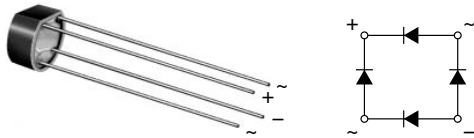


Glass Passivated Single-Phase Bridge Rectifier



Case Style WOG

FEATURES

- Ideal for printed circuit boards
- High case dielectric strength
- High surge current capability
- Typical I_R less than 0.1 μ A
- Solder dip 260 °C, 40 s
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



RoHS
COMPLIANT

TYPICAL APPLICATIONS

General purpose use in ac-to-dc bridge full wave rectification for power supply, adapter, charger, lighting ballaster on consumers and home appliances applications.

MECHANICAL DATA

Case: WOG

Epoxy meets UL 94V-0 flammability rating

Terminals: Silver plated leads, solderable per J-STD-002 and JESD22-B102

E4 suffix for consumer grade

Polarity: As marked on body

| PRIMARY CHARACTERISTICS | |
|-------------------------|---------------|
| $I_{F(AV)}$ | 0.9 A |
| V_{RRM} | 65 V to 600 V |
| I_{FSM} | 45 A |
| I_R | 10 μ A |
| V_F | 1.0 V |
| T_J max. | 125 °C |

| MAXIMUM RATINGS ($T_A = 25$ °C unless otherwise noted) | | | | | | | |
|--|-------------|---------------|--------------|---------------|---------------|---------------|------------------|
| PARAMETER | SYMBOL | B40 C800G | B80 C800G | B125 C800G | B250 C800G | B380 C800G | UNIT |
| Maximum repetitive peak reverse voltage | V_{RRM} | 65 | 125 | 200 | 400 | 600 | V |
| Maximum RMS input voltage R- and C-load | V_{RMS} | 40 | 80 | 125 | 250 | 380 | V |
| Maximum average forward output current for R- and L-load free air operation at $T_A = 45$ °C | $I_{F(AV)}$ | 0.9 0.8 | | | | | A |
| Maximum non-repetitive peak voltage | V_{RSM} | 100 | 200 | 350 | 600 | 1000 | V |
| Maximum DC blocking voltage | V_{DC} | 65 | 125 | 200 | 400 | 600 | V |
| Maximum peak working voltage | V_{RWM} | 90 | 180 | 300 | 600 | 900 | V |
| Maximum repetitive peak forward surge current | I_{FRM} | 10 | | | | | A |
| Peak forward surge current single sine-wave on rated load | I_{FSM} | 45 | | | | | A |
| Rating for fusing at $T_J = 125$ °C ($t < 100$ ms) | I^2t | 10 | | | | | A ² s |
| Minimum series resistor C-load at $V_{RMS} = \pm 10$ % | R_t | 1.0 | 2.0 | 4.0 | 8.0 | 12 | Ω |
| Maximum load capacitance + 50 % - 10 % | C_L | 5000 | 2500 | 1000 | 500 | 200 | μ F |
| Operating junction temperature range | T_J | - 40 to + 125 | | | | | °C |
| Storage temperature range | T_{STG} | - 40 to + 150 | | | | | °C |

| ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted) | | | | | | | | |
|--|-----------------|----------------|-----------|-----------|------------|------------|------------|------|
| PARAMETER | TEST CONDITIONS | SYMBOL | B40 C800G | B80 C800G | B125 C800G | B250 C800G | B380 C800G | UNIT |
| Maximum instantaneous forward voltage drop per diode | 0.9 A | V _F | 1.0 | | | | | V |
| Maximum reverse current at rated repetitive peak voltage per diode | | I _R | 10 | | | | | μA |

| THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted) | | | | | | | |
|---|------------------|-----------|-----------|------------|------------|------------|------|
| PARAMETER | SYMBOL | B40 C800G | B80 C800G | B125 C800G | B250 C800G | B380 C800G | UNIT |
| Typical thermal resistance ⁽¹⁾ | R _{θJA} | 36 | | | | | °C/W |
| | R _{θJL} | 11 | | | | | |

Note:

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. at 0.375" (9.5 mm) lead lengths with 0.22 x 0.22" (5.5 x 5.5 mm) copper pads

| ORDERING INFORMATION (Example) | | | | |
|--------------------------------|-----------------|------------------------|---------------|---------------|
| PREFERRED P/N | UNIT WEIGHT (g) | PREFERRED PACKAGE CODE | BASE QUANTITY | DELIVERY MODE |
| B380C800G-E4/51 | 1.12 | 51 | 100 | Plastic bag |

RATINGS AND CHARACTERISTICS CURVES

(T_A = 25 °C unless otherwise noted)

