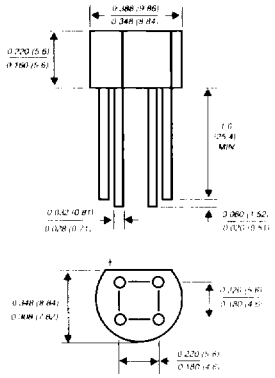
B40C1000G THRU B380C1000G

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

***Reverse Voltage** - 65 to 600 Volts* ***Forward Current** -1.0 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 IR less than 0.1 μ 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: 0.05 ounce, 1.3 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	B40 C1000G	B80 C1000G	B125 C1000G	B250 C1000G	B380 C1000G	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	900	Volts
Maximum non-repetitive peak voltage	V_{RSM}	100	200	350	600	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°C R + L-Load C-Load	$I_{(AV)}$	1.2 1.0					Amps
Peak forward surge current single sine wave on rated load (JEDEC Method) at T_J=125°C	I_{FSM}	45.0					Amps
Rating for fusing at T_J=125°C (t<100ms)	I^2t	10.0					A²sec
Minimum series resistor C-load at V_{RMS} = ±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 1.0A	V_F	1.0					Volts
Maximum reverse current at rated repetitive peak voltage per leg T_A=25°C	I_R	10.0					μA
Typical thermal resistance (NOTE 1)	$R_{\Theta JA}$ $R_{\Theta JL}$	36.0					°C/W
Operating junction temperature range	T_J	-40 to +125					°C
Storage temperature range	T_{STG}	-40 to +150					°C

NOTE:
(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

FIG.1 - DERATING CURVE OUTPUT RECTIFIED CURRENT B40C1000Z...B380C1000Z

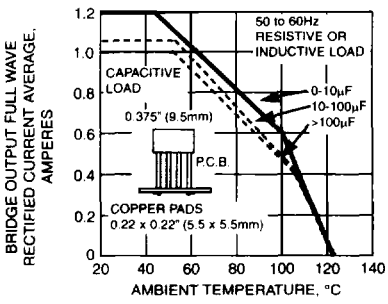


FIG. 2 - DERATING CURVES FOR OUTPUT RECTIFIED CURRENT B40C1000Z...B380C1000Z

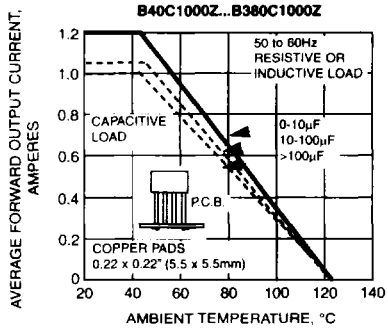


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD CURRENT PER LEG

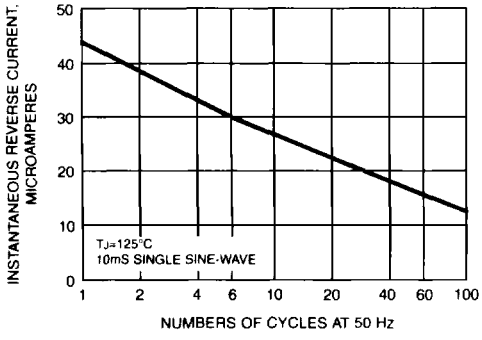


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS PER LEG

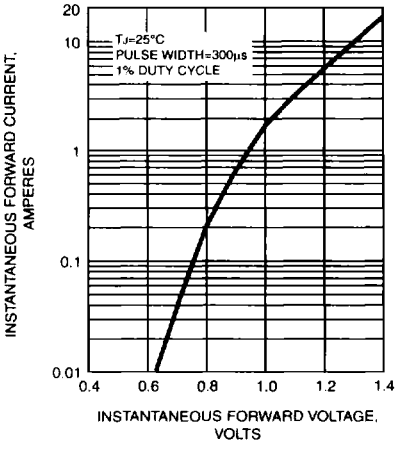


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS PER LEG

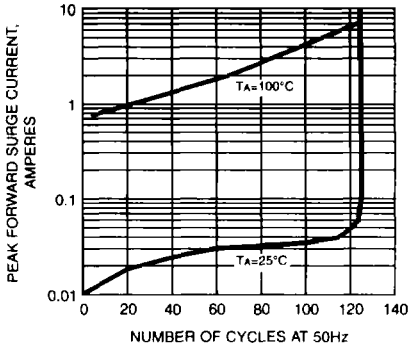


FIG. 6 - TYPICAL JUNCTION CAPACITANCE PER LEG