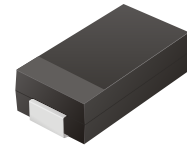


CDBC520 Thru CDBC5100

Reverse Voltage: 20 - 100 Volts
Forward Current: 5.0 Amp

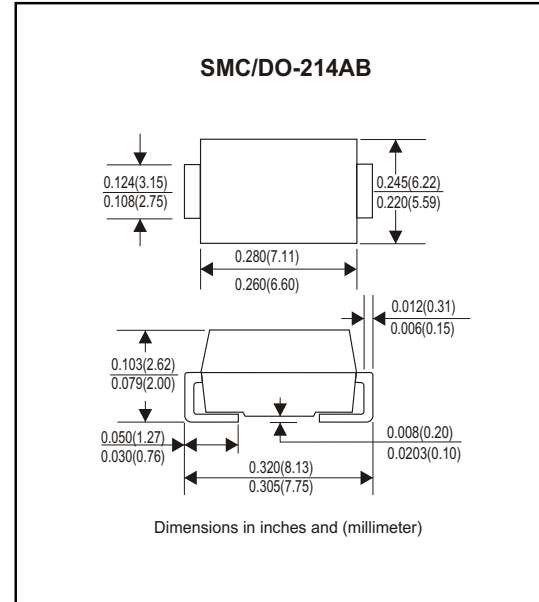


Features

- 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 half sine-wave superimposed on rate load (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°C | I _R | 1.0 | | | | mA |
| | | 20 | | 10 | | |
| Max. Thermal Resistance (Note 1) | R _{θJA} | 50 | | | | °C/W |
| | R _{θJL} | 10 | | | | |
| Operating Junction temperature | T _j | -50 to +125 | | | | °C |
| Storage Temperature | T _{STG} | -65 to +150 | | | | °C |

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

Rating and Characteristic Curves (CDBC520 Thru CDBC5100)

Fig. 1 - Reverse Characteristics

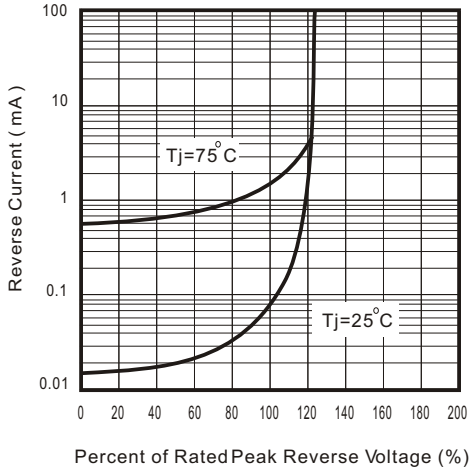


Fig.2 - Forward Characteristics

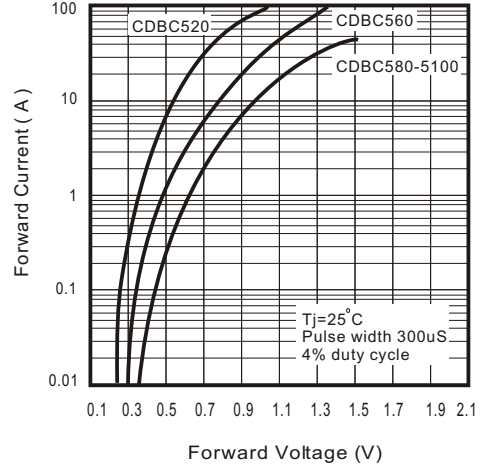


Fig. 3 - Junction Capacitance

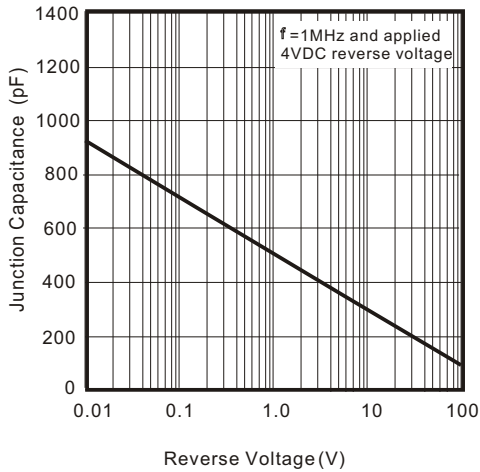


Fig. 4 - Current Derating Curve

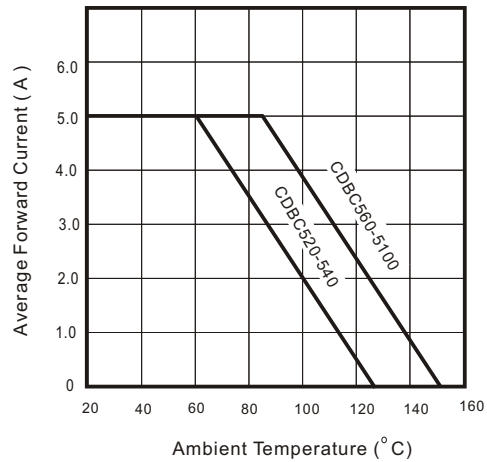


Fig. 5 - Non Repetitive Forward Surge Current

