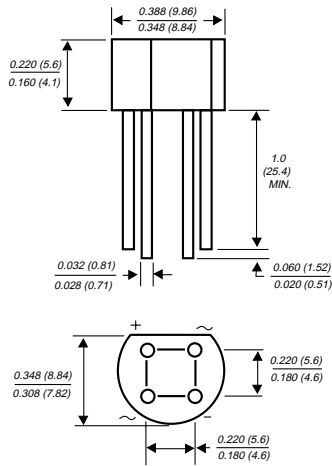


# B40C1000G THRU B380C1000G

## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

Reverse Voltage - 65 to 600 Volts      Forward Current -1.0 Ampere

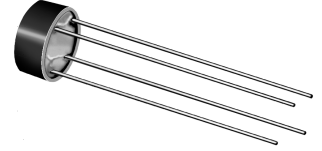
### Case Style WOG



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Glass passivated chip junctions
- ◆ High case dielectric strength
- ◆ Typical  $I_R$  less than  $0.1 \mu A$
- ◆ High overload surge current
- ◆ Ideal for printed circuit boards
- ◆ High temperature soldering guaranteed:  
260°C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension



### MECHANICAL DATA

**Case:** Molded plastic body over passivated junctions  
**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026  
**Mounting Position:** Any  
**Weight:** 0.04 ounce, 1.1 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

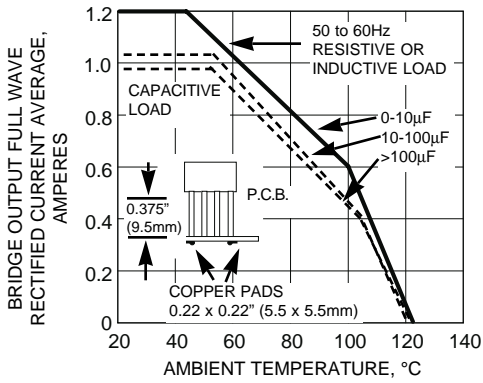
Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	B40 C1000G	B80 C1000G	B125 C1000G	B250 C1000G	B380 C1000G	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	65	125	200	400	600	Volts
Maximum RMS input voltage R + C-load	$V_{RMS}$	40	80	125	250	380	Volts
Maximum DC blocking voltage	$V_{DC}$	65	125	200	400	600	Volts
Maximum peak working voltage	$V_{RWM}$	90	180	300	600	900	Volts
Maximum non-repetitive peak voltage	$V_{RSM}$	100	200	350	600	1000	Volts
Maximum repetitive peak forward surge current	$I_{FRM}$	10.0					Amps
Maximum average forward output current for free air operation at $T_A=45^\circ C$ R + L-Load C-Load	$I_{(AV)}$	1.2 1.0					Amps
Peak forward surge current single sine wave on rated load (JEDEC Method)	$I_{FSM}$	45.0					Amps
Rating for fusing at $T_J=125^\circ C$ ( $t<8.3ms$ )	$I^2t$	10.0					A <sup>2</sup> sec
Minimum series resistor C-load at $V_{RMS} = \pm 10\%$	$R_T$	1.0	2.0	4.0	8.0	12.0	Ohms
Maximum load capacitance +50% -10%	$C_L$	5000	2500	1000	500	200	$\mu F$
Maximum instantaneous forward voltage drop per leg at 1.0A	$V_F$	1.0					Volts
Maximum reverse current at rated repetitive peak voltage per leg $T_A=25^\circ C$	$I_R$	10.0					$\mu A$
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$ $R_{\theta JL}$	36.0 11.0					$^\circ C/W$
Operating junction temperature range	$T_J$	-40 to +125					$^\circ C$
Storage temperature range	$T_{STG}$	-40 to +150					$^\circ C$

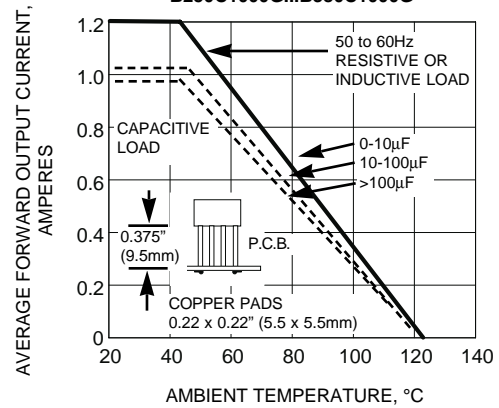
**NOTE:**  
(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. at 0.375" (9.5mm) lead lengths with 0.2 x 0.2" (5.5 x 5.5mm) copper pads

