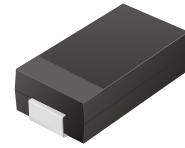


## CDBA5817 Thru CDBA5819

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

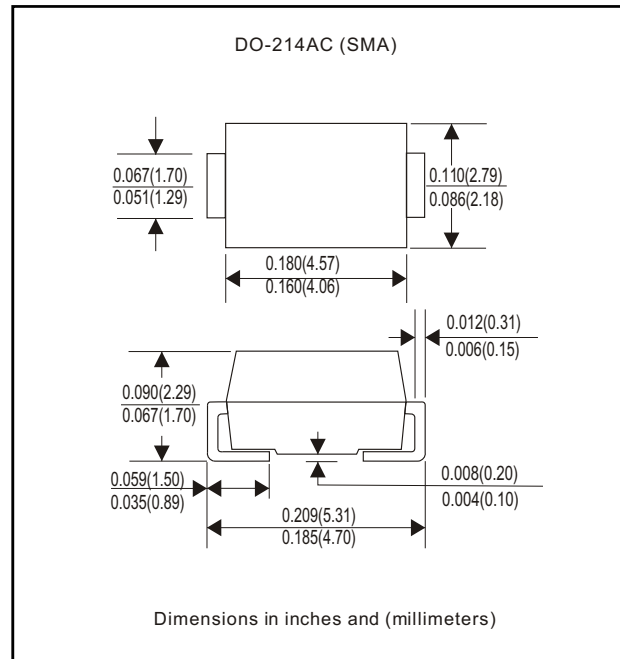


### Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- 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
- Mounting position: Any
- Approx. weight: 0.064 gram



### Maximum Ratings and Electrical Characteristics

| Parameter  | Symbol                               | CDBA5817    | CDBA5818 | CDBA5819 | Unit |
|--|--------------------------------------|-------------|----------|----------|------|
| Max. Repetitive Peak Reverse Voltage   | V <sub>RRM</sub>                     | 20          | 30       | 40       | V    |
| Max. DC Blocking Voltage   | V <sub>DC</sub>                      | 20          | 30       | 40       | V    |
| Max. RMS Voltage   | V <sub>RMS</sub>                     | 14          | 21       | 28       | V    |
| Peak Surge Forward Current<br>8.3ms single half sine-wave<br>superimposed on rate load<br>(JEDEC method) | I <sub>FSM</sub>                     | 35          |          |          | A    |
| Max. Average Forward Current   | I <sub>O</sub>                       | 1.0         |          |          | A    |
| Max. Instantaneous Forward Current<br>at 1.0A  | V <sub>F</sub>                       | 0.45        | 0.55     | 0.60     | V    |
| Max. DC Reverse Current at Rated DC<br>Blocking Voltage<br>Ta=25°C                                       | I <sub>R</sub>                       | 0.5         |          |          | mA   |
| Ta=100°C   |                                      | 10          |          |          |      |
| Max. Thermal Resistance (Note 1)   | R <sub>θJA</sub><br>R <sub>θJL</sub> | 88<br>20    |          |          | °C/W |
| Operating Junction Temperature   | T <sub>j</sub>                       | -50 to +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 copper pad areas

## Rating and Characteristic Curves (CDBA5817Thru CDBA5819)

Fig. 1 - Reverse Characteristics

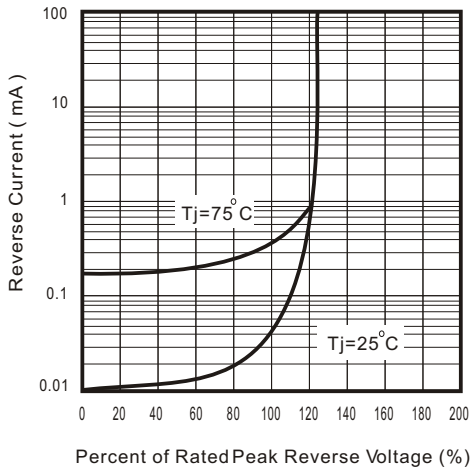


Fig.2 - Forward Characteristics

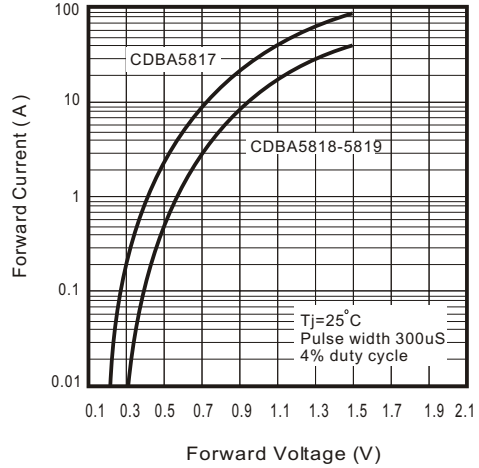


Fig. 3 - Junction Capacitance

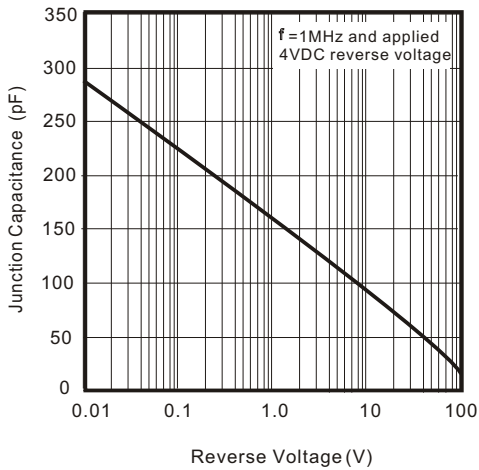


Fig. 4 - Current Derating Curve

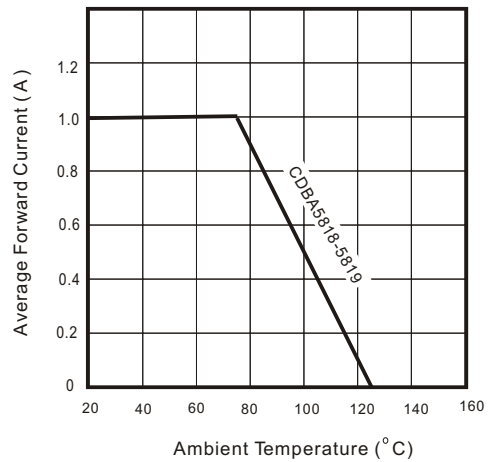


Fig. 5 - Non repetitive forward surge current

