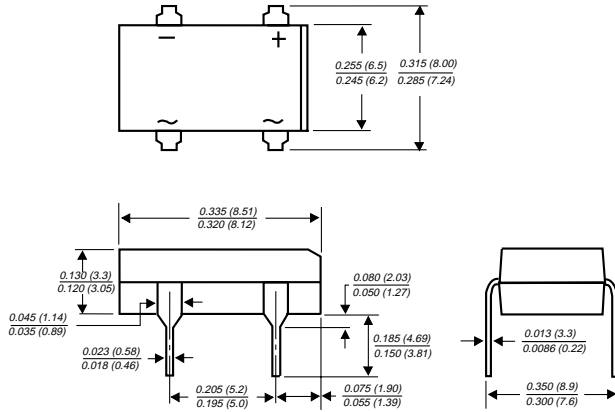


B40C800DM THRU B380C800DM

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

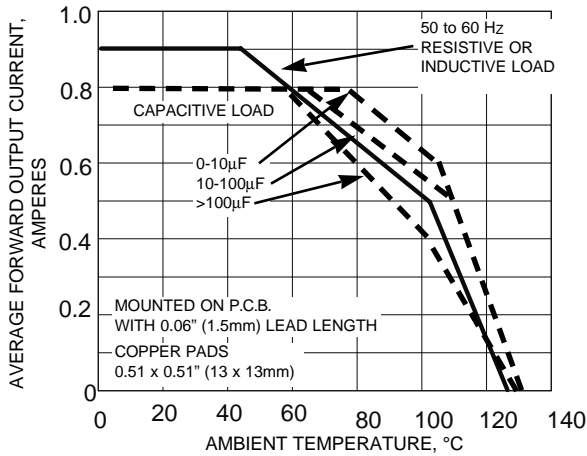


FIG. 2 - DERATING CURVE OUTPUT RECTIFIED CURRENT FOR B250C800DM...B380C800DM

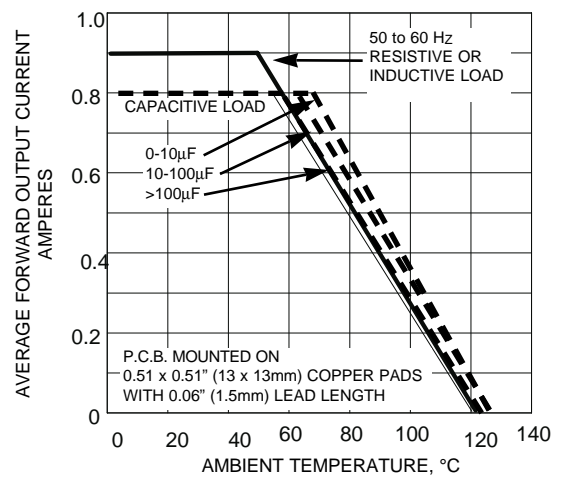


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD CURRENT PER LEG

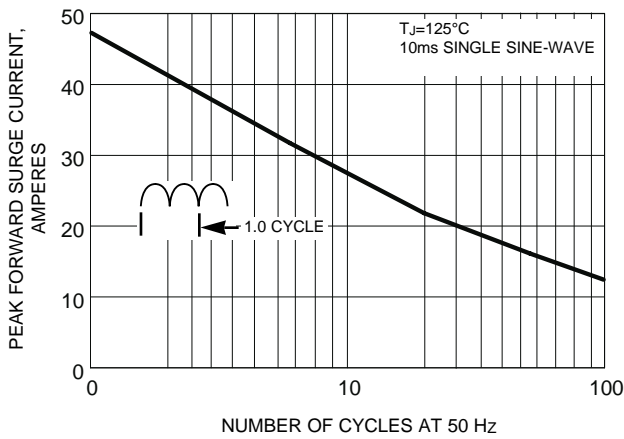


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS PER LEG

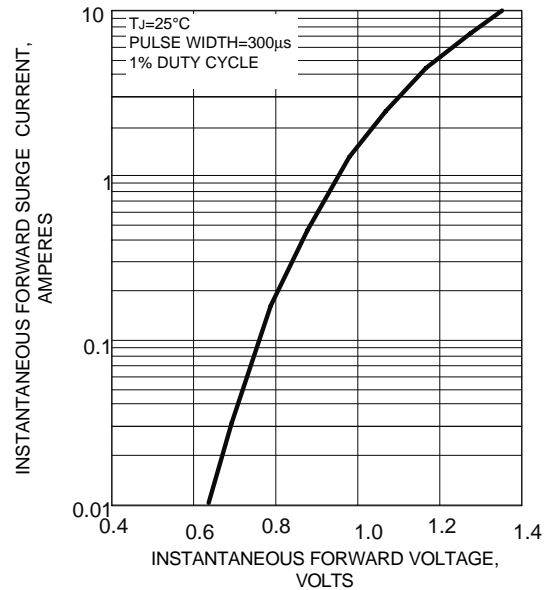


FIG. 5 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

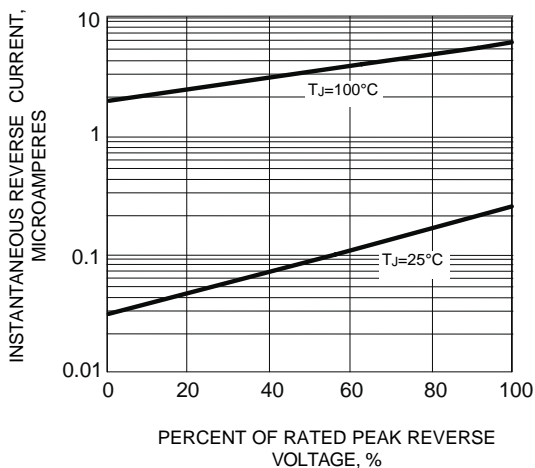


FIG. 6 - TYPICAL JUNCTION CAPACITANCE PER LEG