# RATINGS AND CHARACTERISTICS CURVES B40C1000G THRU B380C1000G

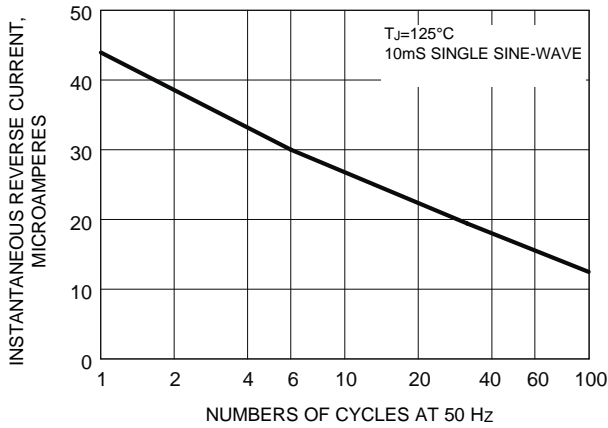
**FIG. 1 - DERATING CURVE  
OUTPUT RECTIFIED CURRENT  
B40C1000G...B125C1000G**



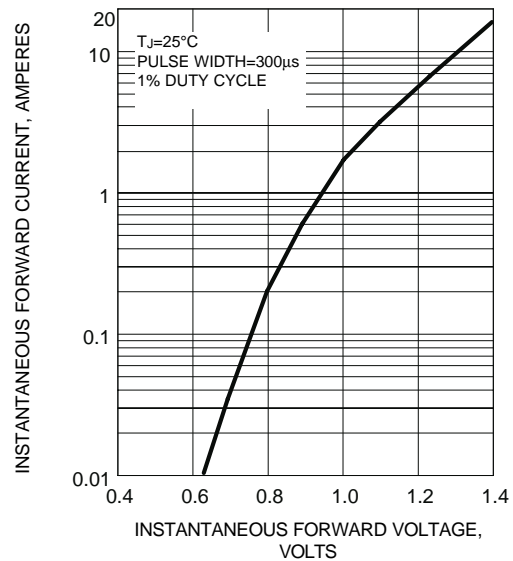
**FIG. 2 - DERATING CURVES FOR  
OUTPUT RECTIFIED CURRENT  
B250C1000G...B380C1000G**



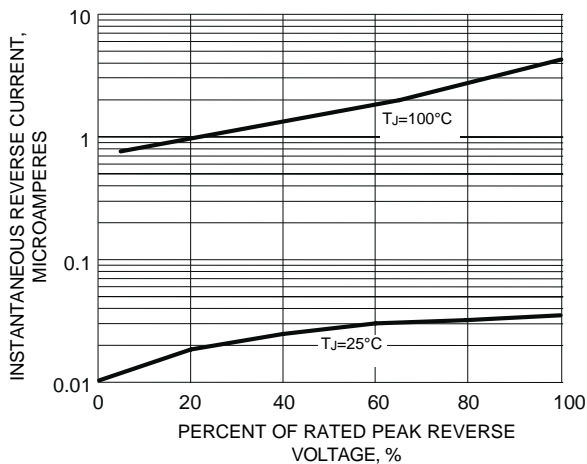
**FIG. 3 - MAXIMUM NON-REPETITIVE PEAK  
FORWARD CURRENT PER LEG**



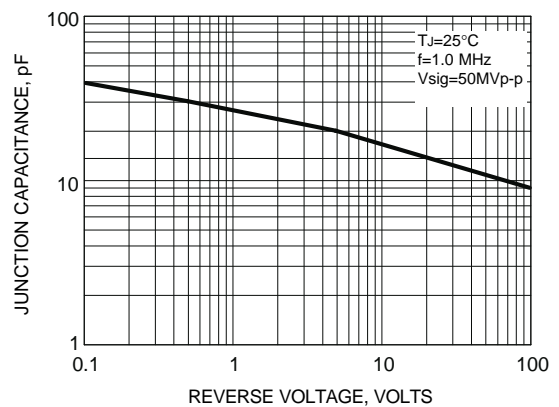
**FIG. 4 - TYPICAL FORWARD CHARACTERISTICS  
PER LEG**



**FIG. 5 - TYPICAL REVERSE  
CHARACTERISTICS PER LEG**



**FIG. 6 - TYPICAL JUNCTION CAPACITANCE  
PER LEG**





LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

[LittleDiode.com](http://LittleDiode.com)

Looking forward to providing you with the best possible service.