

Low VF SMD Schottky Barrier Rectifier



CDBL120L-G Thru CDBL140L-G

Reverse Voltage: 20 - 40 Volts
 Forward Current: 1.0 Amp
 RoHS Device

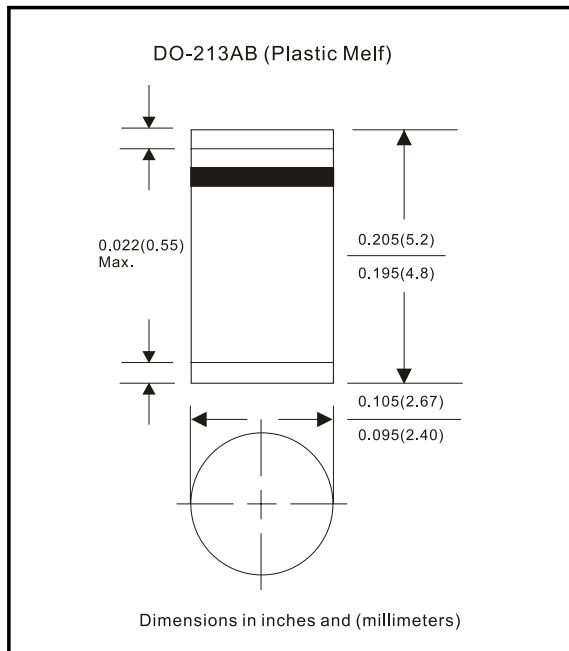


Features

- 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
- Approx. Weight: 0.116 gram



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBL120L-G	CDBL140L-G	Unit
Max. Repetitive Peak Reverse Voltage	V _{RRM}	20	40	V
Max. DC Blocking Voltage	V _{DC}	20	40	V
Max. RMS Voltage	V _{RMS}	14	28	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}	30		A
Max. Average Forward Current	I _o	1.0		A
Max. Instantaneous Forward Current at 1.0 A	V _F	0.38	0.40	V
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25°C	I _R	1.0		mA
Ta=100°C		10		
Max. Thermal Resistance (Note 1)	R _{θJA}	75		°C/W
	R _{θJT}	35		
Max. Operating Junction Temperature	T _j	125		°C
Storage Temperature	T _{STG}	-55 to +150		°C

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

Rating and Characteristic Curves (CDBL120L-G Thru CDBL140:L-G)

Fig. 1 - Reverse Characteristics

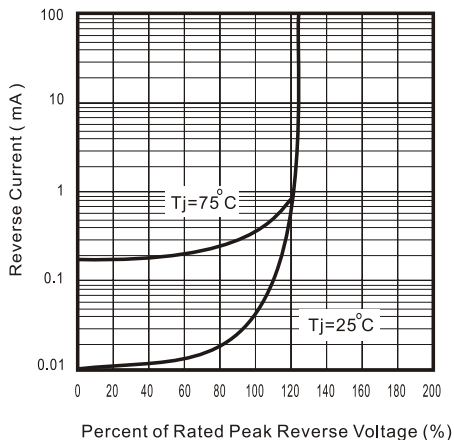


Fig. 2 - Forward Characteristics

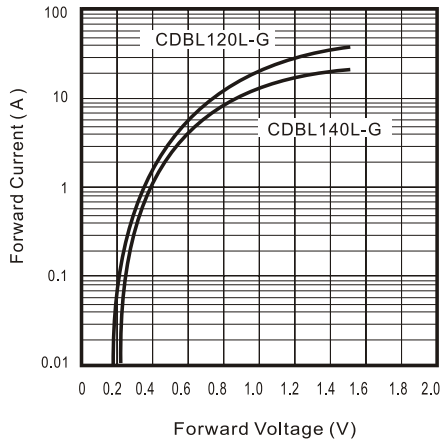


Fig. 3 - Junction Capacitance

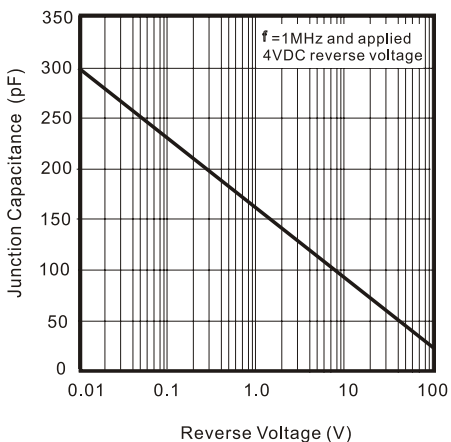


Fig. 4 - Current Derating Curve

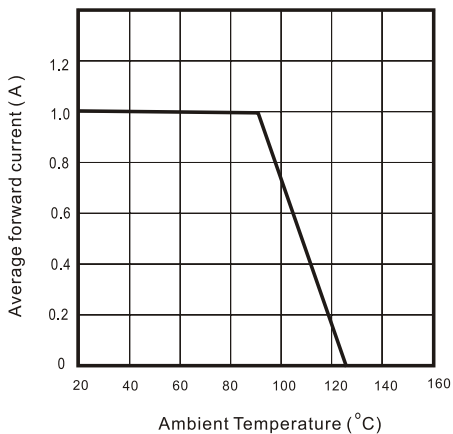


Fig. 5 - Non repetitive Forward Surge Current

