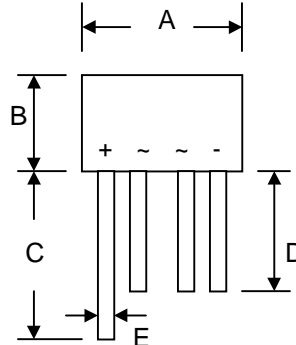


### Features

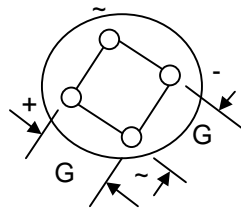
- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards



| Dim                  | WOB  |      |
|----------------------|------|------|
|                      | 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 |      |      |

### Mechanical Data

- Case: 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



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

Single Phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

| Characteristic   | Symbol       | B40C800     | B80C800 | B125C800 | B250C800 | B380C800 | B500C800 | Unit             |
|--|--------------|-------------|---------|----------|----------|----------|----------|------------------|
| Peak Repetitive Reverse Voltage  | $V_{RRM}$    |             |         |          |          |          |          | V                |
| Working Peak Reverse Voltage   | $V_{RWM}$    | 100         | 200     | 300      | 600      | 900      | 1200     |                  |
| DC Blocking Voltage  | $V_R$        |             |         |          |          |          |          |                  |
| Input Voltage Recommended  | $V_{R(RMS)}$ | 40          | 80      | 125      | 250      | 380      | 500      | V                |
| Average Rectified Output Current (Note 1) @ $T_A = 50^\circ\text{C}$   | $I_O$        | 0.8         |         |          |          |          |          | A                |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$    | 45          |         |          |          |          |          | A                |
| Forward Voltage (per element) @ $I_F = 0.8\text{A}$  | $V_{FM}$     | 1.0         |         |          |          |          |          | V                |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$        | $I_{RM}$     | 10<br>500   |         |          |          |          |          | $\mu\text{A}$    |
| Operating Temperature Range  | $T_j$        | -55 to +125 |         |          |          |          |          | $^\circ\text{C}$ |
| Storage Temperature Range  | $T_{STG}$    | -55 to +150 |         |          |          |          |          | $^\circ\text{C}$ |

