

## CDBL120 Thru CDBL1100

**Reverse Voltage: 20 - 100 Volts**  
**Forward Current: 1.0 Amp**

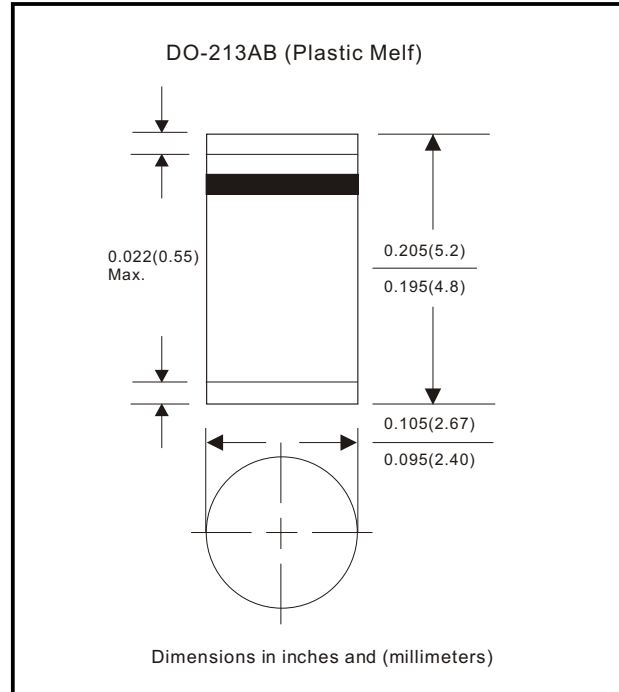


### Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Guard Ring Protection
- Low Forward voltage and power loss for high efficiency

### Mechanical data

- Case: DO-213AB molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight: 0.116 gram



### Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBL120	CDBL140	CDBL160	CDBL180	CDBL1100	Unit
Max. Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	60	80	100	V
Max. DC Blocking Voltage	V <sub>DC</sub>	20	40	60	80	100	V
Max. RMS Voltage	V <sub>RMS</sub>	14	28	42	56	70	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30					A
Max. Average Forward Current	I <sub>O</sub>	1.0					A
Max. Instantaneous Forward Current at 1.0 A	V <sub>F</sub>	0.50		0.70		0.85	V
Max. DC Reverse Current at Rated DC Blocking Voltage T <sub>a</sub> =25°C	I <sub>R</sub>	0.5					mA
		10		5			
Max. I. Thermal Resistance (Note 1)	R <sub>θJA</sub>	75					°C/W
	R <sub>θJT</sub>	35					
Operating Junction Temperature	T <sub>j</sub>	-55 to +125			-55 to +150		°C
Storage Temperature	T <sub>STG</sub>	-55 to +150					°C

Note 1: Thermal resistance from junction to ambient and junction to terminals.

## Rating and Characteristic Curves (CDBL120 Thru CDBL1100)

Fig. 1 - Reverse Characteristics

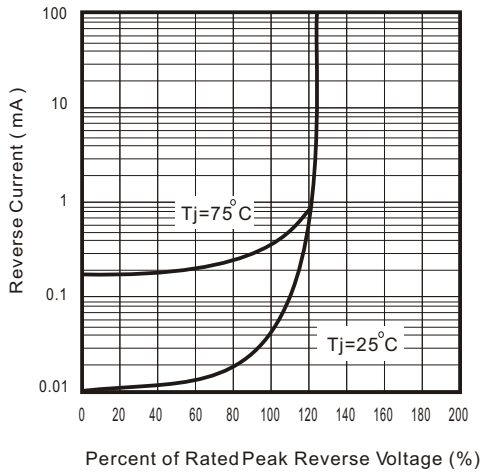


Fig.2 - Forward Characteristics

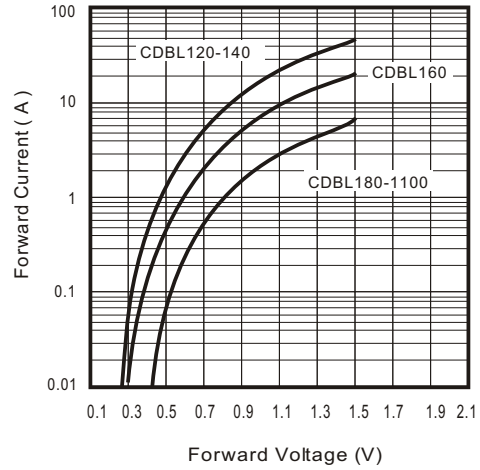


Fig. 3 - Junction Capacitance

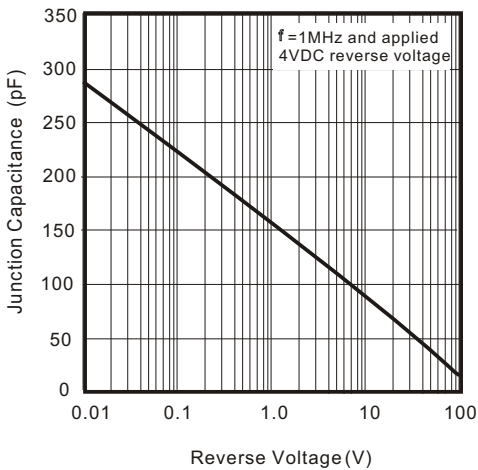


Fig. 4 - Current Derating Curve

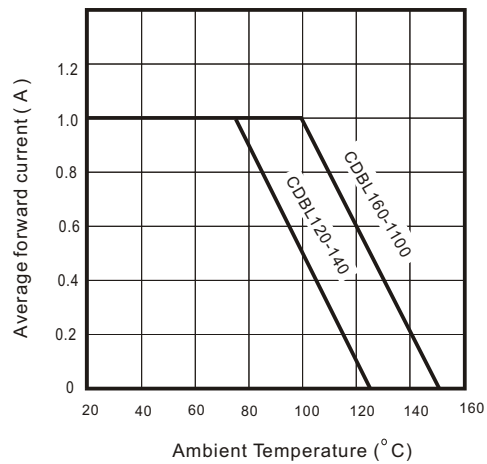


Fig. 5 - Non repetitive Forward Surge Current

