



B40C1000 – B500C1000



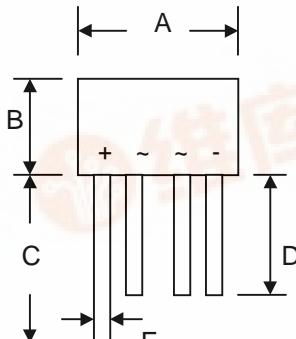
1.0A SINGLE-PHASE BRIDGE RECTIFIER

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Excellent Case Dielectric Strength

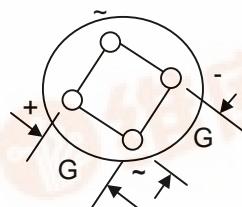
Mechanical Data

- Case: WOB, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.1 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



WOB		
Dim	Min	Max
A	8.60	9.10
B	5.0	5.50
C	27.9	—
D	25.4	—
E	0.71	0.81
G	4.60	5.60

All Dimensions in mm



Maximum Ratings and Electrical Characteristics $\text{@ } T_A = 25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	B40C 1000	B80C 1000	B125C 1000	B250C 1000	B380C 1000	B500C 1000	Unit
Peak Repetitive Reverse Voltage	V _{RRM}							
Working Peak Reverse Voltage	V _{RWM}	100	200	300	600	900	1200	V
DC Blocking Voltage	V _R							
Input Voltage Recommended	V _R (RMS)	40	80	125	250	380	500	V
Average Rectified Output Current (Note 1) $\text{@ } T_A = 50^\circ\text{C}$	I _o							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}							A
Forward Voltage (per element) $\text{@ } I_F = 1.0\text{A}$	V _{FM}							V
Peak Reverse Current $\text{@ } T_A = 25^\circ\text{C}$ $\text{@ } T_A = 100^\circ\text{C}$	I _{RM}							μA
Operating Temperature Range	T _j							$^\circ\text{C}$
Storage Temperature Range	T _{STG}							$^\circ\text{C}$

