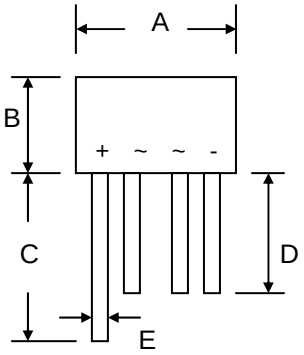
B40C1000 – B500C1000

1.0A SINGLE-PHASE BRIDGE RECTIFIER

Features

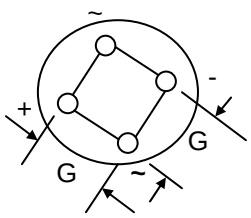
- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Excellent Case Dielectric Strength



WOB		
Dim	**Min**	**Max**
A	8.60	9.10
B	5.00	5.50
C	21.90	—
D	19.00	—
E	0.69	0.80
G	4.60	5.60
All Dimensions in mm		

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**



Maximum Ratings and Electrical Characteristics @T_A=25°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 Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	200	300	600	900	1200	V
Input Voltage Recommended	$V_{R(RMS)}$	40	80	125	250	380	500	V
Average Rectified Output Current (Note 1) @T_A = 50°C	I_O	1.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	45						A
Forward Voltage (per element) @I_F = 1.0A	V_{FM}	1.0						V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	5.0 500						μA
Operating Temperature Range	T_j	-55 to +125						°C
Storage Temperature Range	T_{STG}	-55 to +150						°C

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

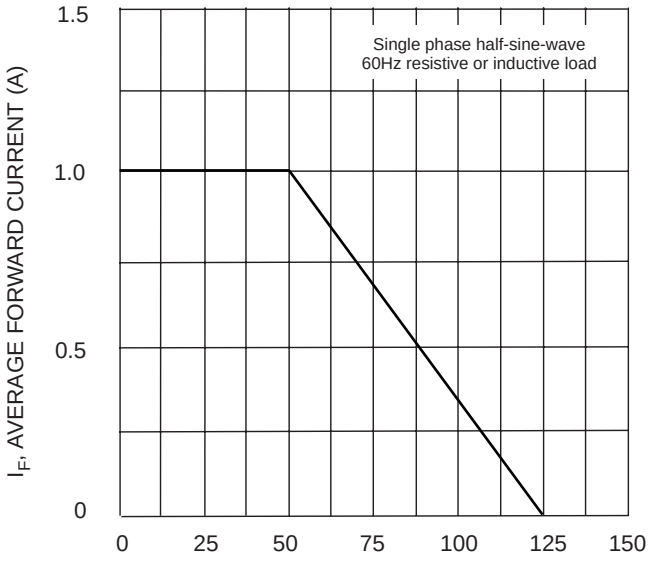


Fig. 1 Forward Current Derating Curve

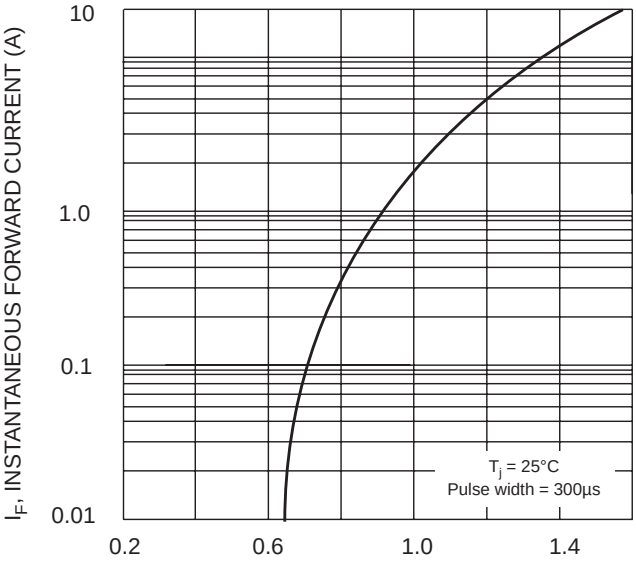


Fig. 2 Typical Forward Characteristics, per element

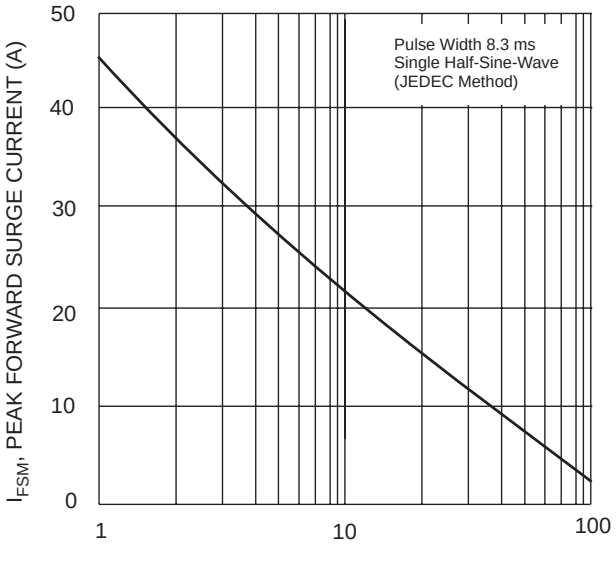


Fig. 3 Max Non-Repetitive Surge Current

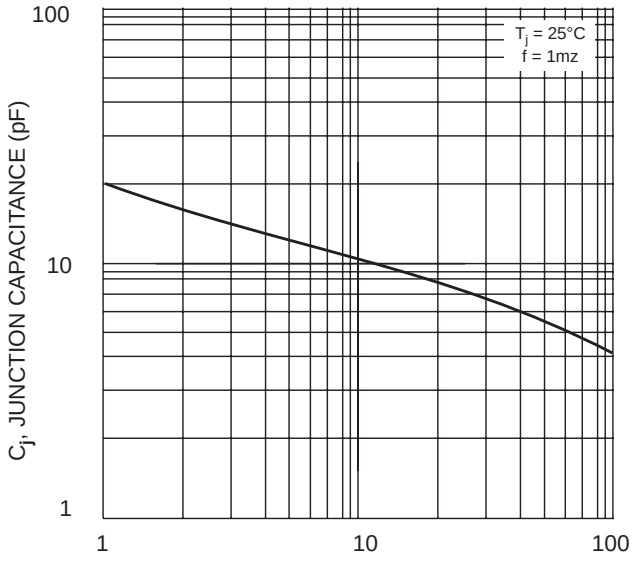
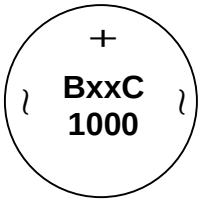


Fig. 4 Typical Junction Capacitance

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.**

Won-Top Electronics Co., Ltd.
No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan
Phone: 886-7-822-5408 or 886-7-822-5410
Fax: 886-7-822-5417
Email: sales@wontop.com
Internet: http://www.wontop.com

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