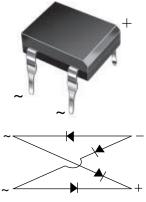


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Glass Passivated Ultrafast Bridge Rectifier



Case Style DFM

LINKS TO ADDITIONAL RESOURCES



PRIMARY CHARACTERISTICS						
I _{F(AV)}	0.9 A					
V _{RRM} 65 V, 125 V, 200 V, 400 V						
I _{FSM}	45 A					
I _R	10 µA					
V_F at $I_F = 0.9$ A	1.0 V					
T _J max.	125 °C					
Package	DFM					
Circuit configuration	Quad					

FEATURES

- Ideal for automated placement
- High surge current capability
- Solder dip 275 °C max. 10 s, per JESD 22-B106
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

TYPICAL APPLICATIONS

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

MECHANICAL DATA

Case: DFM

Molding compound meets UL 94 V-0 flammability rating Base P/N-E3 - RoHS-compliant, commercial grade

Terminals: matte tin plated leads, solderable per J-STD-002 and JESD 22-B102

E3 suffix meets JESD 201 class 1A whisker test

Polarity: as marked on body

MAXIMUM RATINGS (T _A = 25 °C unless otherwise noted)							
PARAMETER	SYMBOL	B40 C800DM	B80 C800DM	B125 C800DM	B250 C800DM	B380 C800DM	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	65	125	200	400	600	V
Maximum RMS input voltage R- and C-load	V _{RMS}	40	80	125	250	380	V
Maximum average forward output current R- and L-load		0.9				_	
for free air operation at $T_A = 45$ °C C-load	I _{F(AV)}	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				А	
Peak forward surge current single sine-wave on rated load	I _{FSM}	45				Α	
Rating for fusing at T_J = 125 °C (t < 100 ms)	l ² t	10				A ² s	
Minimum series resistor C-load at V_{RMS} = ± 10 %	R _T	1.0	2.0	4.0	8.0	12.0	Ω
Maximum load capacitance + 50 % - 10 %	CL	5000	2500	1000	500	200	μF
Operating junction temperature range	TJ	-40 to +125				°C	
Storage temperature range	T _{STG}	-40 to +150			°C		

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COMPLIANT



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ELECTRICAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted)								
PARAMETER	TEST CONDITIONS	SYMBOL	B40 C800DM	B80 C800DM	B125 C800DM	B250 C800DM	B380 C800DM	UNIT
Maximum instantaneous forward voltage drop per diode	0.9 A	V _F	1.0					V
Maximum reverse current at rated repetitive peak voltage per diode		I _R	10				μA	

THERMAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted)							
PARAMETER	SYMBOL	B40 C800DM	B80 C800DM	B125 C800DM	B250 C800DM	B380 C800DM	UNIT
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$	40					°C/W
Typical merma resistance of	$R_{\theta JL}$	15					

Note

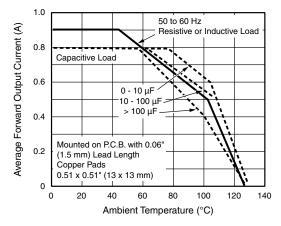
⁽¹⁾ Thermal resistance from junction to ambient and from junction to lead mounted on PCB with 0.5" x 0.5" (13 mm x 13 mm) copper pads

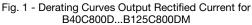
ORDERING INFORMATION (Example)								
PREFERRED P/N	UNIT WEIGHT (g)	IT WEIGHT (g) PREFERRED PACKAGE CODE BASE QUANTITY DELIVER						
B380C800DM-E3/45	0.416	45	50	Tube				

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RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)





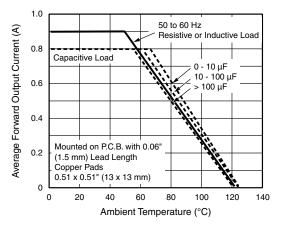


Fig. 2 - Derating Curves Output Rectified Current for B250C800D...B360C800DM

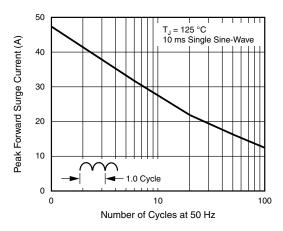


Fig. 3 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

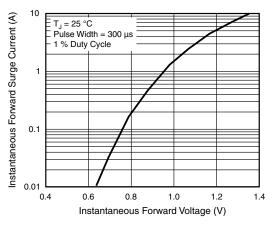


Fig. 4 - Typical Forward Characteristics Per Diode

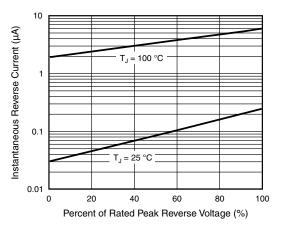


Fig. 5 - Typical Reverse Leakage Characteristics Per Diode

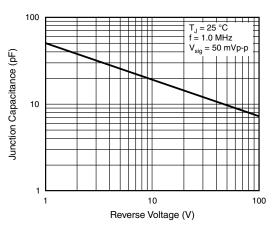


Fig. 6 - Typical Junction Capacitance Per Diode

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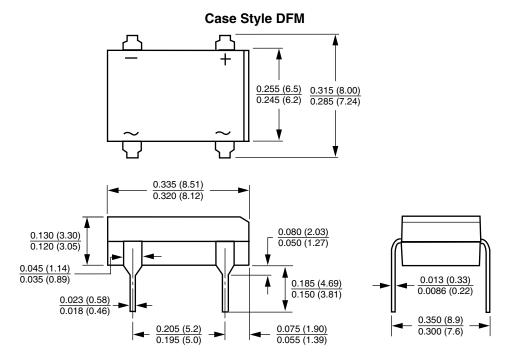
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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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