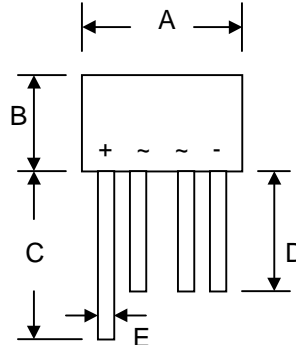


### Features

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

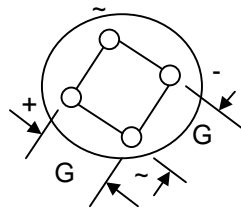


| Dim | WOB  |      |
|-----|------|------|
|     | Min  | Max  |
| A   | 8.60 | 9.10 |
| B   | 5.0  | 5.50 |
| C   | 27.9 | —    |
| D   | 25.4 | —    |
| E   | 0.71 | 0.81 |
| G   | 4.60 | 5.60 |

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.

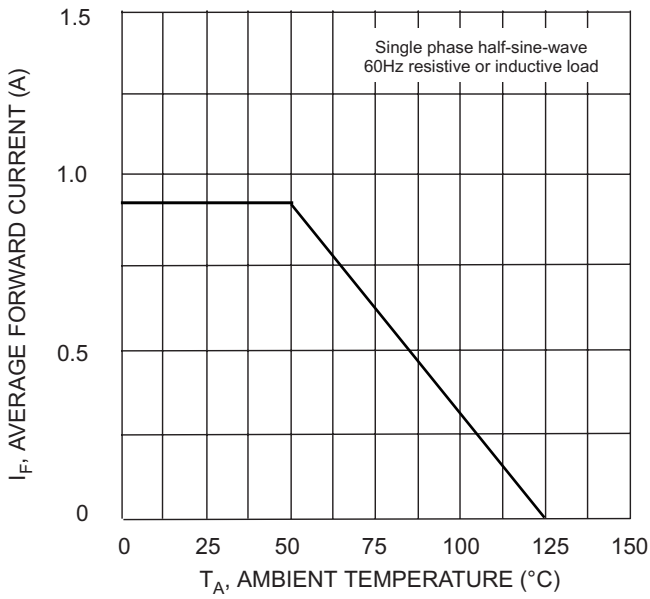


Fig. 1 Forward Current Derating Curve

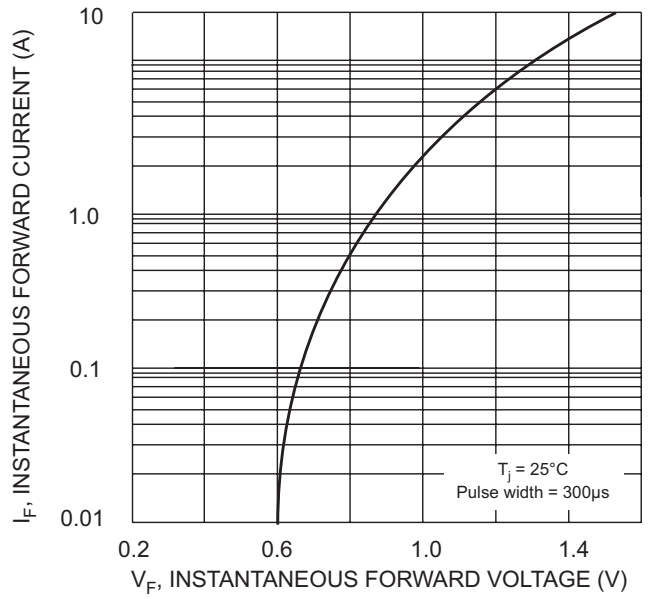


Fig. 2 Typical Forward Characteristics, per element

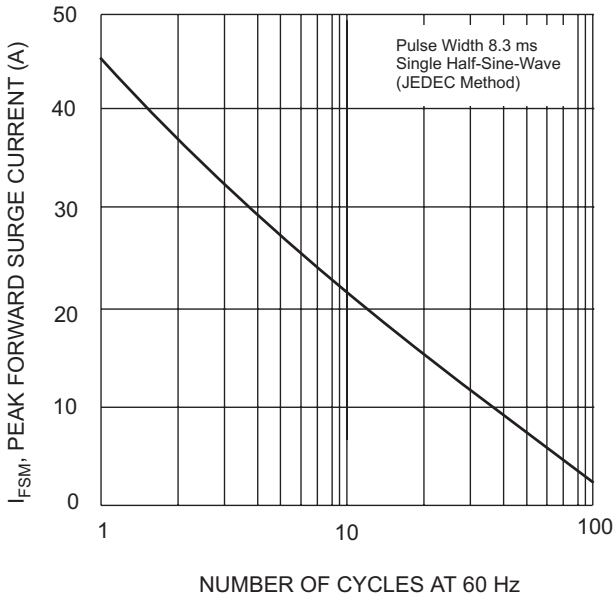


Fig. 3 Max Non-Repetitive Surge Current

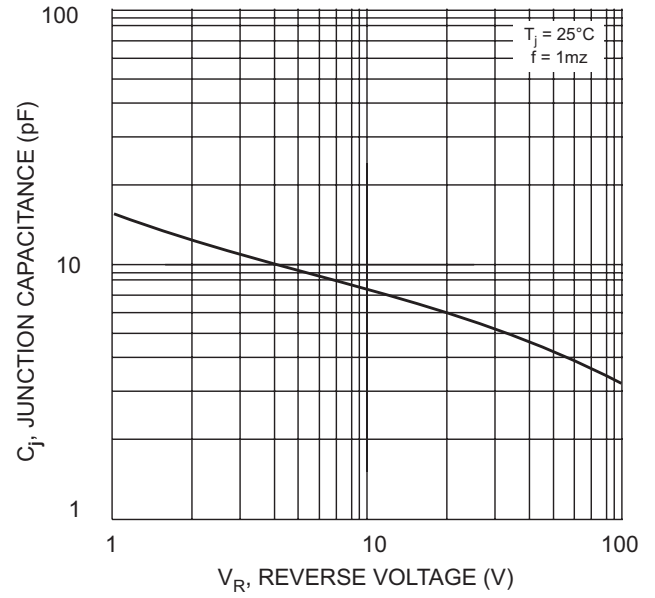


Fig. 4 Typical Junction Capacitance

## 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.

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