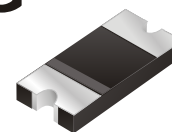


## CDBAF5817-G Thru CDBAF5819-G

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.

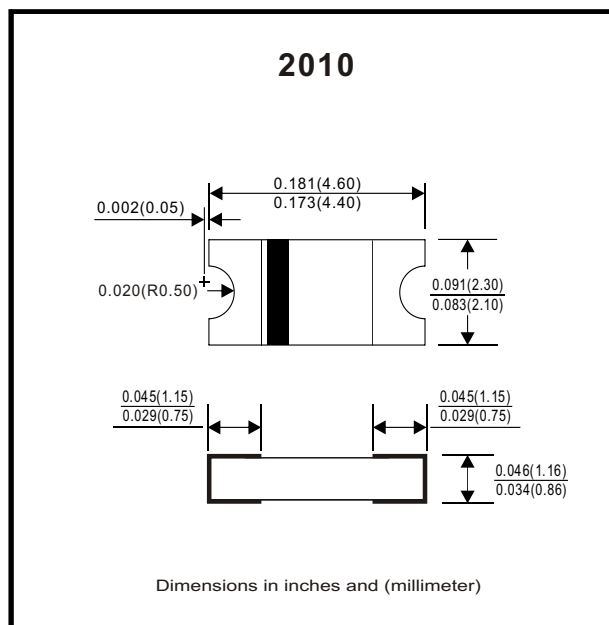
### Mechanical data

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 TA=25°C unless otherwise noted)

Parameter	Symbol	CDBAF5817-G	CDBAF5818-G	CDBAF5819-G	Unit
Max. Repetitive Peak Reverse Voltage	VRRM	20	30	40	V
Max. DC Blocking Voltage	VDC	20	30	40	V
Max. RMS Voltage	VRMS	14	21	28	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30			A
Max. Average Forward Current	IO	1			A
Typical Thermal Resistance (Note 3)	RθJA	80			°C/W
Storage Temperature	TSTG	-50 to +125			°C
Max. Operating Junction Temperature	Tj	+125			°C

### Electrical Characteristics (at TA=25°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)	VF	0.45 0.75	0.550 0.875	0.60 0.90	V
Max. DC Reverse Current at Rated DC Blocking Voltage Tj = 25°C Tj = 100°C	IR	0.5 10			mA
Typical Junction Capacitance (Note 2)	Cj	110			pF

Notes: (1) Pulse test width PW = 300µsec, 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

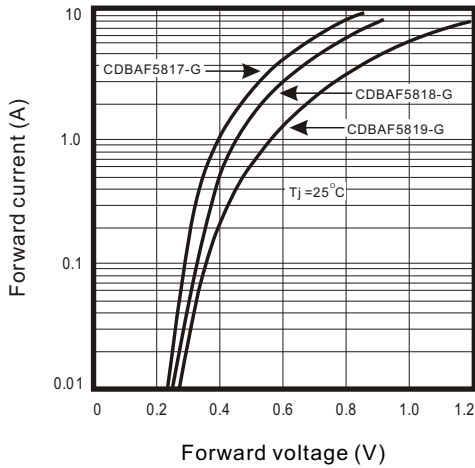


Fig. 2 - Reverse characteristics

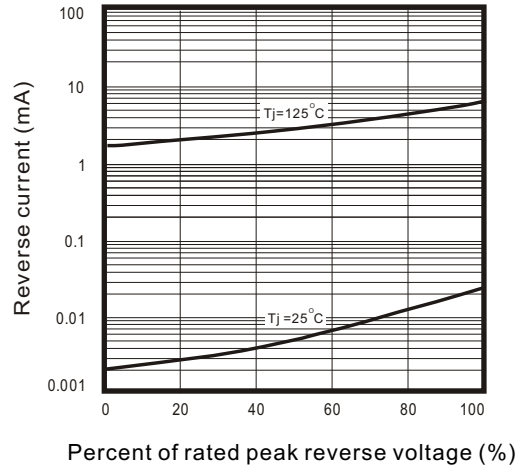


Fig.3 - Capacitance between terminals characteristics

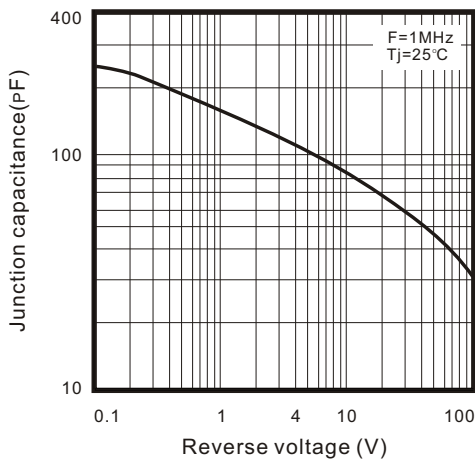


Fig.4 - Current derating curve

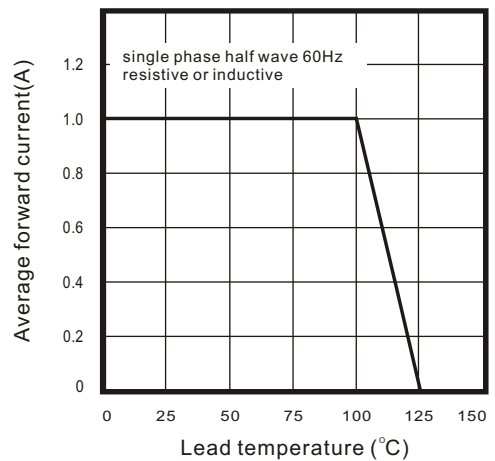


Fig.5 - Max. Non repetitive peak forward surge current

