

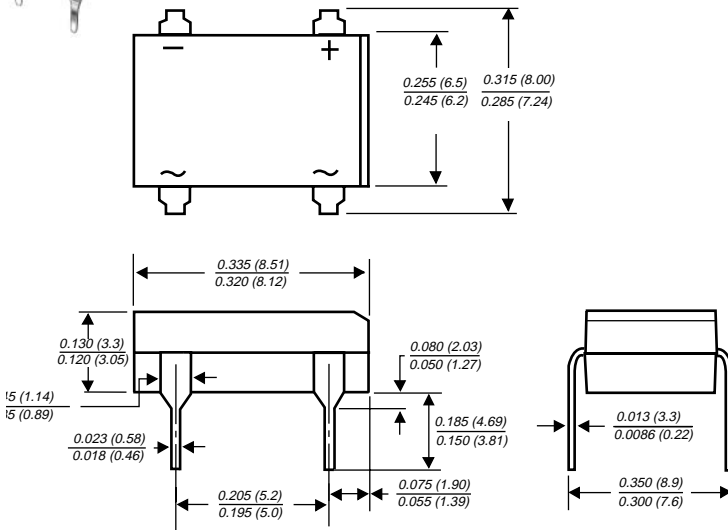


## Glass Passivated Single-Phase Bridge Rectifier



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:** 0.04 oz., 1.0 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	$V_{RRM}$	65	125	200	400	600	V
Maximum RMS input voltage R + C-load	$V_{RMS}$	40	80	125	250	380	V
Maximum average forward output current for free air operation at $T_A=45^\circ\text{C}$	$I_{F(AV)}$	0.9 0.8					A
Maximum DC blocking voltage	$V_{DC}$	65	125	200	400	600	V
Maximum peak working voltage	$V_{RWM}$	90	180	300	600	900	V
Maximum non-repetitive peak voltage	$V_{RSM}$	100	200	350	650	1000	V
Maximum repetitive peak forward surge current	$I_{FRM}$	10					A
Peak forward surge current single sine wave on rated load at $T_J=125^\circ\text{C}$	$I_{FSM}$	45					A
Rating for fusing at $T_J=125^\circ\text{C}$ ( $t < 100\text{ms}$ )	$I^2t$	10					A <sup>2</sup> sec
Minimum series resistor C-load at $V_{RMS} = \pm 10\%$	$R_T$	1.0	2.0	4.0	8.0	12	$\Omega$
Maximum load capacitance +50% -10%	$C_L$	5000	2500	1000	500	200	$\mu\text{F}$
Typical thermal resistance per leg (1)	$R_{\theta JA}$ $R_{\theta JL}$	40 15					$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-40 to +125					$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-40 to +150					$^\circ\text{C}$

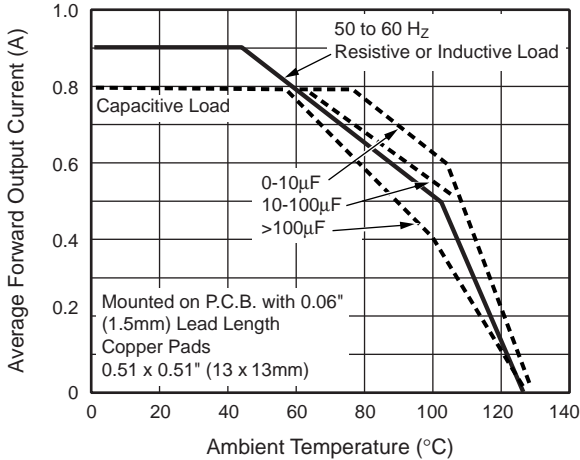
### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	B40 C800DM	B80 C800DM	B125 C800DM	B250 C800DM	B380 C800DM	Units
Maximum instantaneous forward voltage drop per leg at 0.9A	$V_F$	1.0					V
Maximum reverse current at rated repetitive peak voltage per leg	$I_R$	10					$\mu\text{A}$

