

## CDBA320-G Thru CDBA3100-G

Reverse Voltage: 20 - 100 Volts  
Forward Current: 3.0 Amp  
RoHS Device

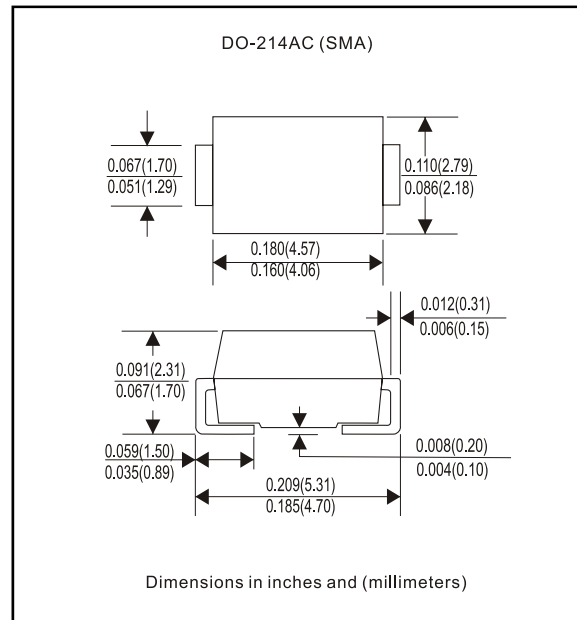


### Features

- 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-214AC molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.063 gram



### Maximum Ratings and Electrical Characteristics

| Parameter                                                                                                  | Symbol           | CDBA320-G   | CDBA340-G | CDBA360-G | CDBA380-G | CDBA3100-G | 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<br>8.3ms single half sine-wave<br>superimposed on rate load<br>( JEDEC method ) | I <sub>FSM</sub> | 80          |           |           |           |            | A    |
| Max. Average Forward Current                                                                               | I <sub>o</sub>   | 3.0         |           |           |           |            | A    |
| Max. Instantaneous Forward Current<br>at 3.0 A                                                             | V <sub>F</sub>   | 0.50        |           | 0.75      | 0.85      |            | V    |
| Max. DC Reverse Current at Rated DC<br>Blocking Voltage<br>Ta=25°C<br><br>Ta=100°C                         | I <sub>R</sub>   | 0.5         |           |           |           |            | mA   |
|                                                                                                            |                  | 20          |           |           | 10        |            |      |
| Max. Thermal Resistance (Note 1)                                                                           | R <sub>θJA</sub> | 50          |           |           |           |            | °C/W |
|                                                                                                            | R <sub>θJL</sub> | 10          |           |           |           |            |      |
| Max. Operating Junction Temperature                                                                        | T <sub>j</sub>   | 125         |           |           |           |            | °C   |
| Storage Temperature                                                                                        | T <sub>STG</sub> | -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 inch<sup>2</sup> copper pad areas

## Rating and Characteristic Curves (CDBA320-G Thru CDBA3100-G)

Fig. 1 - Reverse Characteristics

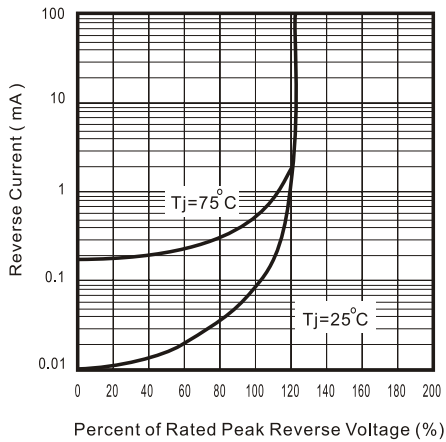


Fig. 2 - Forward Characteristics

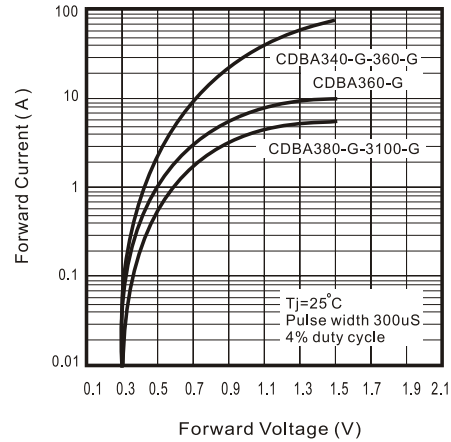


Fig. 3 - Junction Capacitance

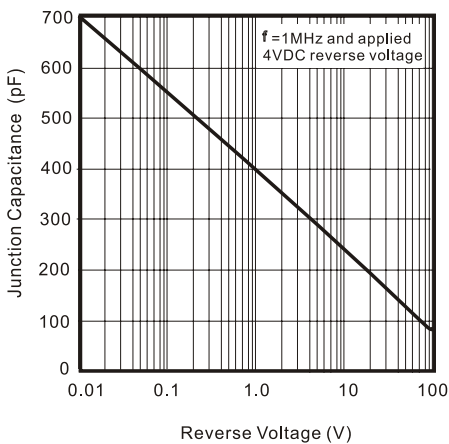


Fig. 4 - Current Derating Curve

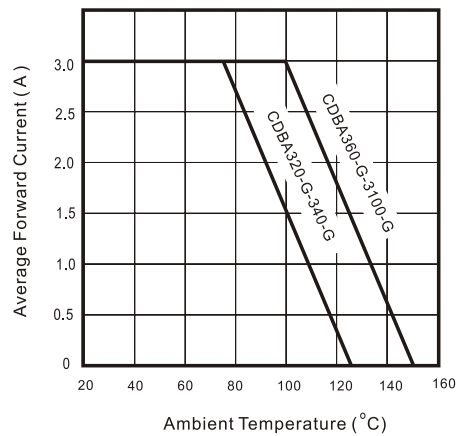


Fig. 5 - Non-Repetitive Forward Surge Current

