

## CDBL120L Thru CDBL140L

**Reverse Voltage: 20 - 40 Volts**  
**Forward Current: 1.0 Amp**

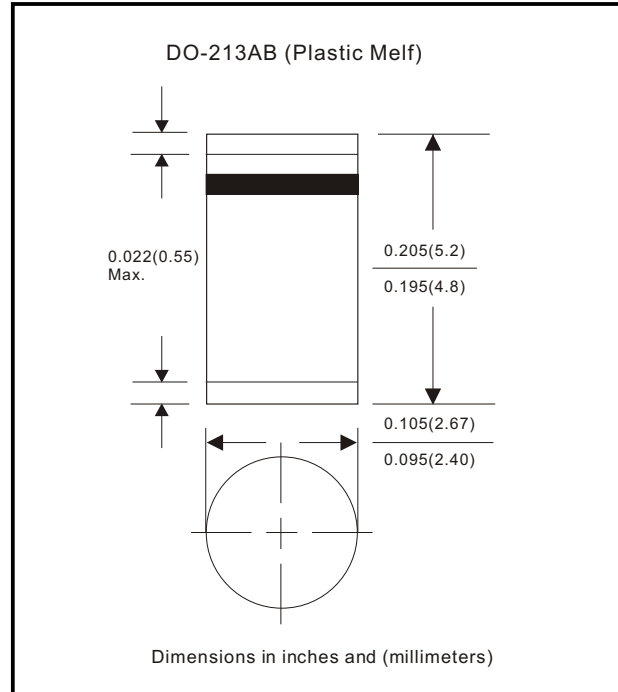


### Features

- 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	CDBL120L	CDBL140L	Unit
Max. Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	V
Max. DC Blocking Voltage	V <sub>DC</sub>	20	40	V
Max. RMS Voltage	V <sub>RMS</sub>	14	28	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rate 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>	0.38	0.40	V
Max. DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.5		mA
T <sub>a</sub> =25°C		10		
T <sub>a</sub> =100°C				
Max. 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		°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 (CDBL120L Thru CDBL140:L)

Fig. 1 - Reverse Characteristics

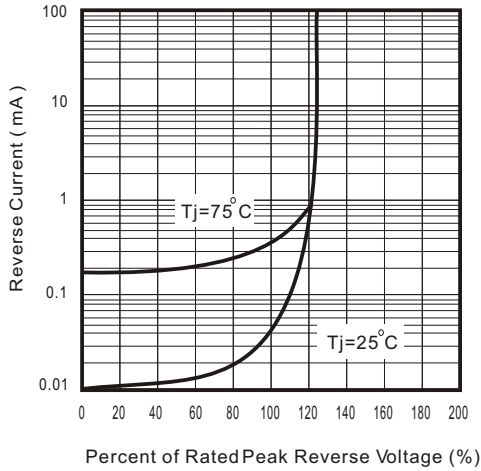


Fig.2 - Forward Characteristics

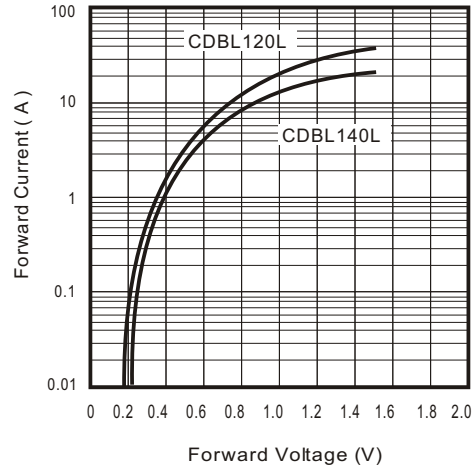


Fig. 3 - Junction Capacitance

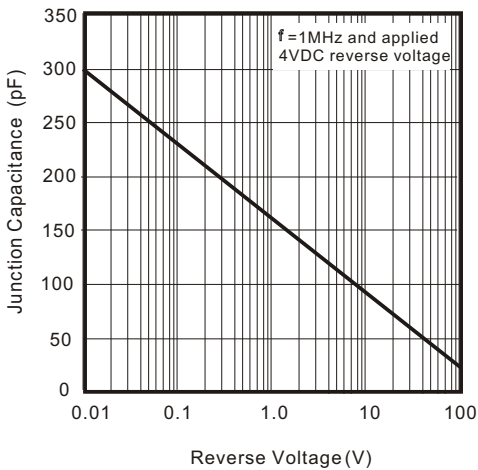


Fig. 4 - Current Derating Curve

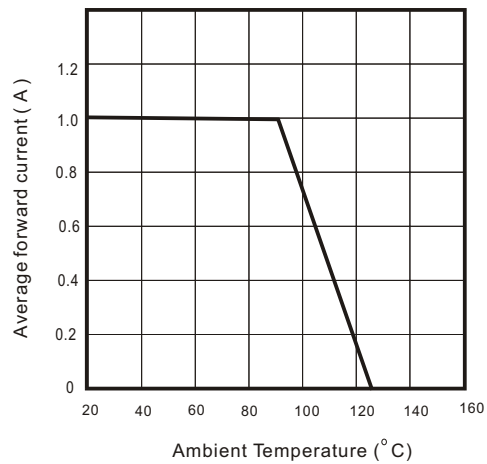


Fig. 5 - Non repetitive Forward Surge Current