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

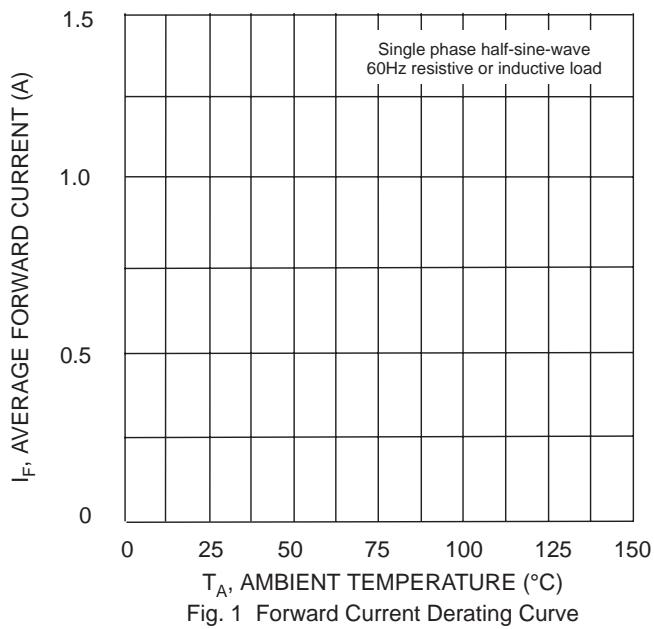


Fig. 1 Forward Current Derating Curve

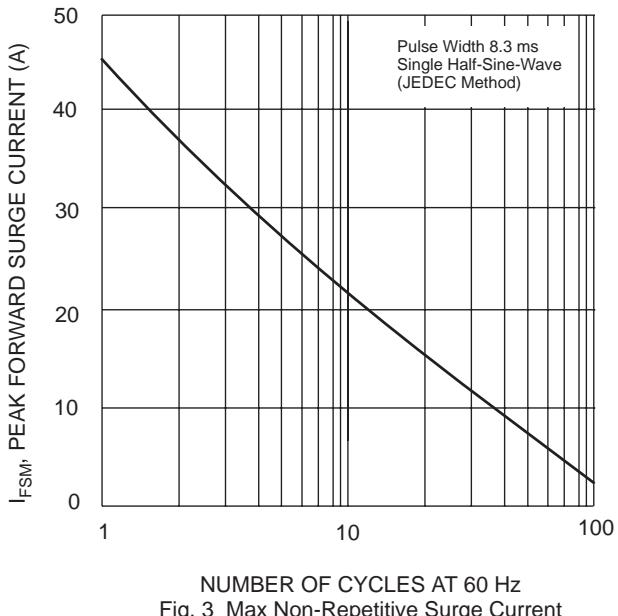


Fig. 3 Max Non-Repetitive Surge Current

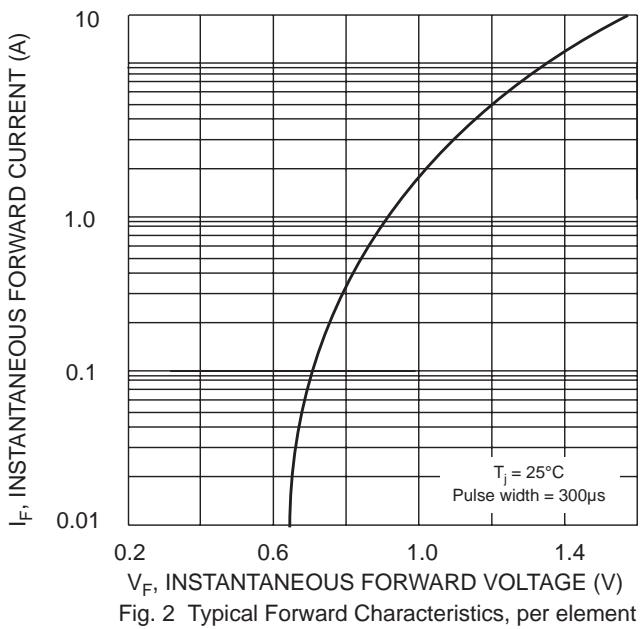


Fig. 2 Typical Forward Characteristics, per element

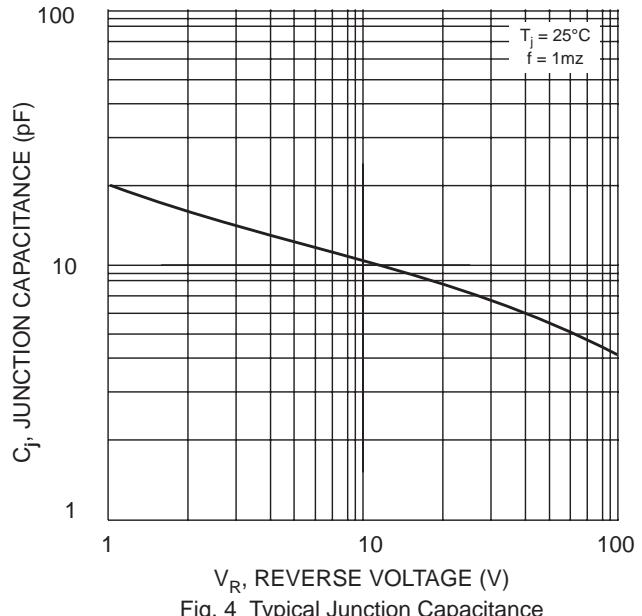
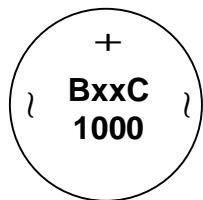


Fig. 4 Typical Junction Capacitance

MARKING INFORMATION



BxxC1000 = Device Number
xx = 40, 80, 125, 250, 380, 500
Polarity = As Marked on Body

PACKAGING INFORMATION

BULK

Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
260 x 190 x 80	1,000	400 x 273 x 415	10,000	14.0

Note: 1. Paper box, white or brown color.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
B40C1000	Round Bridge	1000 Units/Box
B80C1000	Round Bridge	1000 Units/Box
B125C1000	Round Bridge	1000 Units/Box
B250C1000	Round Bridge	1000 Units/Box
B380C1000	Round Bridge	1000 Units/Box
B500C1000	Round Bridge	1000 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add “-LF” suffix to part number above. For example, B40C1000-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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