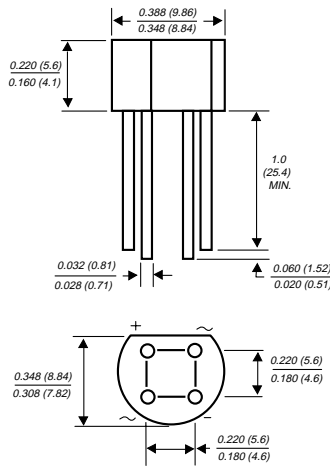


# B40C1500G THRU B380C1500G

## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

Reverse Voltage - 65 to 600 Volts Forward Current - 1.5 Amperes

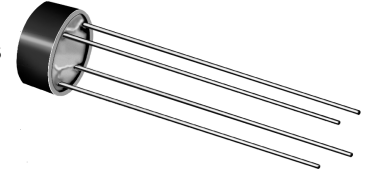
### Case Style WOG



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 surge current capability
- ◆ 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.

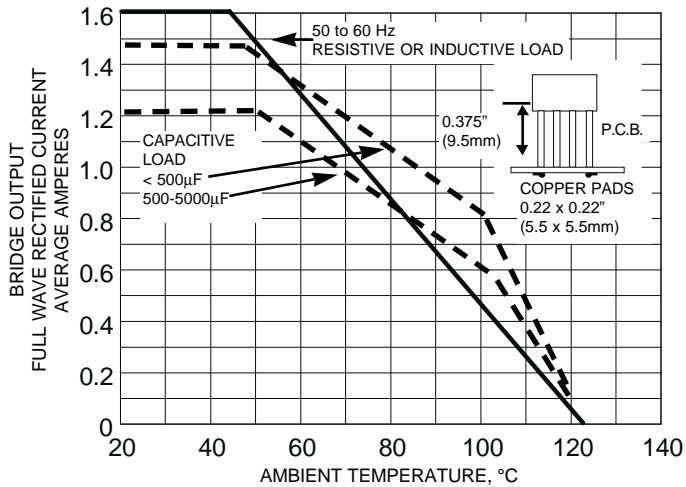
	SYMBOLS	B40 C1500G	B80 C1500G	B125 C1500G	B250 C1500G	B380 C1500G	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	65	125	200	400	600	Volts
Maximum RMS input voltage R + C-load	V <sub>RMS</sub>	40	80	125	250	380	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	65	125	200	400	600	Volts
Maximum peak working voltage	V <sub>RWM</sub>	90	180	300	600	800	Volts
Maximum non-repetitive peak voltage	V <sub>RSM</sub>	100	200	350	650	1000	Volts
Maximum repetitive peak forward surge current	I <sub>FRM</sub>	10.0					Amps
Maximum average forward output current for free air operation at T <sub>A</sub> =45°C R + L-load C-load	I <sub>(AV)</sub>	1.6 1.5					Amps
Peak forward surge current single sine wave on rated load at T <sub>J</sub> =125°C	I <sub>FSM</sub>	50.0					Amps
Rating for fusing at T <sub>J</sub> =125°C (t<100ms)	I <sup>2</sup> t	12.5					A <sup>2</sup> sec
Min. series resistor C-load at V <sub>RMS</sub> = ±10%	R <sub>t</sub>	1.0	2.0	4.0	8.0	12.0	Ohms
Maximum load capacitance +50% -10%	C <sub>L</sub>	5000	2500	1000	500	200	μF
Maximum instantaneous forward voltage drop per leg at 1.5A	V <sub>F</sub>	1.0					Volts
Maximum reverse current at rated repetitive peak voltage per leg T <sub>A</sub> =25°C	I <sub>R</sub>	10.0					μA
Typical thermal resistance per leg (NOTE 1)	R <sub>θJA</sub> R <sub>θJL</sub>	36.0 11.0					°C/W
Operating junction temperature range	T <sub>J</sub>	-40 to +125					°C
Storage temperature range	T <sub>STG</sub>	-40 to +150					°C

