

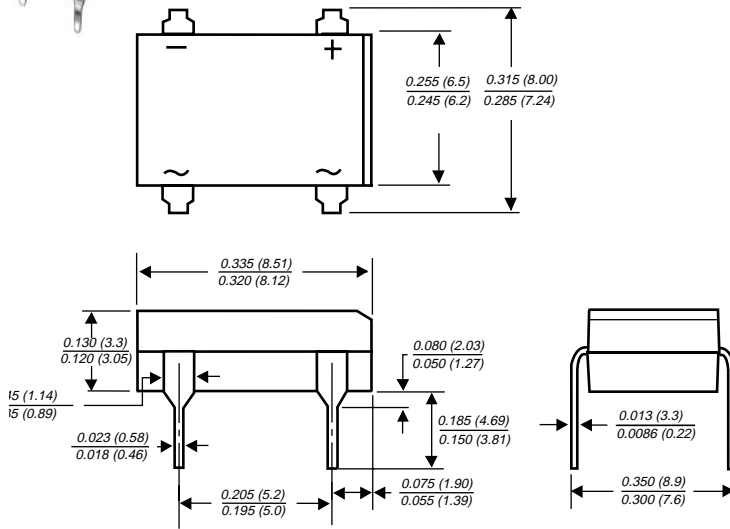


## Glass Passivated Single-Phase Bridge Rectifier



Case Style DFM

Rectifier Reverse Voltage 65 and 600 V  
Rectifier Forward Current 0.9 A



### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Surge overload rating of 45 Amperes peak
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds, at 5lbs. (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 as marked on body  
**Mounting Position:** Any  
**Weight:** 0.014 oz., 0.4 g  
**Packaging codes/options:**  
 45/50 EA. per Bulk Tube

### Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	B40 C800DM	B80 C800DM	B125 C800DM	B250 C800DM	B380 C800DM	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	65	125	200	400	600	V
Maximum RMS input voltage R + C-load	V <sub>RMS</sub>	40	80	125	250	380	V
Maximum average forward output current for free air operation at T <sub>A</sub> =45°C	I <sub>F(AV)</sub>	0.9 0.8					A
Maximum DC blocking voltage	V <sub>DC</sub>	65	125	200	400	600	V
Maximum peak working voltage	V <sub>RWM</sub>	90	180	300	600	900	V
Maximum non-repetitive peak voltage	V <sub>RSM</sub>	100	200	350	650	1000	V
Maximum repetitive peak forward surge current	I <sub>FRM</sub>	10					A
Peak forward surge current single sine wave on rated load at T <sub>J</sub> =125°C	I <sub>FSM</sub>	45					A
Rating for fusing at T <sub>J</sub> =125°C (t<100ms)	I <sup>2</sup> t	10					A <sup>2</sup> sec
Minimum series resistor C-load at V <sub>RMS</sub> = ±10%	R <sub>T</sub>	1.0	2.0	4.0	8.0	12	Ω
Maximum load capacitance +50% -10%	C <sub>L</sub>	5000	2500	1000	500	200	μF
Typical thermal resistance per leg (1)	R <sub>θJA</sub> R <sub>θJL</sub>	40 15					°C/W
Operating junction temperature range	T <sub>J</sub>	-40 to +125					°C
Storage temperature range	T <sub>STG</sub>	-40 to +150					°C

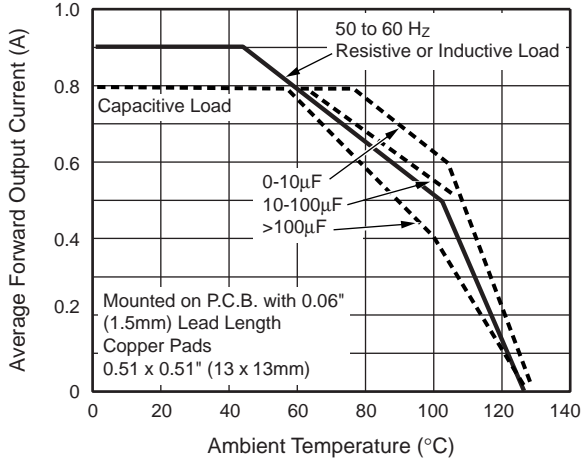
### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	B40 C800DM	B80 C800DM	B125 C800DM	B250 C800DM	B380 C800DM	Units
Maximum instantaneous forward voltage drop per leg at 0.9A	V <sub>F</sub>	1.0					V
Maximum reverse current at rated repetitive peak voltage per leg	I <sub>R</sub>	10					μA