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

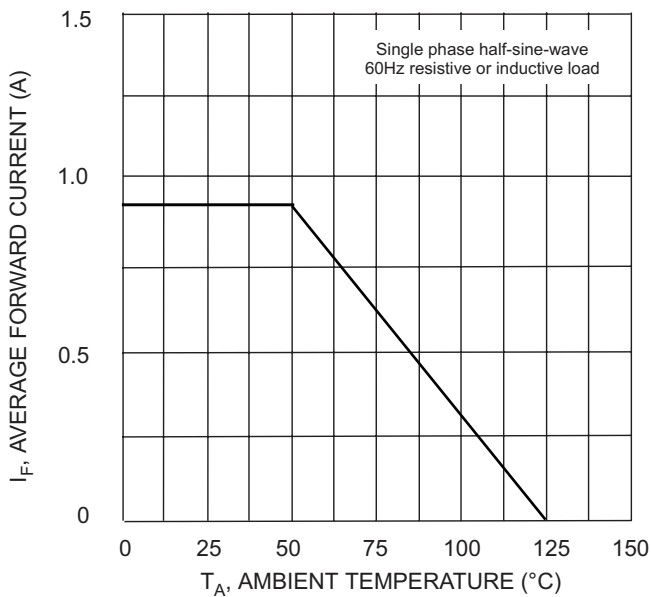


Fig. 1 Forward Current Derating Curve

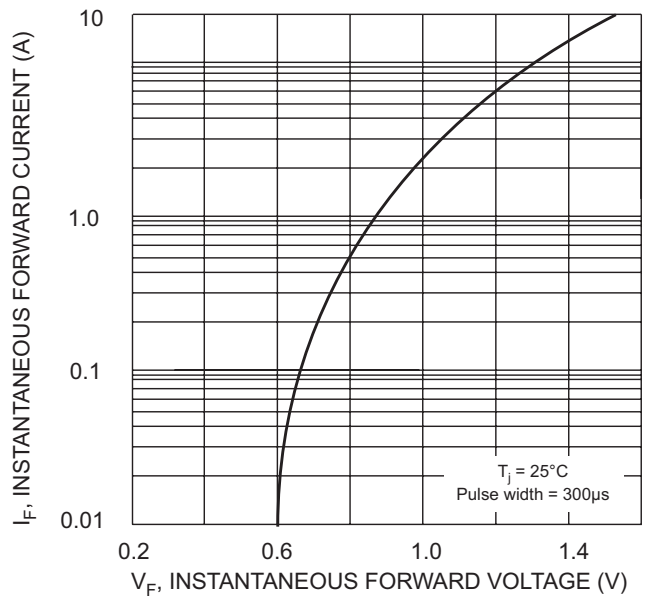


Fig. 2 Typical Forward Characteristics, per element

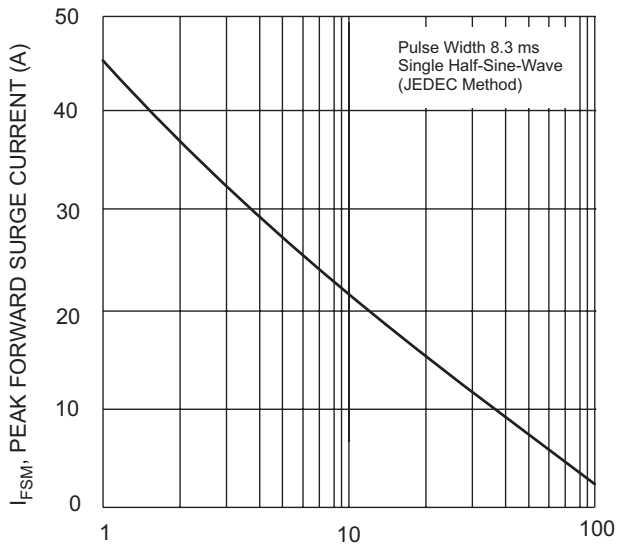


Fig. 3 Max Non-Repetitive Surge Current

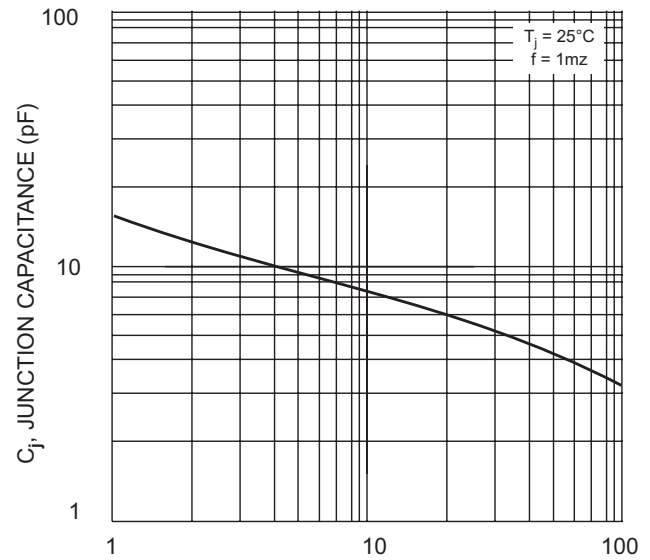


Fig. 4 Typical Junction Capacitance

## ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| B40C800     | Round Bridge | 1000 Units/Box    |
| B80C800     | Round Bridge | 1000 Units/Box    |
| B125C800    | Round Bridge | 1000 Units/Box    |
| B250C800    | Round Bridge | 1000 Units/Box    |
| B380C800    | Round Bridge | 1000 Units/Box    |
| B500C800    | Round Bridge | 1000 Units/Box    |

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**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.

**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>

*We power your everyday.*

This datasheet has been download from:

[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.