#### NOTES:

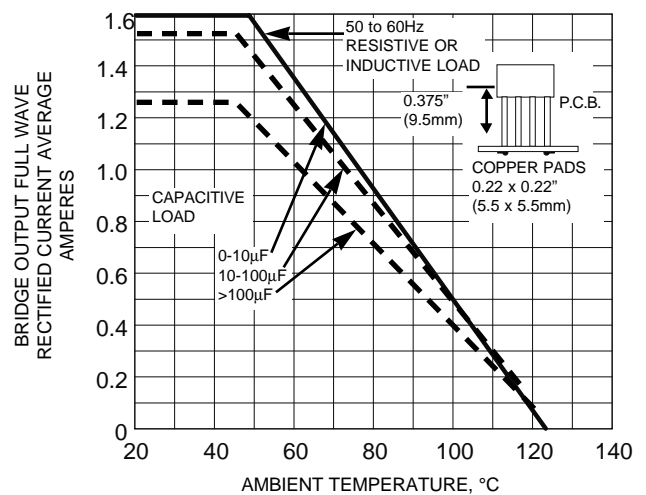
1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. at 0.375" (9.5mm) lead lengths with 0.2 x 0.2"

# RATINGS AND CHARACTERISTICS CURVES B40C1500G THRU B380C1500G

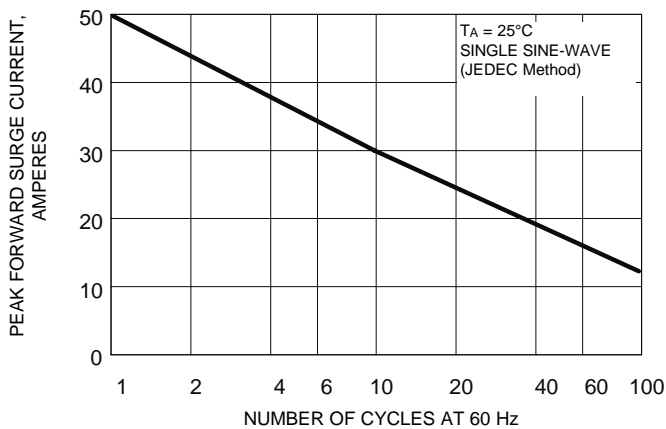
**FIG. 1 - DERATING CURVES  
OUTPUT RECTIFIED CURRENT  
FOR B40C1500G...B125C1500G**



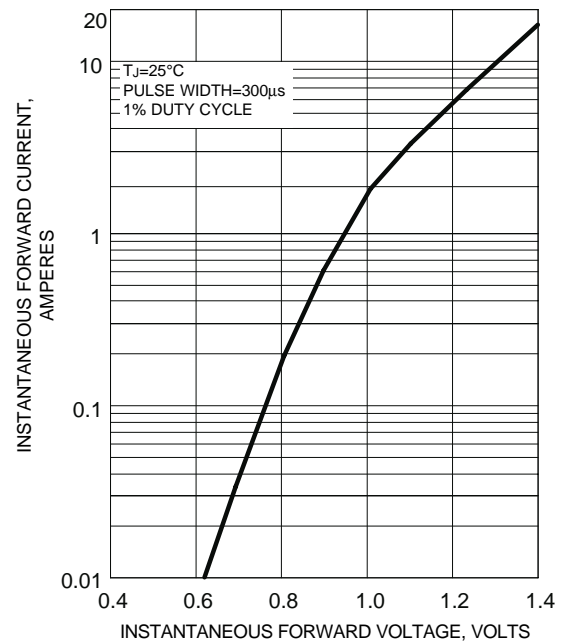
**FIG. 2 - DERATING CURVES  
OUTPUT RECTIFIED CURRENT  
FOR B250C1500G...B380C1500G**



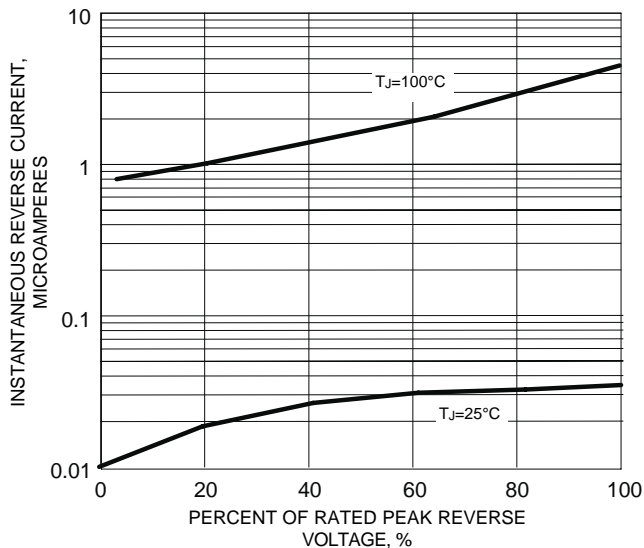
**FIG. 3 - MAXIMUM NON-REPETITIVE  
FORWARD SURGE CURRENT PER LEG**



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



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



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

