

## CDBA5817 Thru CDBA5819

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

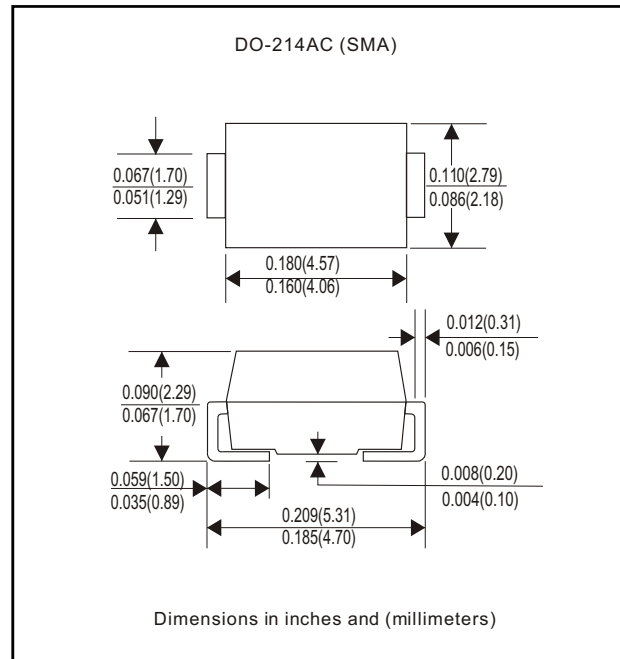


### Features

- 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 8.3ms single half sine-wave superimposed on rate load ( JEDEC method )	I <sub>FSM</sub>	35			A
Max. Average Forward Current	I <sub>O</sub>	1.0			A
Max. Instantaneous Forward Current at 1.0A	V <sub>F</sub>	0.45	0.55	0.60	V
Max. DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.5			mA
T <sub>a</sub> =25°C		10			
T <sub>a</sub> =100°C					
Max. Thermal Resistance (Note 1)	R <sub>θJA</sub> R <sub>θJL</sub>	88 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 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

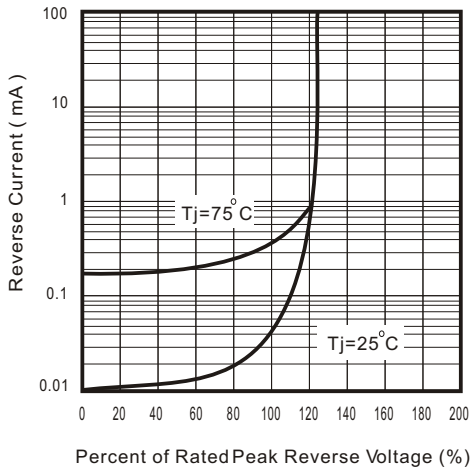


Fig.2 - Forward Characteristics

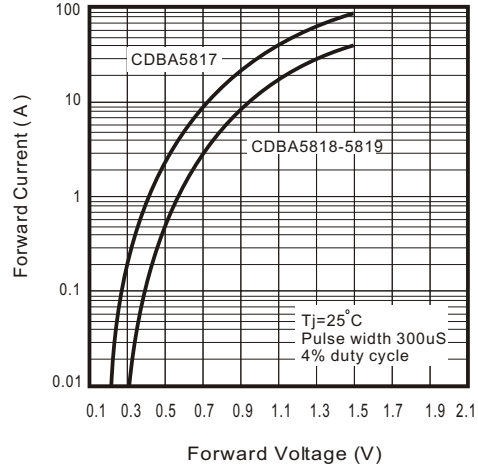


Fig. 3 - Junction Capacitance

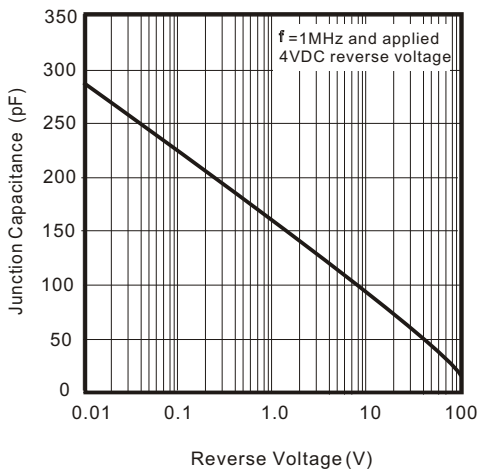


Fig. 4 - Current Derating Curve

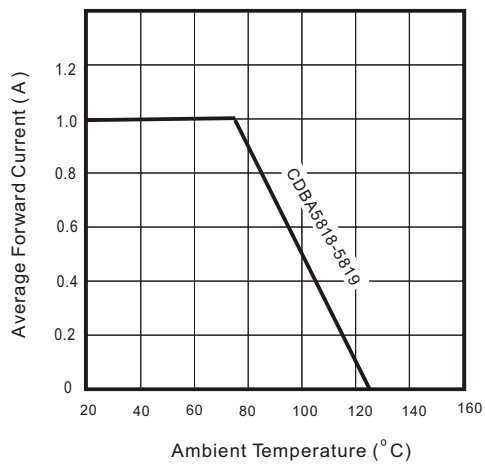


Fig. 5 - Non repetitive forward surge current

