

CDBL120L Thru CDBL140L

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

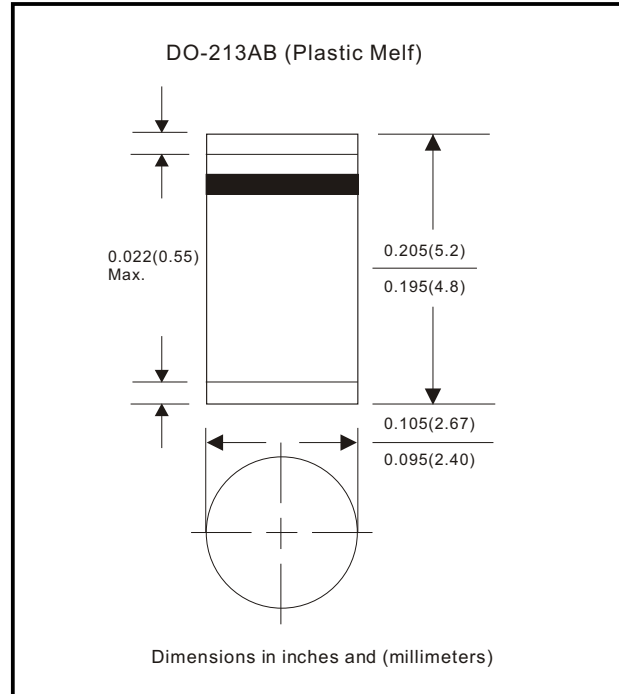


Features

- 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 _{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 rated 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 | I _R | 0.5 | | mA |
| T _a =25°C | | 10 | | |
| Max. Thermal Resistance (Note 1) | R _{θJA} | 75 | | °C/W |
| | R _{θJT} | 35 | | |
| Operating Junction Temperature | T _j | -55 to +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 Thru CDBL140:L)

Fig. 1 - Reverse Characteristics

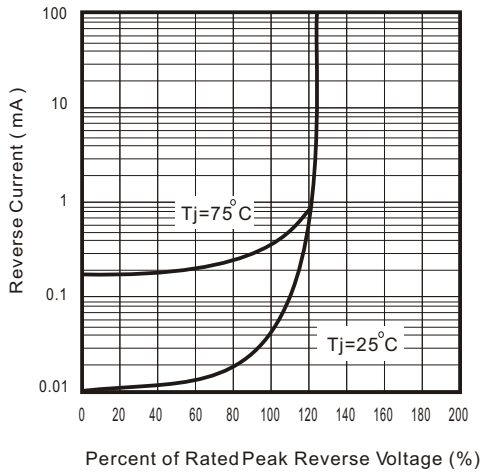


Fig.2 - Forward Characteristics

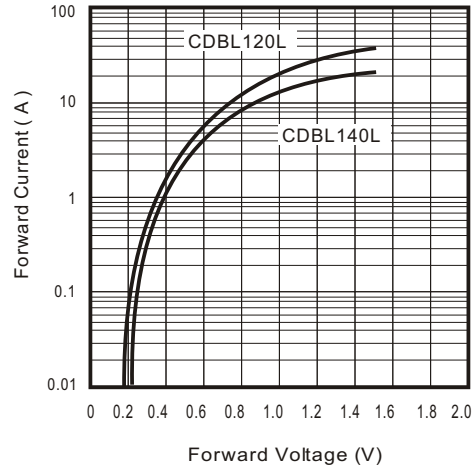


Fig. 3 - Junction Capacitance

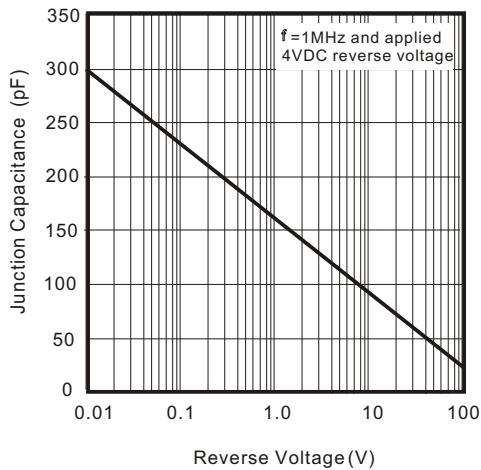


Fig. 4 - Current Derating Curve

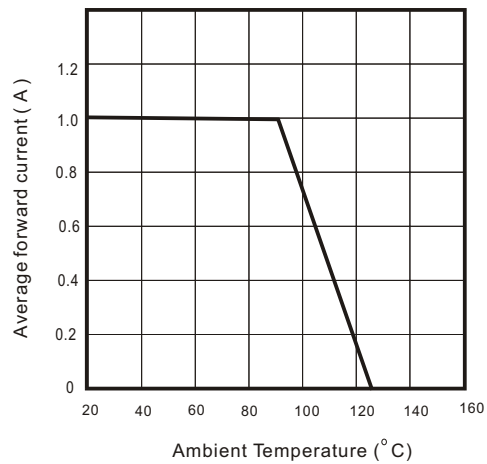


Fig. 5 - Non repetitive Forward Surge Current

