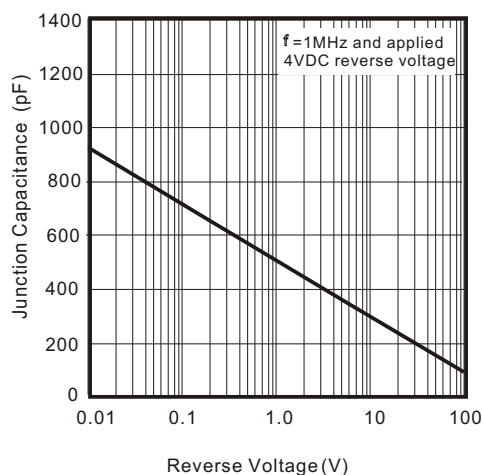


Fig. 4 - Current Derating Curve

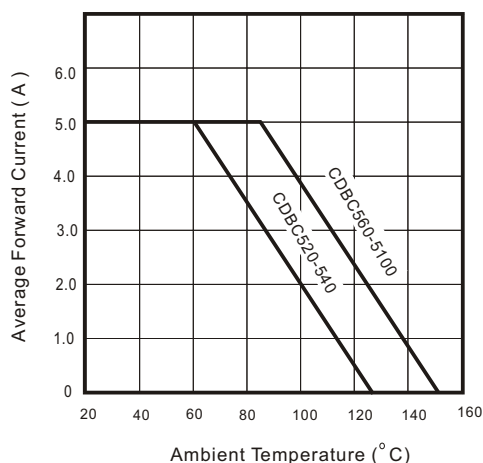


Fig. 5 - Non Repetitive Forward Surge Current

