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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

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B40C1500G, B80C1500G, B125C1500G, B250C1500G, B380C1500G

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Vishay Semiconductors

RoHS

COMPLIANT

Glass Passivated Single-Phase Bridge Rectifier



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Case Style WOG

PRIMARY CHARACTERISTICS					
Package	WOG				
I _{F(AV)}	1.5 A				
V _{RRM}	65 V, 125 V, 200 V, 400 V, 600 V				
I _{FSM}	50 A				
I _R	10 µA				
V_F at $I_F = 1.5 A$	1.0 V				
T _J max.	125 °C				
Diode variations	Quad				

FEATURES

- Ideal for printed circuit boards
- · High case dielectric strength
- High surge current capability
- Typical I_R less than 0.1 μA
- 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 power supply, adapter, charger, lighting ballaster on consumers, and home appliances applications.

MECHANICAL DATA

Case: WOG

Molding compound meets UL 94 V-0 flammability rating Base P/N-E4 - RoHS-compliant, commercial grade

Terminals: plated Silver leads, solderable per J-STD-002 and JESD22-B102

Polarity: As marked on body

MAXIMUM RATINGS (T _A = 25 °C unless otherwise noted)							
PARAMETER	SYMBOL	B40 C1500G	B80 C1500G	B125 C1500G	B250 C1500G	B380 C1500G	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 DC blocking voltage	V _{DC}	65	125	200	400	600	V
Maximum peak working voltage	V _{RWM}	90	180	300	600	800	V
Maximum non-repetitive peak voltage	V _{RSM}	100	200	350	600	1000	V
Maximum repetitive peak forward surge current	I _{FRM}	10					А
Maximum average forward output current R- and L-load	1.6					A	
for free air operation at $T_A = 45 \text{ °C}$ C-load	I _{F(AV)}			1.5			A
Peak forward surge current single sine-wave on rated load	I _{FSM}	50					А
Rating for fusing at $T_J = 125 \text{ °C}$ (t < 100 ms)	l ² t	12.5				A ² s	
Minimum series resistor C-load at V_{RMS} = ± 10 %	R _T	1.0	2.0	4.0	8.0	12	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

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)								
PARAMETER	TEST CONDITIONS	SYMBOL	B40 C1500G	B80 C1500G	B125 C1500G	B250 C1500G	B380 C1500G	UNIT
Maximum instantaneous forward voltage drop per diode	1.5 A	V _F			1.0			V
Maximum reverse current at rated repetitive peak voltage per diode	T _A = 25 °C	I _R			10			μA

Revision: 08-Jul-13

Document Number: 88501

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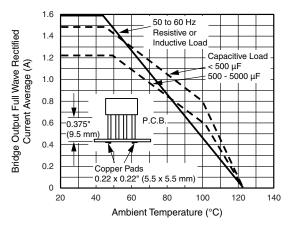
THERMAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted)							
PARAMETER	SYMBOL	MBOL B40 B80 B125 B250 B380 UNI C1500G C1500G C1500G C1500G C1500G UNI					UNIT
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$	36					°C/W
Typical therman esistance (*)	$R_{\theta JL}$	11					0/11

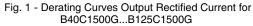
Note

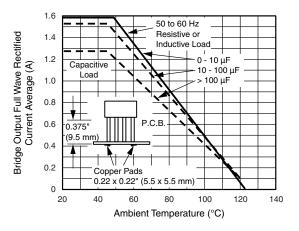
(1) Thermal resistance from junction to ambient and from junction to lead mounted on PCB at 0.375" (9.5 mm) lead lengths with 0.22" x 0.22" (5.5 mm x 5.5 mm) copper pads

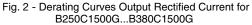
ORDERING INFORMATION (Example)								
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE				
B380C1500G-E4/51	1.12	51	100	Plastic bag				

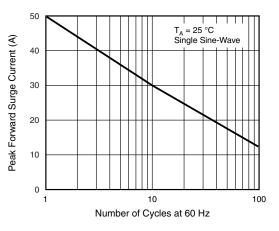
RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

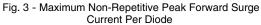












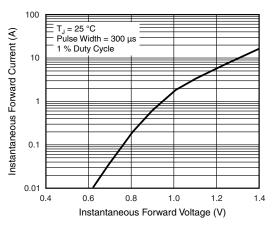


Fig. 4 - Typical Forward Characteristics Per Diode

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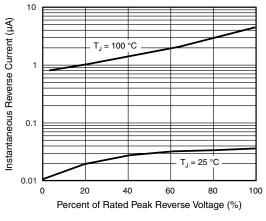
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Fig. 5 - Typical Reverse Characteristics Per Diode

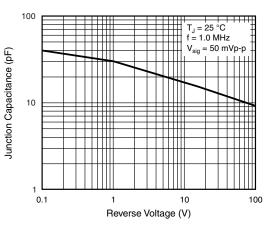
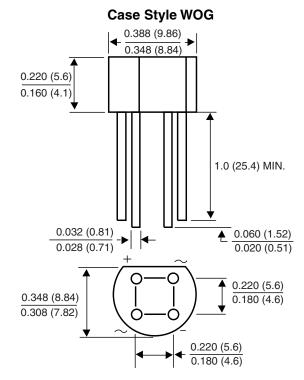


Fig. 6 - Typical Junction Capacitance Per Diode







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