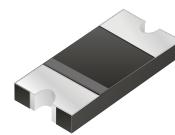


## CDBAF5817-G Thru CDBAF5819-G

Reverse Voltage: 20 - 40 Volts

Forward Current: 1A or 3A

RoHS Device

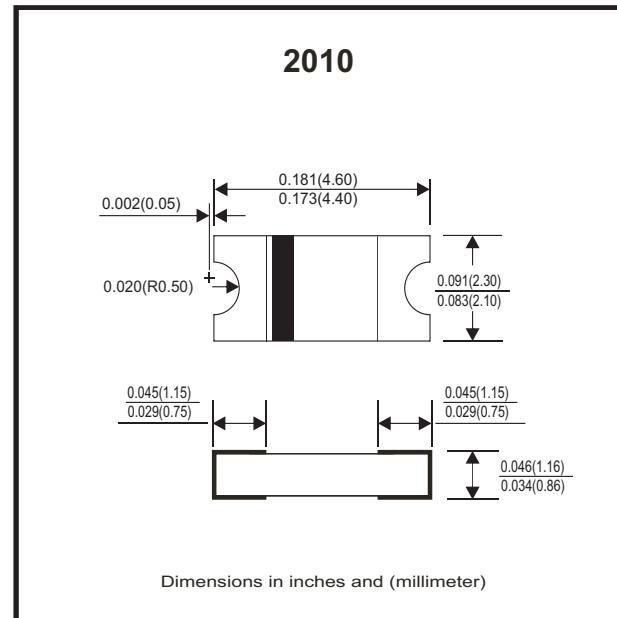


### Features

- For surface mounted applications.
- Metal to silicon rectifier, majority carrier conduction.
- Plastic package has Underwriters Lab, flammability classification 94V-0.
- High surge capacity.
- High current capability, low forward voltage.

### Mechanical data

- Case: Packed with FRP substrate and epoxy underfilled.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band
- Weight: 0.02 gram(approx.).



### Maximum Ratings (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	CDBAF5817-G	CDBAF5818-G	CDBAF5819-G	Unit
Max. Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	V
Max. DC Blocking Voltage	$V_{DC}$	20	30	40	V
Max. RMS Voltage	$V_{RMS}$	14	21	28	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$		30		A
Max. Average Forward Current	$I_o$		1		A
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$		80		$^\circ\text{C}/\text{W}$
Storage Temperature	$T_{STG}$		-50 to +125		$^\circ\text{C}$
Max. Operating Junction Temperature	$T_j$		+125		$^\circ\text{C}$

### Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	CDBAF5817-G	CDBAF5818-G	CDBAF5819-G	Unit
Max. Forward Voltage at 1.0 A (Note 1) at 3.0 A (Note 1)	$V_F$	0.45 0.75	0.550 0.875	0.60 0.90	V
Max. DC Reverse Current at Rated DC Blocking Voltage $T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$	$I_R$		0.5 10		mA
Typical Junction Capacitance (Note 2)	$C_j$		110		pF

Notes: (1) Pulse test width  $PW = 300\mu\text{sec}$ , 1% duty cycle.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

(3) Thermal Resistance Junction to Ambient.

## RATING AND CHARACTERISTIC CURVES (CDBAF5817-G Thru CDBAF5819-G)

Fig. 1 - Forward characteristics

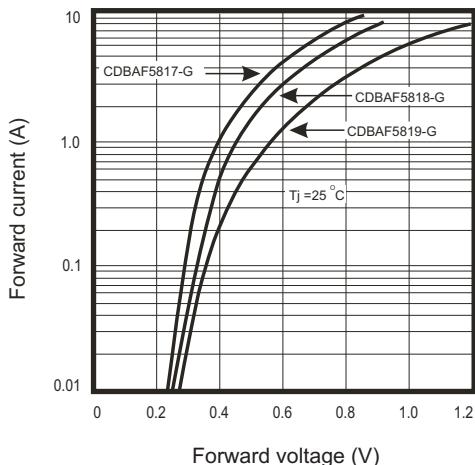


Fig. 2 - Reverse characteristics

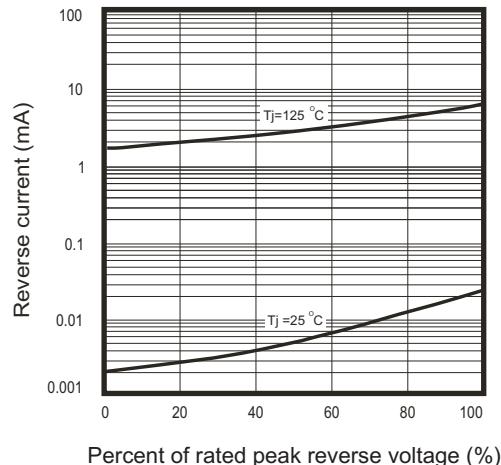


Fig.3 - Capacitance between terminals characteristics

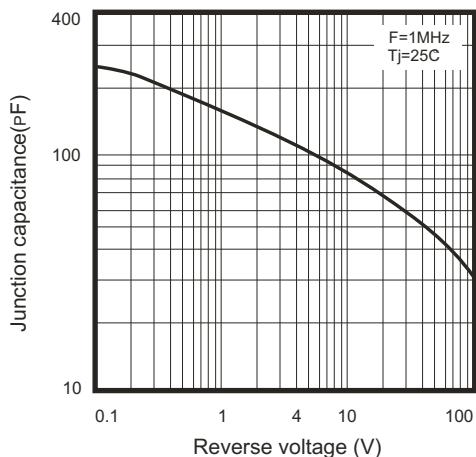


Fig.4 - Current derating curve

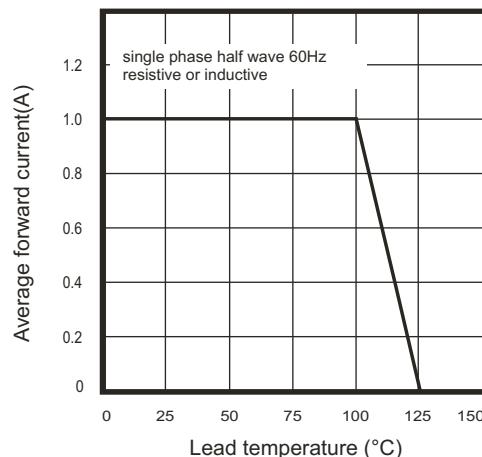


Fig.5 - Max. Non repetitive peak forward surge current

