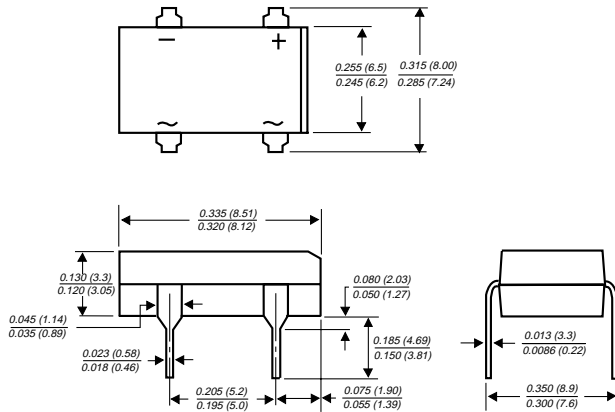


B40C800DM THRU B380C800DM

MINIATURE GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

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

Case Style DFM



Dimensions in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Glass passivated chip junctions
- ◆ Surge overload rating of 45 Amperes peak
- ◆ Ideal for printed circuit boards
- ◆ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs. (2.3kg) tension



MECHANICAL DATA

Case: Molded plastic body over passivated junctions
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on body
Mounting Position: Any
Weight: 0.04 ounce, 1.0 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	B40 C800DM	B80 C800DM	B125 C800DM	B250 C800DM	B380 C800DM	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 $T_A=45^\circ\text{C}$ R + L-load C-load	$I_{(AV)}$	0.9 0.8					Amp
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	650	1000	Volts
Maximum repetitive peak forward surge current	I_{FRM}	10.0					Amps
Peak forward surge current single sine wave on rated load at $T_J=125^\circ\text{C}$	I_{FSM}	45.0					Amps
Rating for fusing at $T_J=125^\circ\text{C}$ ($t<100\text{ms}$)	I^2t	10.0					A ² 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	μF
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					μA
Typical thermal resistance per leg (NOTE 1)	$R_{\theta JA}$ $R_{\theta JL}$	40.0 15.0					$^\circ\text{C/W}$
Operating junction temperature range	T_J	-40 to +125					$^\circ\text{C}$
Storage temperature range	T_{STG}	-40 to +150					$^\circ\text{C}$

NOTES: (1) Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.5 x 0.5" (13 x 13mm) copper pads

RATINGS AND CHARACTERISTICS CURVES B40C800DM THRU B380C800DM

FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT FOR B40C800DM...B125C800DM

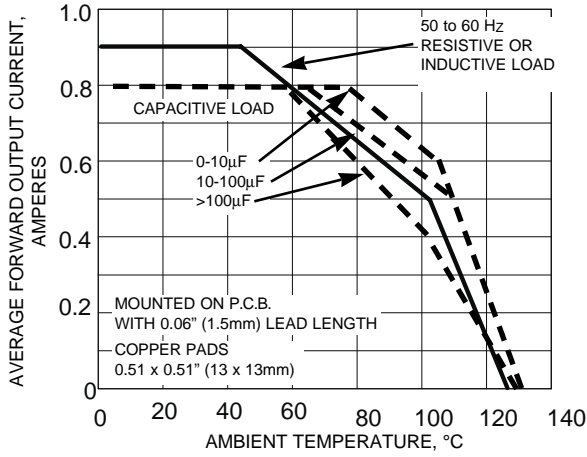


FIG. 2 - DERATING CURVE OUTPUT RECTIFIED CURRENT FOR B250C800DM...B380C800DM

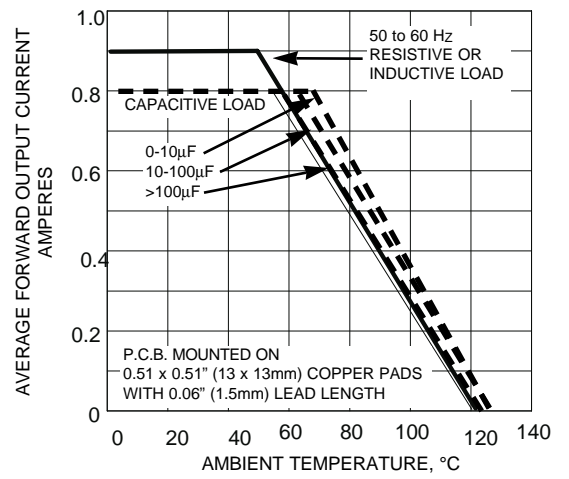


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD CURRENT PER LEG

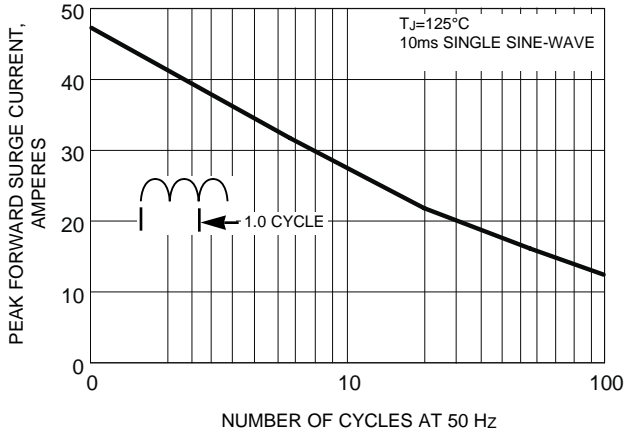


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS PER LEG

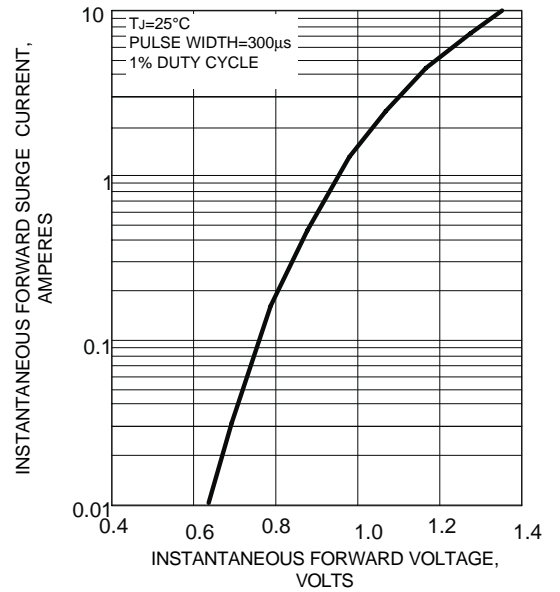


FIG. 5 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

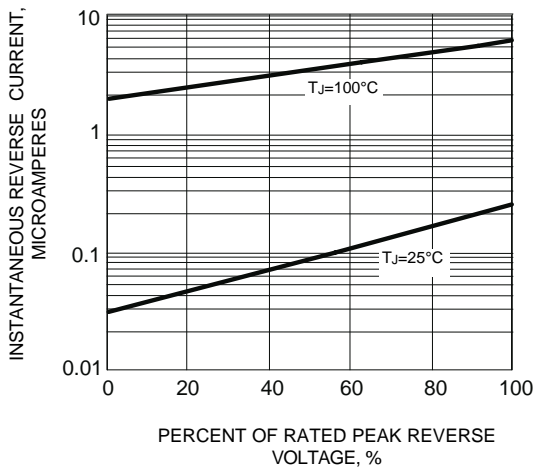


FIG. 6 - TYPICAL JUNCTION CAPACITANCE PER LEG

