

# SMD Schottky Barrier Rectifiers



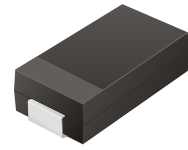
SMD Diodes Specialist

## CDBB320-G Thru. CDBB3100-G

Reverse Voltage: 20 to 100 Volts

Forward Current: 3.0 Amp

RoHS Device

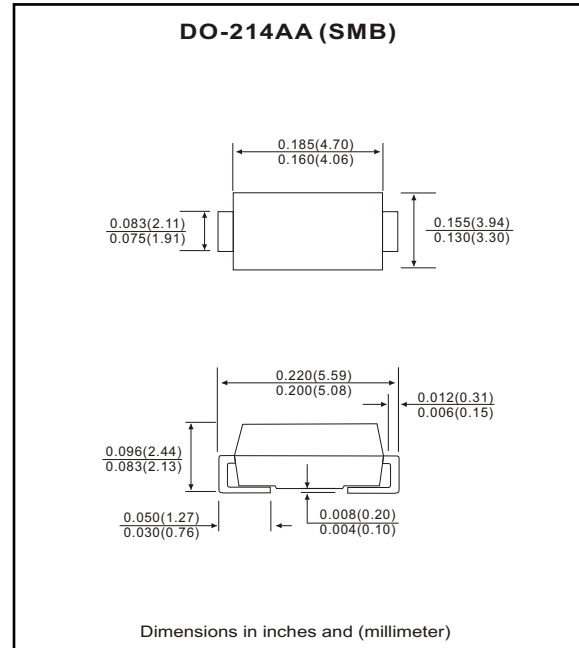


### Features

- 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-214AA, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Approx. weight: 0.093 grams



### Maximum Ratings and Electrical Characteristics

| Parameter                                                                                        | Symbol          | CDBB 320-G  | CDBB 340-G | CDBB 360-G | CDBB 380-G | CDBB 3100-G | Units         |
|--------------------------------------------------------------------------------------------------|-----------------|-------------|------------|------------|------------|-------------|---------------|
| Max. repetitive peak reverse voltage                                                             | $V_{RRM}$       | 20          | 40         | 60         | 80         | 100         | V             |
| Max. DC blocking voltage                                                                         | $V_{DC}$        | 20          | 40         | 60         | 80         | 100         | V             |
| Max. RMS voltage                                                                                 | $V_{RMS}$       | 14          | 28         | 42         | 56         | 70          | V             |
| Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | $I_{FSM}$       | 80          |            |            |            |             | A             |
| Max. average forward current                                                                     | $I_o$           | 3.0         |            |            |            |             | A             |
| Max. instantaneous forward voltage at 3.0A                                                       | $V_F$           | 0.50        |            | 0.70       | 0.85       |             | V             |
| Max. DC reverse current at $T_A=25^{\circ}C$ rated DC blocking voltage $T_A=100^{\circ}C$        | $I_R$           | 0.5         |            |            |            |             | mA            |
|                                                                                                  |                 | 20          |            |            | 10         |             |               |
| Max. thermal resistance (Note 1)                                                                 | $R_{\theta JA}$ | 50          |            |            |            |             | $^{\circ}C/W$ |
|                                                                                                  | $R_{\theta JL}$ | 10          |            |            |            |             |               |
| Max. operating junction temperature                                                              | $T_J$           | 125         |            |            |            |             | $^{\circ}C$   |
| Storage temperature                                                                              | $T_{STG}$       | -65 to +150 |            |            |            |             | $^{\circ}C$   |

Notes: 1. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2x0.2 inch<sup>2</sup> copper pad area.

## RATING AND CHARACTERISTIC CURVES (CDBB320-G thru CDBB3100-G)

Fig.1 Reverse Characteristics

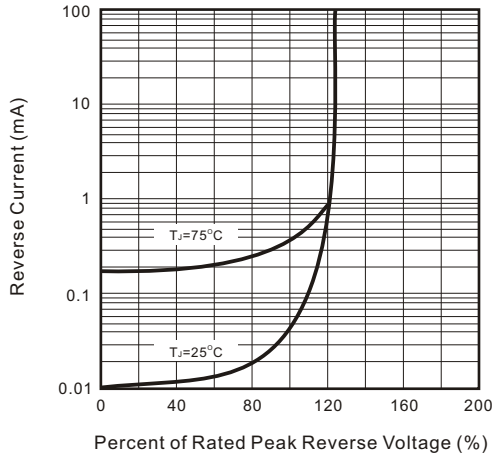


Fig.2 Forward Characteristics

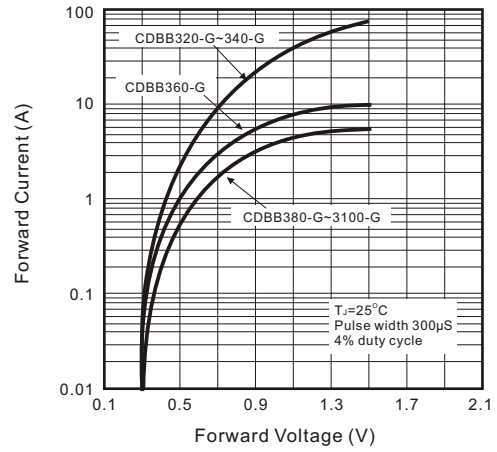


Fig.3 Junction Capacitance

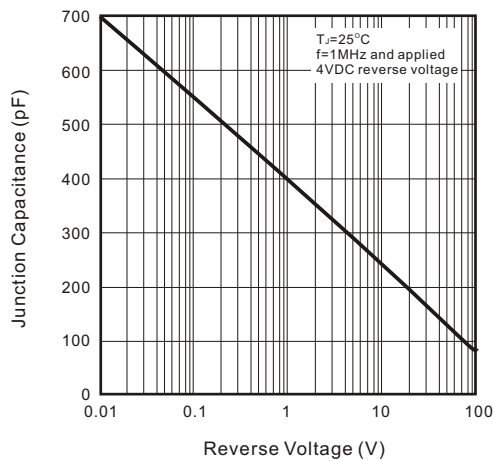


Fig.4 Current Derating Curve

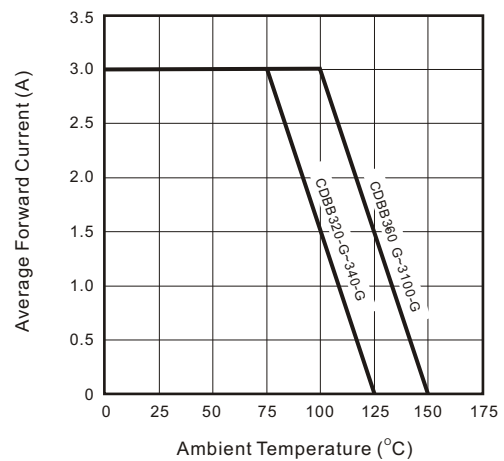


Fig.5 Non-repetitive Forward Surge Current

