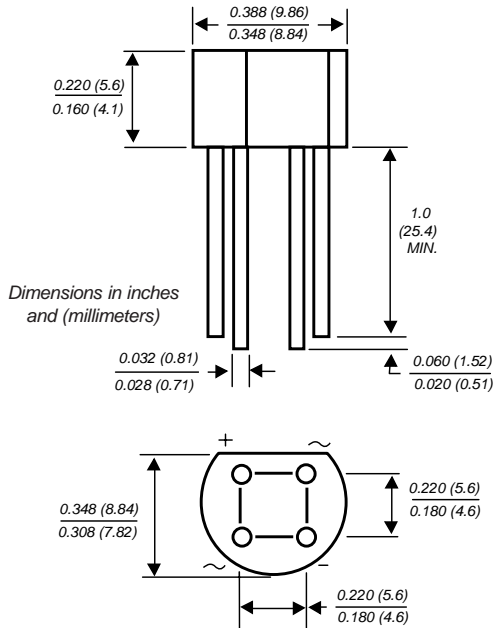




**Glass Passivated Single-Phase Bridge Rectifier**

**Reverse Voltage** 65 and 600V  
**Forward Current** 1.0A

**Case Style WOG**



**Features**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- 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 oz., 1.1 g
- Packaging codes/options:** 1/100 EA. per Bulk Bag

**Maximum Ratings & Thermal Characteristics** Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	B40	B80	B125	B250	B380	Units
		C1000G	C1000G	C1000G	C1000G	C1000G	
Maximum repetitive peak reverse voltage	$V_{RRM}$	65	125	200	400	600	V
Maximum RMS input voltage R + C-load	$V_{RMS}$	40	80	125	250	380	V
Maximum DC blocking voltage	$V_{DC}$	65	125	200	400	600	V
Maximum peak working voltage	$V_{RWM}$	90	180	300	600	800	V
Maximum non-repetitive peak voltage	$V_{RSM}$	100	200	350	600	1000	V
Maximum repetitive peak forward surge current	$I_{FRM}$	10					A
Maximum average forward output current for free air operation at $T_A=45^\circ C$ R + L-load	$I_{F(AV)}$	1.2					A
C-Load		1.0					
Peak forward surge current single sine wave on rated load (JEDEC Method)	$I_{FSM}$	45					A
Rating for fusing at $T_J=125^\circ C$ ( $t < 8.3ms$ )	$I^2t$	10					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	$\Omega$
Maximum load capacitance +50% -10%	$C_L$	5000	2500	1000	500	200	$\mu F$
Typical thermal resistance per leg <sup>(1)</sup>	$R_{\theta JA}$ $R_{\theta JL}$	36 11					$^\circ C/W$
Operating junction temperature range	$T_J$	-40 to +125					$^\circ C$
Storage temperature range	$T_{STG}$	-40 to +150					$^\circ C$

**Electrical Characteristics** Ratings at 25°C ambient temperature unless otherwise specified.

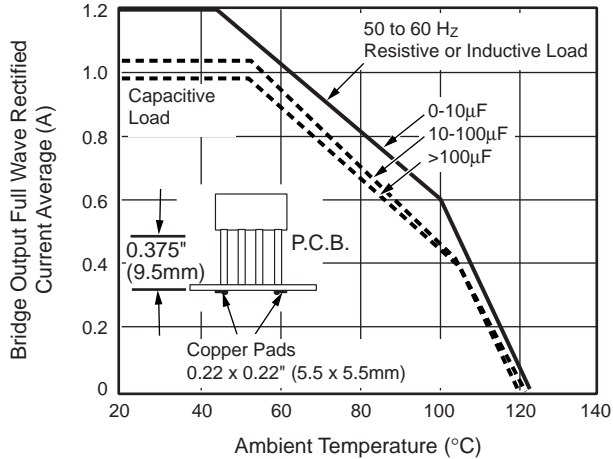
Maximum instantaneous forward voltage drop per leg at 1.0A	$V_F$	1.0	V
Maximum reverse current at rated repetitive peak voltage per leg $T_A=25^\circ C$	$I_R$	10	$\mu A$