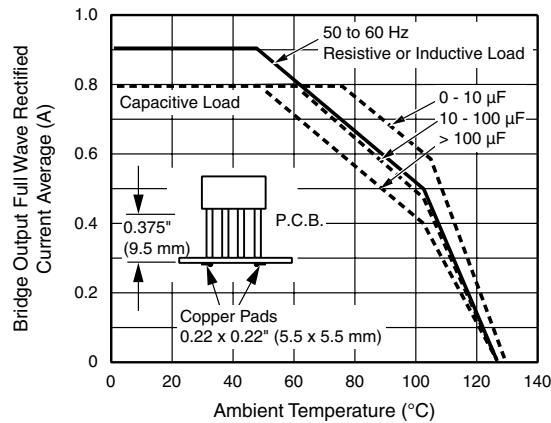


Figure 1. Derating Curves Output Rectified Current for B40C800G...B125C800G

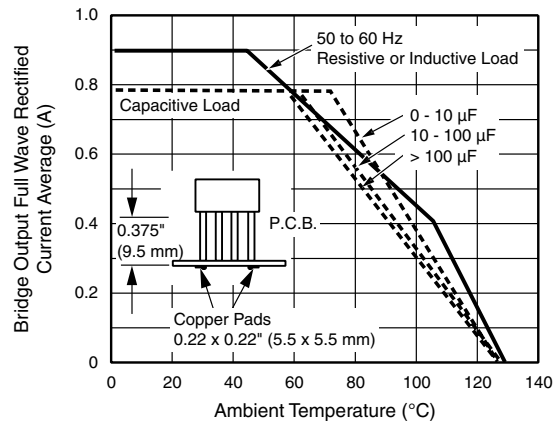


Figure 2. Derating Curves Output Rectified Current for B250C800G...B380C800G

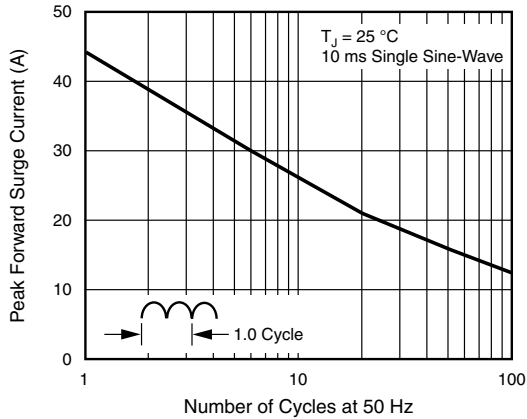


Figure 3. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

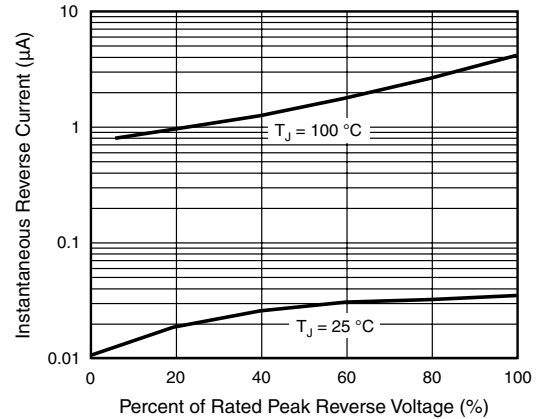


Figure 5. Typical Reverse Characteristics Per Diode

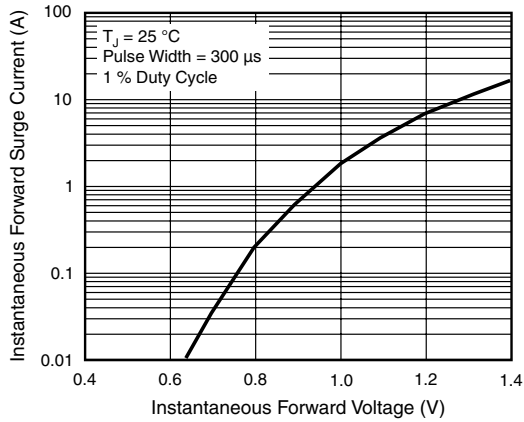


Figure 4. Typical Forward Characteristics Per Diode

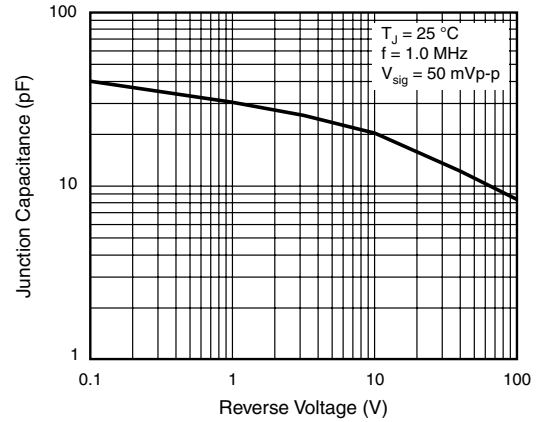


Figure 6. Typical Junction Capacitance Per Diode

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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- Подбор аналогов;
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- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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