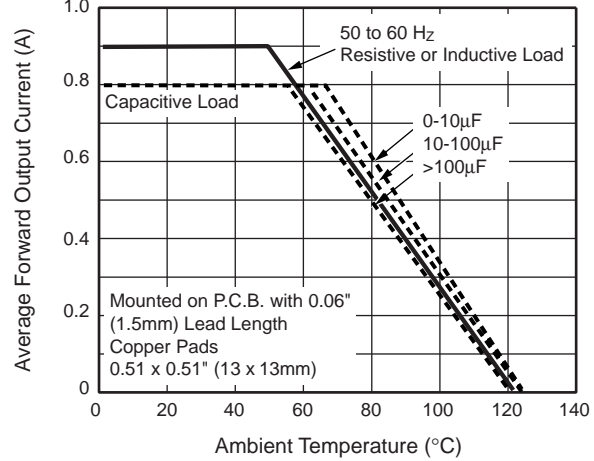
**Notes:** (1) Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.5 x 0.5" (13 x 13mm) copper pads

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

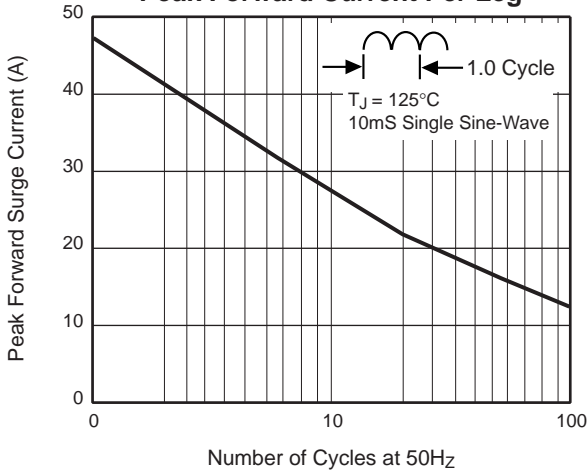
**Fig. 1 — Derating Curves  
Output Rectified Current For  
B40C800DM...B125C800DM**



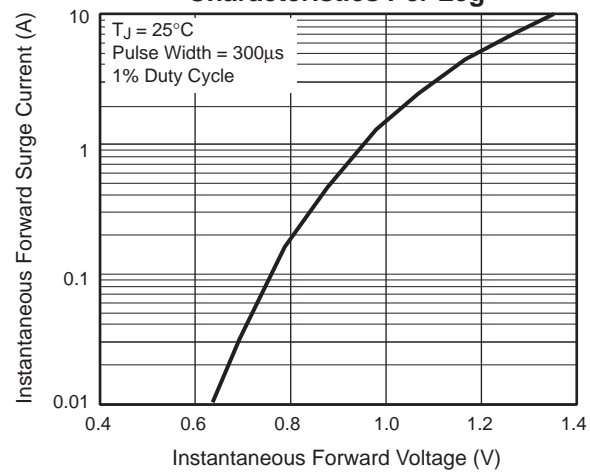
**Fig. 2 — Derating Curves  
Output Rectified Current For  
B250C800DM...B360C800DM**



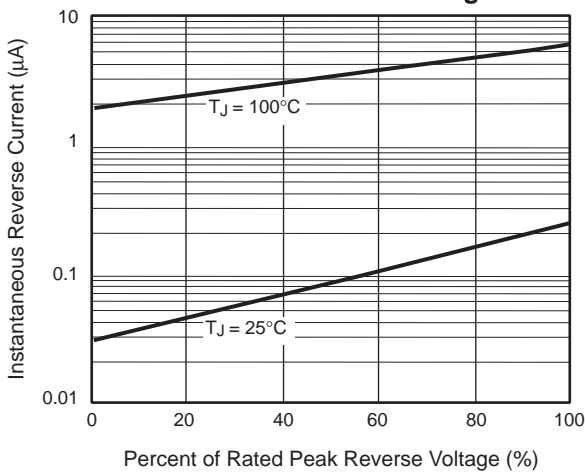
**Fig. 3 — Maximum Non-Repetitive  
Peak Forward Current Per Leg**



**Fig. 4 — Typical Forward  
Characteristics Per Leg**



**Fig. 5 — Typical Reverse Leakage  
Characteristics Per Leg**



**Fig. 6 — Typical Junction Capacitance  
Per Leg**