**Notes:**

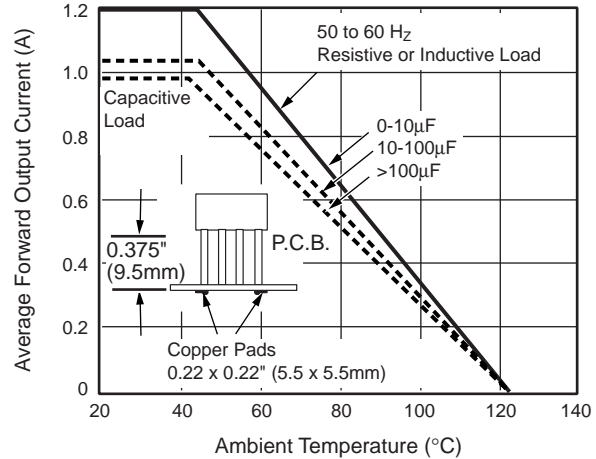
(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. at 0.375" (9.5mm) lead lengths with 0.2 x 0.2" (5.5 x 5.5mm) copper pads

## Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

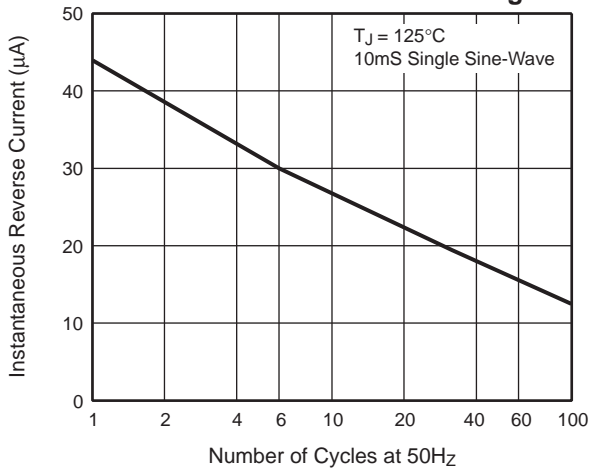
**Fig. 1 — Derating Curves  
Output Rectified Current For  
B40C1000G...B125C1000G**



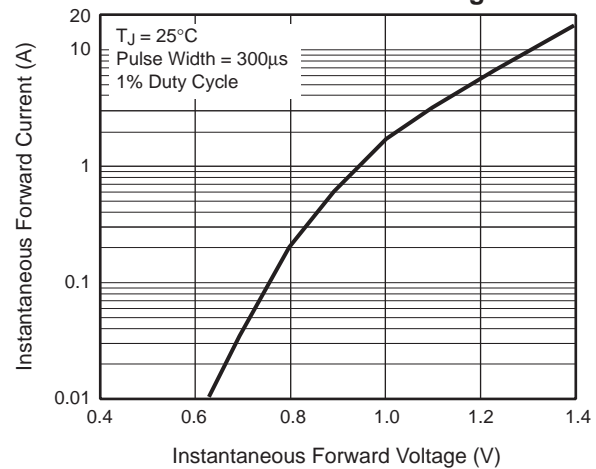
**Fig. 2 — Derating Curves  
Output Rectified Current For  
B250C41000G...B380C1000G**



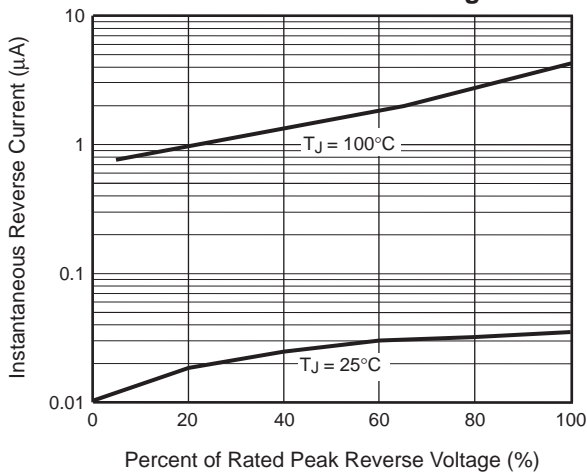
**Fig. 3 — Maximum Non-Repetitive  
Peak Forward Current Per Leg**



**Fig. 4 — Typical Forward  
Characteristics Per Leg**



**Fig. 5 — Typical Reverse  
Characteristics Per Leg**



**Fig. 6 — Typical Junction Capacitance  
Per Leg**

