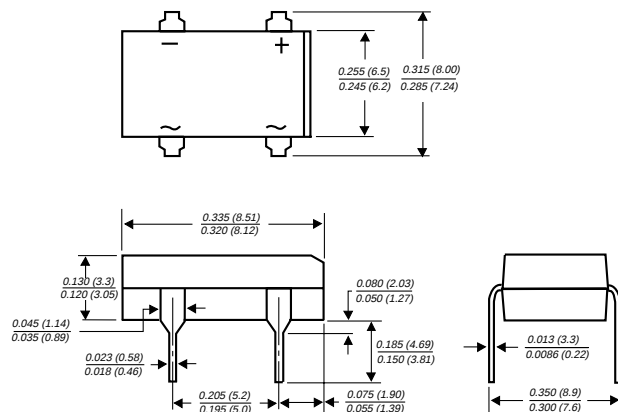


B40C800DM THRU B380C800DM

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°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°C	I _{FSM}	45.0					Amps
Rating for fusing at T _J =125°C (t<100ms)	I ² t	10.0					A ² sec
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 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 _{θJA} R _{θJL}		40.0 15.0					°C/W
Operating junction temperature range	T _J	-40 to +125					°C
Storage temperature range	T _{STG}	-40 to +150					°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

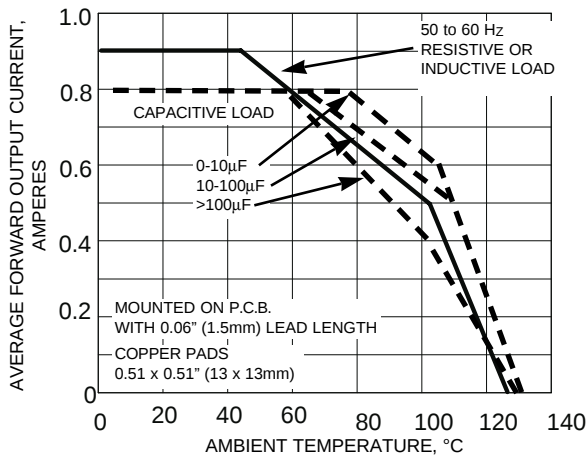


FIG. 2 - DERATING CURVE OUTPUT RECTIFIED CURRENT FOR B250C800DM...B380C800DM

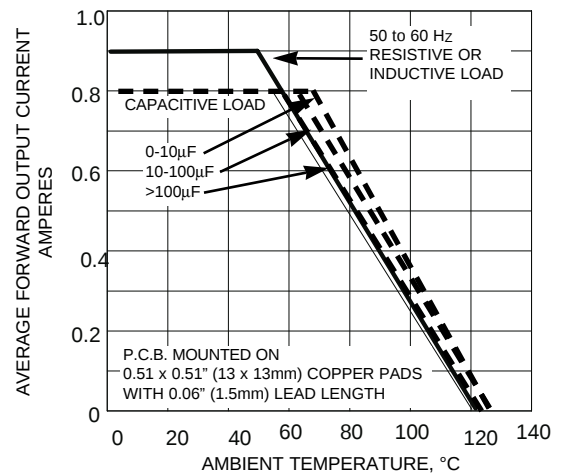


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD CURRENT PER LEG

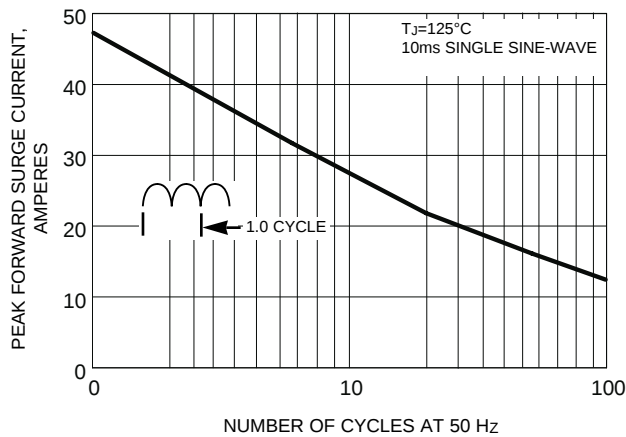


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS PER LEG

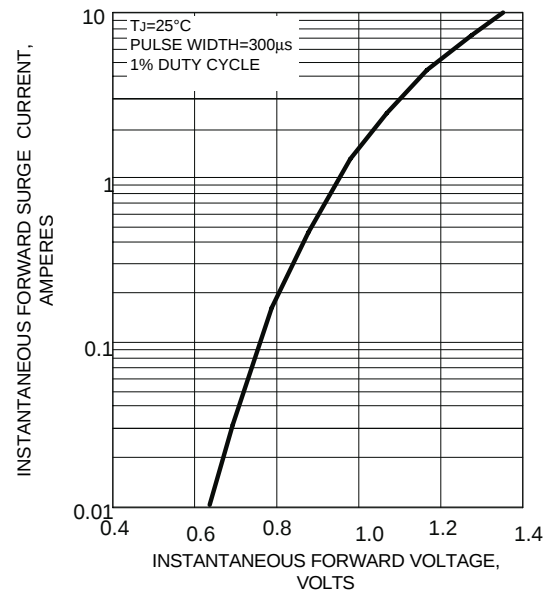


FIG. 5 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

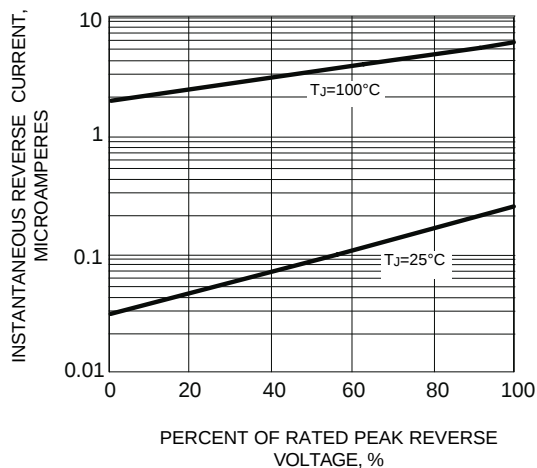


FIG. 6 - TYPICAL JUNCTION CAPACITANCE PER LEG