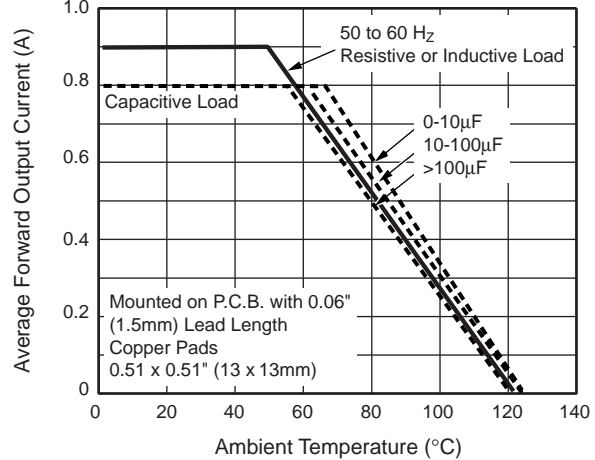
**Notes:** (1) Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.5 x 0.5" (13 x 13mm) copper pads

## Ratings and Characteristic Curves (T<sub>A</sub> = 25°C unless otherwise noted)

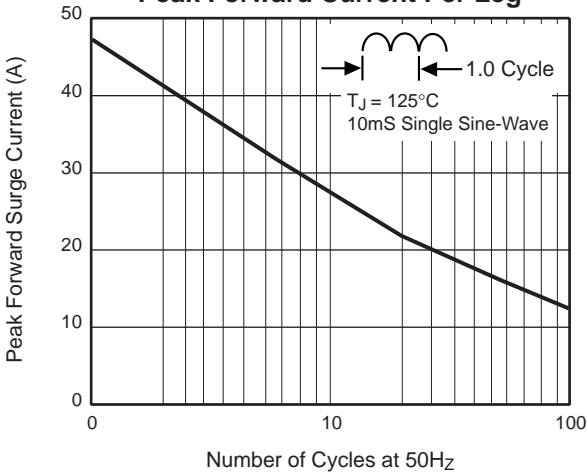
**Fig. 1 — Derating Curves  
Output Rectified Current For  
B40C800DM...B125C800DM**



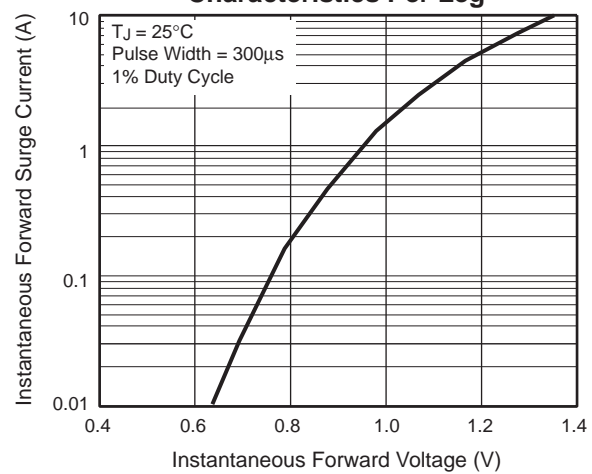
**Fig. 2 — Derating Curves  
Output Rectified Current For  
B250C800DM...B360C800DM**



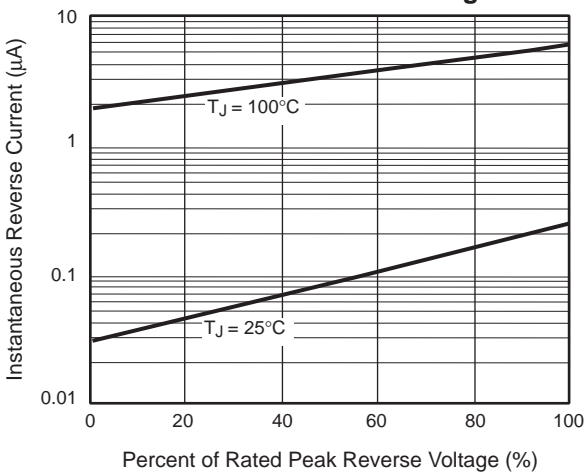
**Fig. 3 — Maximum Non-Repetitive  
Peak Forward Current Per Leg**



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



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



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

