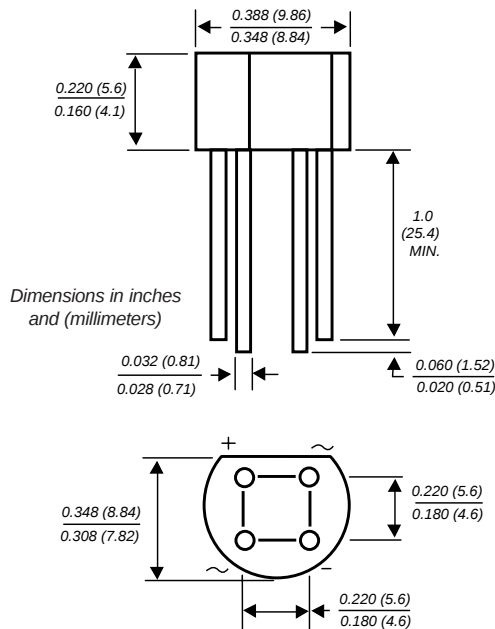




Glass Passivated Single-Phase Bridge Rectifier

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: $260^\circ C/10$ 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 $25^\circ C$ ambient temperature unless otherwise specified.

Parameter	Symbols	B40 C1000G	B80 C1000G	B125 C1000G	B250 C1000G	B380 C1000G	Units
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 ² sec
Minimum series resistor C-load at $V_{RMS} = \pm 10\%$	R_t	1.0	2.0	4.0	8.0	12	Ω
Maximum load capacitance +50% -10%	C_L	5000	2500	1000	500	200	μF
Typical thermal resistance per leg ⁽¹⁾	$R_{\theta JA}$ $R_{\theta JL}$	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 $25^\circ C$ 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	μA

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 0.2×0.2 " ($5.5 \times 5.5mm$) copper pads

B40C1000G thru B380C1000G

Vishay Semiconductors
formerly General Semiconductor



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

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

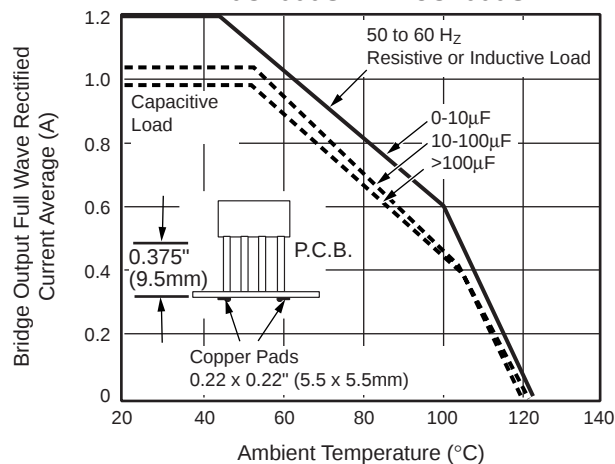


Fig. 2 — Derating Curves
Output Rectified Current For
B250C41000G...B380C1000G

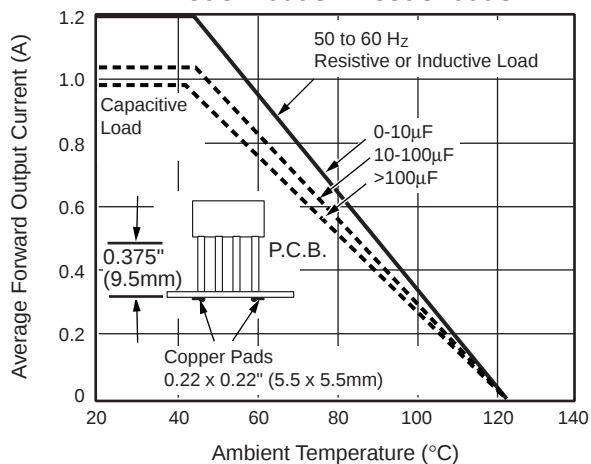


Fig. 3 — Maximum Non-Repetitive
Peak Forward Current Per Leg

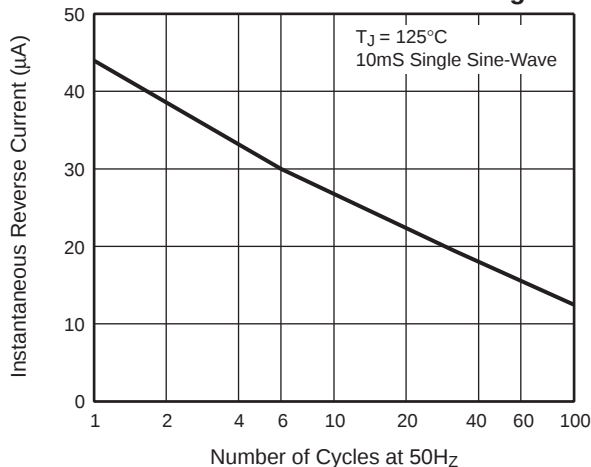


Fig. 4 — Typical Forward
Characteristics Per Leg

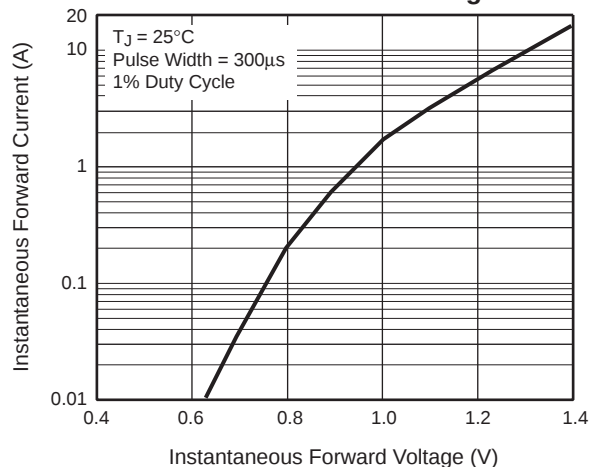


Fig. 5 — Typical Reverse
Characteristics Per Leg

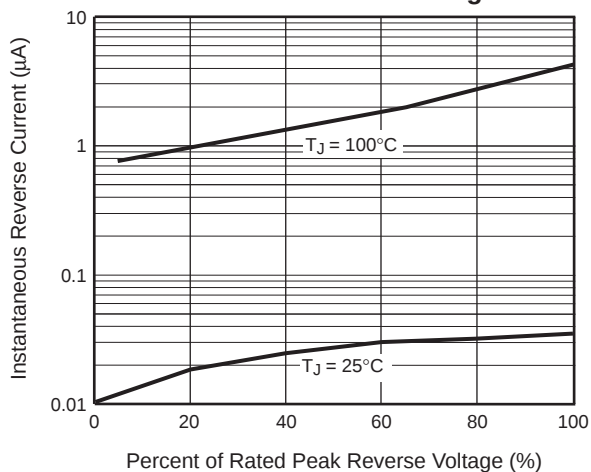


Fig. 6 — Typical Junction Capacitance
Per Leg

