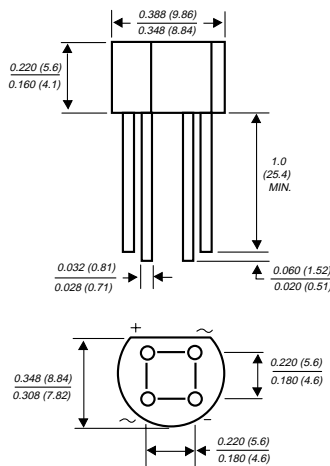


# B40C1500G THRU B380C1500G

## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

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

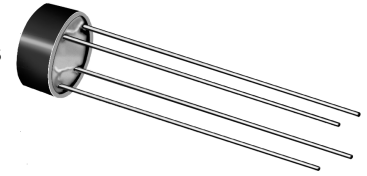
### Case Style WOG



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.

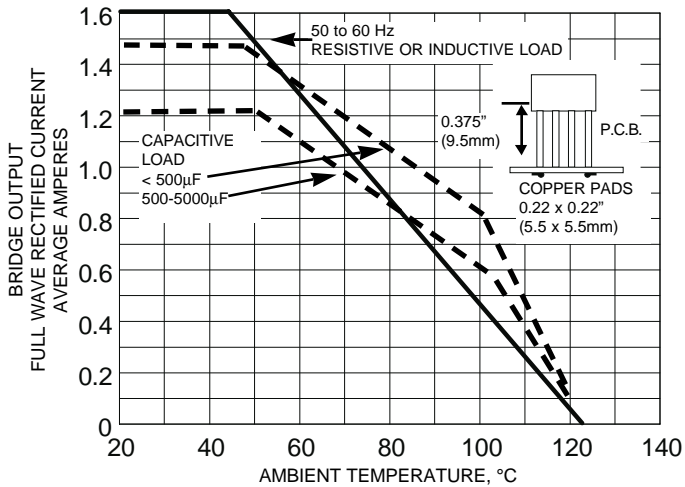
	SYMBOLS	B40 C1500G	B80 C1500G	B125 C1500G	B250 C1500G	B380 C1500G	UNITS
Maximum repetitive peak reverse voltage	VRRM	65	125	200	400	600	Volts
Maximum RMS input voltage R + C-load	VRMS	40	80	125	250	380	Volts
Maximum DC blocking voltage	VDC	65	125	200	400	600	Volts
Maximum peak working voltage	VRWM	90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

#### NOTES:

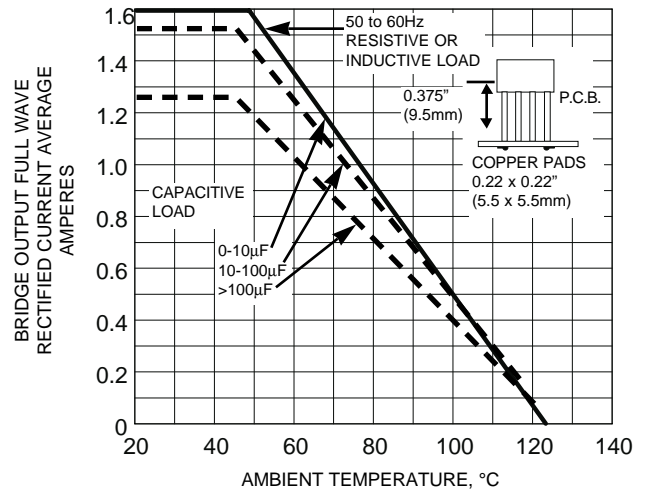
1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. at 0.375" (9.5mm) lead lengths with 0.2 x 0.2"

# RATINGS AND CHARACTERISTICS CURVES B40C1500G THRU B380C1500G

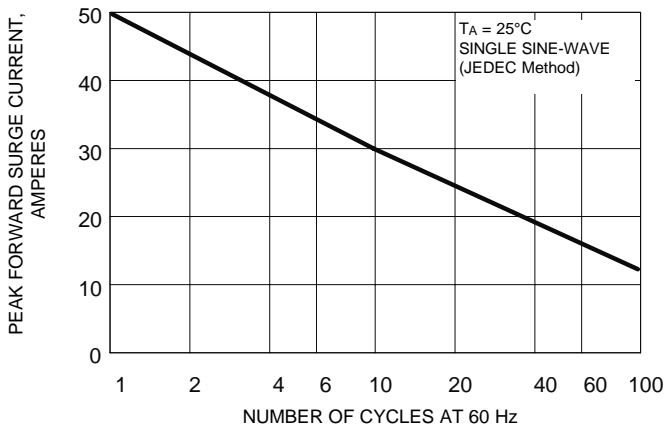
**FIG. 1 - DERATING CURVES  
OUTPUT RECTIFIED CURRENT  
FOR B40C1500G...B125C1500G**



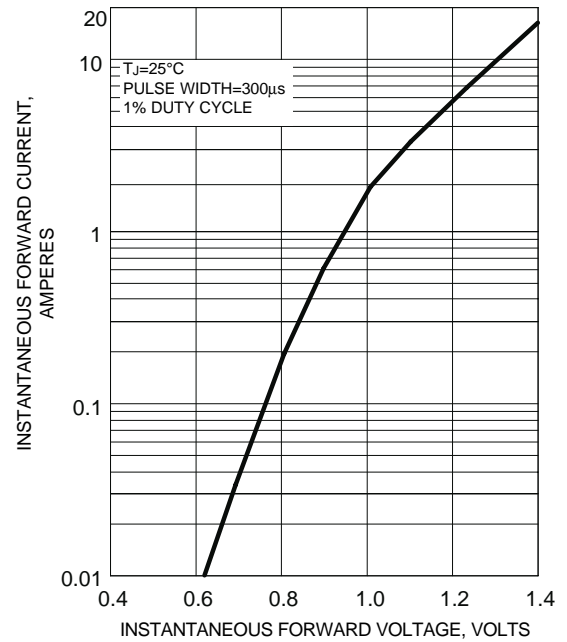
**FIG. 2 - DERATING CURVES  
OUTPUT RECTIFIED CURRENT  
FOR B250C1500G...B380C1500G**



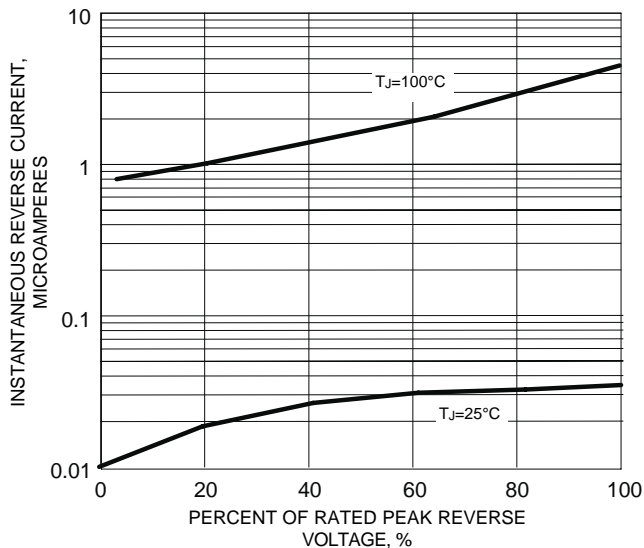
**FIG. 3 - MAXIMUM NON-REPETITIVE  
FORWARD SURGE CURRENT PER LEG**



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



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



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

