

SENSITRON
SEMICONDUCTOR

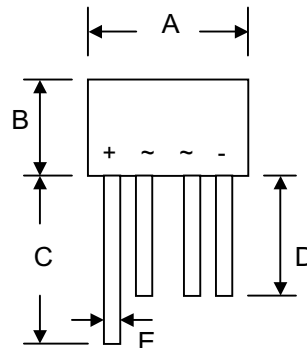
B40C800 – B500C800

0.8A BRIDGE RECTIFIER

Data Sheet 1294,Rev.A

Features

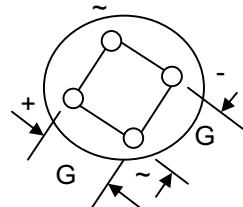
- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- UL Recognized File # E223064



| WOB | | | | |
|-----|-------|------|---------|-------|
| Dim | Min | Max | Min | Max |
| A | 8.60 | 9.10 | 0.339 | 0.358 |
| B | 5.0 | 5.50 | 0.197 | 0.217 |
| C | 27.9 | — | 1.098 | — |
| D | 25.4 | — | 1 | — |
| E | 0.71 | 0.81 | 0.028 | 0.032 |
| G | 4.60 | 5.60 | 0.181 | 0.220 |
| | In mm | | In inch | |

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 | B40C 800 | B80C 800 | B125C 800 | B250C 800 | B380C 800 | B500C 800 | 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) @ $T_A = 50^{\circ}\text{C}$ | I_o | 0.8 | | | | | | 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) @ $I_F = 0.8\text{A}$ | V_{FM} | 1.0 | | | | | | V |
| Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$ | I_{RM} | 10 500 | | | | | | μA |
| 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.

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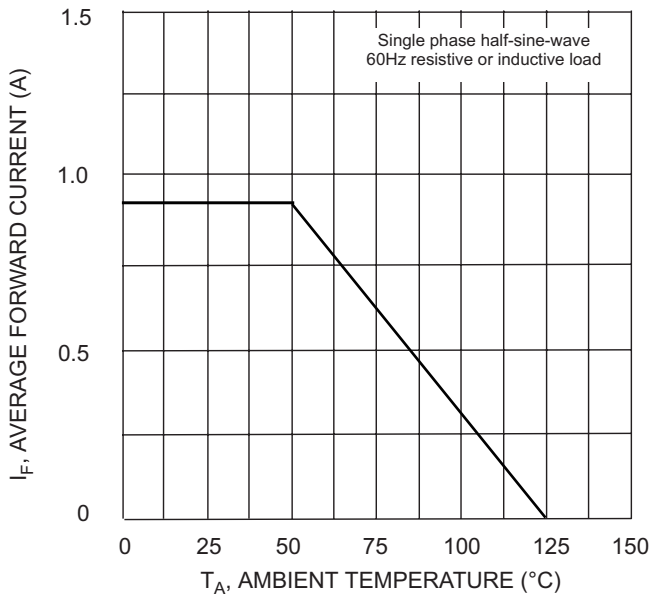


Fig. 1 Forward Current Derating Curve

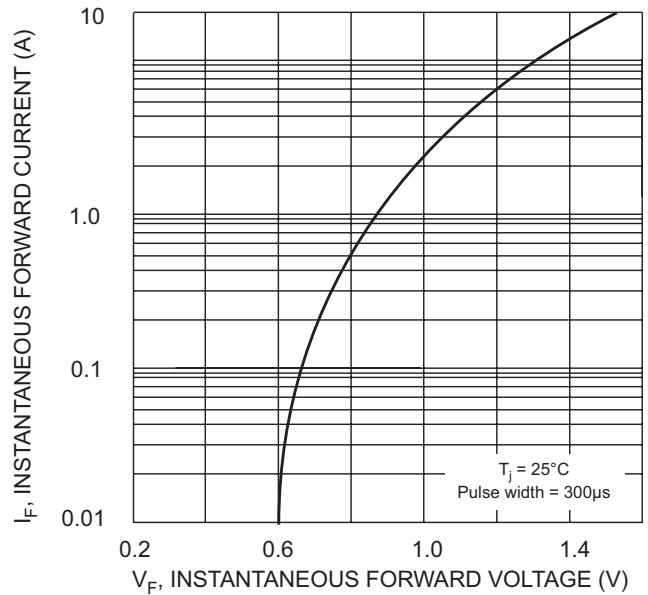


Fig. 2 Typical Forward Characteristics, per element

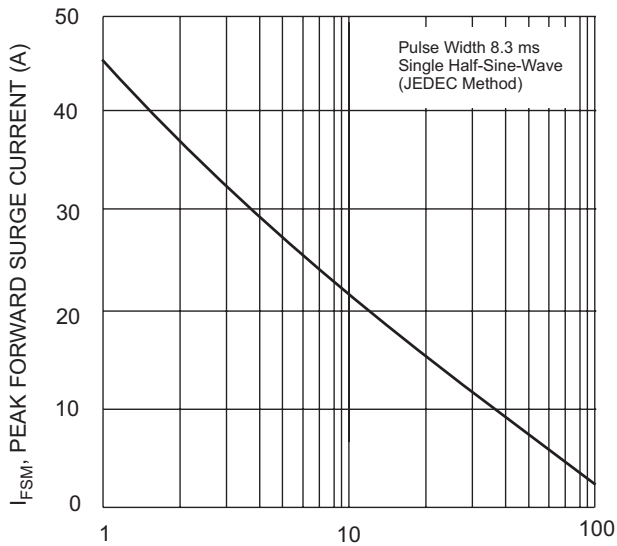


Fig. 3 Max Non-Repetitive Surge Current

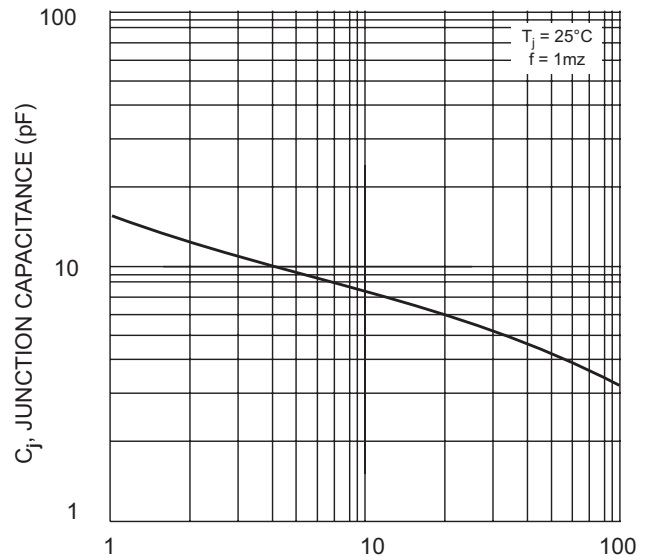


Fig. 4 Typical Junction Capacitance

TECHNICAL DATA

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