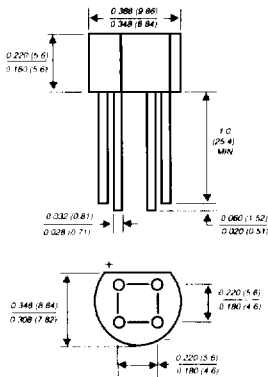


B40C1500G THRU B380C1500G

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

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

Case Style W0G



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.

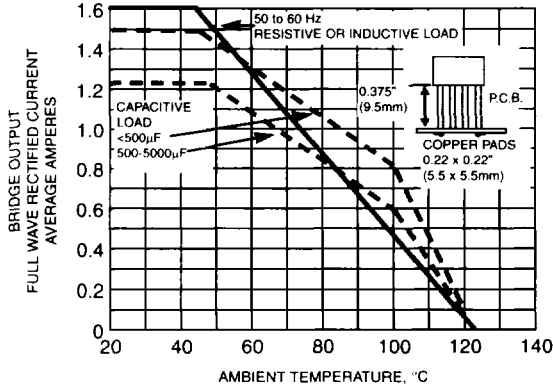
	SYMBOLS	B40 C1500G	B80 C1500G	B125 C1500G	B250 C1500G	B380 C1500G	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	65	125	200	400	600	Volts	
Maximum RMS input voltage R + C-load	V_{RMS}	40	80	125	250	380	Volts	
Maximum DC blocking voltage	V_{DC}	65	125	200	400	600	Volts	
Maximum peak working voltage	V_{RWM}	90	180	300	600	800	Volts	
Maximum non-repetitive peak voltage	V_{RSM}	100	200	350	650	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	$I_{(AV)}$	1.6 1.5						Amps
Peak forward surge current single sine wave on rated load at $T_J=125^\circ C$	I_{FSM}	50.0						Amps
Rating for fusing at $T_J=125^\circ C$ ($t < 100ms$)	I^2t	12.5						A ² sec
Min. 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	μF	
Maximum instantaneous forward voltage drop per leg at 1.5A	V_F	1.0						Volts
Maximum reverse current at rated repetitive peak voltage per leg $T_A=25^\circ C$	I_R	10.0						μA
Typical thermal resistance per leg (NOTE 1)	$R_{\theta JA}$ $R_{\theta JL}$	36.0						$^\circ C/W$
Operating junction temperature range	T_J	-40 to +125						$^\circ C$
Storage temperature range	T_{STG}	-40 to +150						$^\circ C$

NOTES:

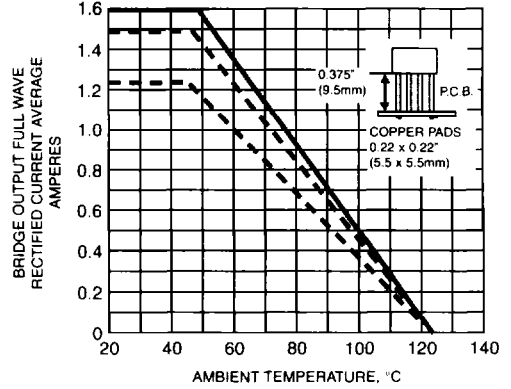
1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. at 0.375" (9.5mm) lead lengths with 0.2 x 0.2"

RATINGS AND CHARACTERISTICS CURVES B40C1500G THRU B380C1500G

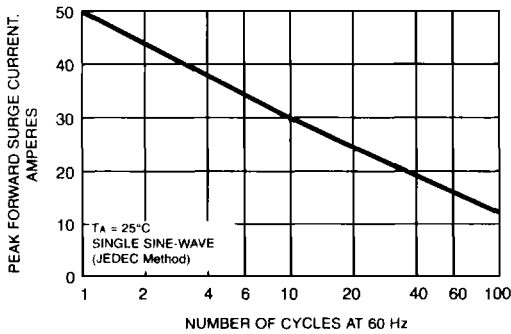
**FIG. 1 - DERATING CURVES
OUTPUT RECTIFIED CURRENT
FOR B40C1500G...B125C1500G**



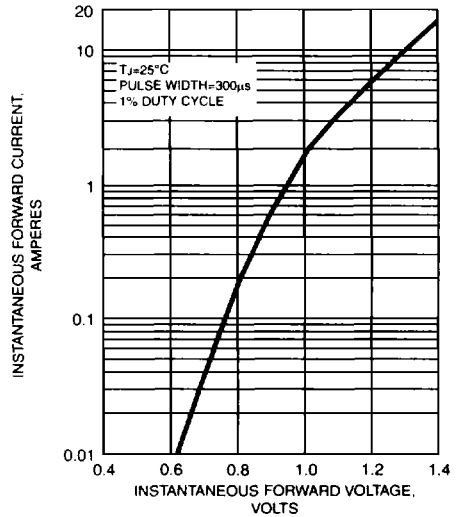
**FIG. 2 - DERATING CURVES
OUTPUT RECTIFIED CURRENT
FOR B250C1500G...B380C1500G**



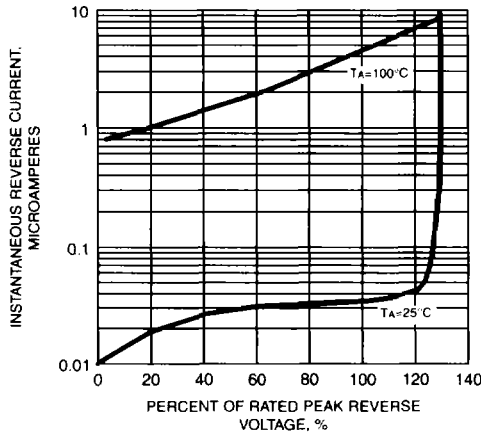
**FIG. 3 - MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER LEG**



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



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



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE
PER LEG**

