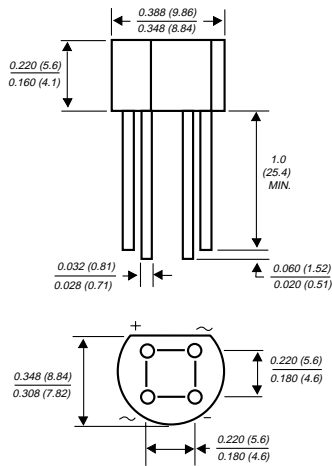


# B40C800G THRU B380C800G

## GLASS PASSIVATED SINGLE - PHASE BRIDGE RECTIFIER

Reverse Voltage - 65 to 600 Volts Forward Current - 0.9 Ampere

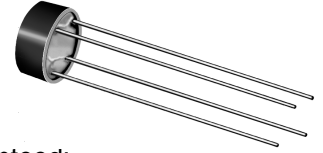
### Case Style WOG



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.

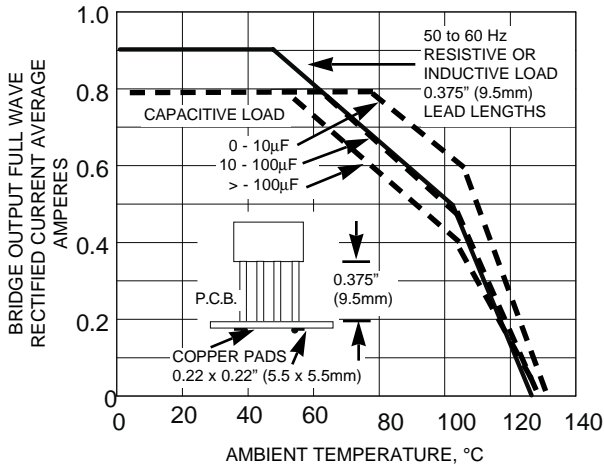
	SYMBOLS	B40 C800G	B80 C800G	B125 C800G	B250 C800G	B380 C800G	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	65	125	200	400	600	Volts
Maximum RMS input voltage R + C-load	$V_{RMS}$	40	80	125	250	380	Volts
Maximum average forward output current for free air operation at $T_A=45^\circ C$ R + L-load C-Load	$I_{(AV)}$	0.9 0.8					Amps
Maximum non-repetitive peak voltage	$V_{RSM}$	100	200	350	600	1000	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 repetitive peak forward surge current	$I_{FRM}$	10.0					Amps
Peak forward surge current single sine wave on rated load at $T_J=125^\circ C$	$I_{FSM}$	45.0					Amps
Rating for fusing at $T_J=125^\circ C$ ( $t < 100ms$ )	$I^2t$	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 0.9A	$V_F$	1.0					Volts
Maximum reverse current at rated repetitive peak voltage per leg	$I_R$	10.0					$\mu A$
Typical thermal resistance per leg (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					$^\circ C$

#### NOTES:

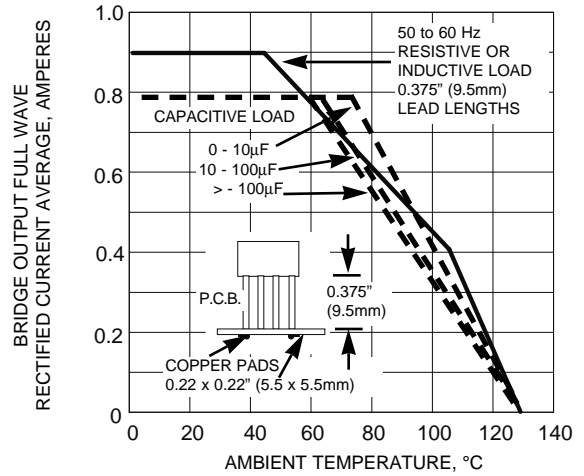
(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. at 0.375" (9.5mm) lead lengths with 0.2 x 0.2" (5.5 x 5.5mm) copper pads.

# RATINGS AND CHARACTERISTICS CURVES B40C800G THRU B380C800G

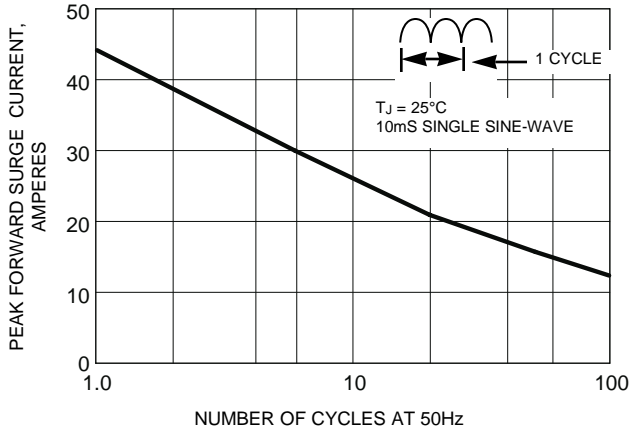
**FIG. 1 - DERATING CURVES OUTPUT RECTIFIED CURRENT FOR B40C800G...B125C800G**



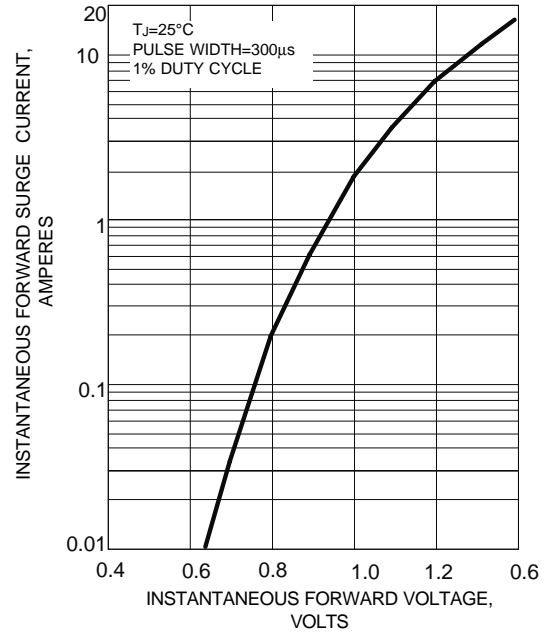
**FIG. 2 - DERATING CURVES FOR OUTPUT RECTIFIED CURRENT B250C800G...B380C800G**



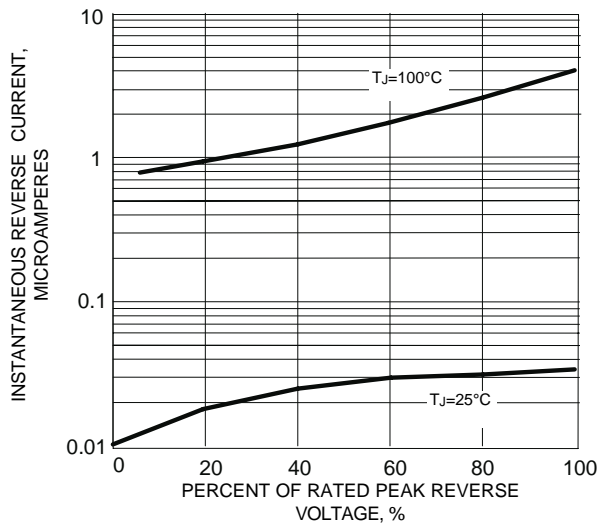
**FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD CURRENT PER LEG**



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



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



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

