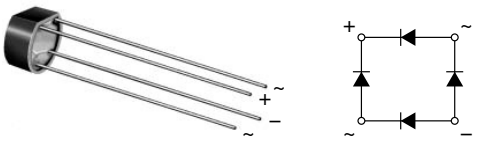
# Glass Passivated Single-Phase Bridge Rectifier



Case Style WOG

## FEATURES

- UL recognition, file number E54214
- Ideal for printed circuit boards
- Typical $I_R$ less than 0.1 µA
- High case dielectric strength
- High surge current capability
- 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.

| PRIMARY CHARACTERISTICS | |
|---|---|
| $I_{F(AV)}$ | 1.5 A |
| $V_{RRM}$ | 50 V to 1000 V |
| $I_{FSM}$ | 50 A |
| $I_R$ | 5 µA |
| $V_F$ | 1.0 V |
| $T_J$ max. | 150 °C |

## 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

**MAXIMUM RATINGS** ($T_A$ = 25 °C unless otherwise noted)

| PARAMETER | SYMBOL | W005G | W01G | W02G | W04G | W06G | W08G | W10G | UNIT |
|---|---|---|---|---|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current at 0.375" (9.5 mm) lead length at $T_A$ = 25 °C | $I_{F(AV)}$ | 1.5 | | | | | | | A |
| Peak forward surge current single sine-wave superimposed on rated load | $I_{FSM}$ | 50 | | | | | | | A |
| Rating for fusing (t < 8.3 ms) | $I^2t$ | 10 | | | | | | | $A^2s$ |
| Operating junction and storage temperature range | $T_J$, $T_{STG}$ | - 55 to + 150 | | | | | | | °C |

| **ELECTRICAL CHARACTERISTICS** ($T_A$ = 25 °C unless otherwise noted) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **PARAMETER** | **TEST CONDITIONS** | **SYMBOL** | **W005G** | **W01G** | **W02G** | **W04G** | **W06G** | **W08G** | **W10G** | **UNIT** |
| Maximum instantaneous forward voltage drop per diode | 1.0 A | $V_F$ | 1.0 | | | | | | | V |
| Maximum DC reverse current at rated DC blocking voltage per diode | $T_A$ = 25 °C<br>$T_A$ = 125 °C | $I_R$ | 5.0<br>500 | | | | | | | µA |
| Typical junction capacitance per diode | 4.0 V, 1 MHz | $C_J$ | 14 | | | | | | | pF |

| **THERMAL CHARACTERISTICS** ($T_A$ = 25 °C unless otherwise noted) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PARAMETER** | **SYMBOL** | **W005G** | **W01G** | **W02G** | **W04G** | **W06G** | **W08G** | **W10G** | **UNIT** |
| Typical thermal resistance (1) | $R_{\theta JA}$<br>$R_{\theta JL}$ | 36<br>11 | | | | | | | °C/W |

**Note:**

(1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5 mm) lead length P.C.B. mounting. P.C.B. size 0.22 x 0.22" (5.5 x 5.5 mm)

| **ORDERING INFORMATION** (Example) | | | | |
|---|---|---|---|---|
| **PREFERRED P/N** | **UNIT WEIGHT (g)** | **PREFERRED PACKAGE CODE** | **BASE QUANTITY** | **DELIVERY MODE** |
| W06G-E4/51 | 1.12 | 51 | 100 | Plastic bag |

## RATINGS AND CHARACTERISTICS CURVES

($T_A$ = 25 °C unless otherwise noted)

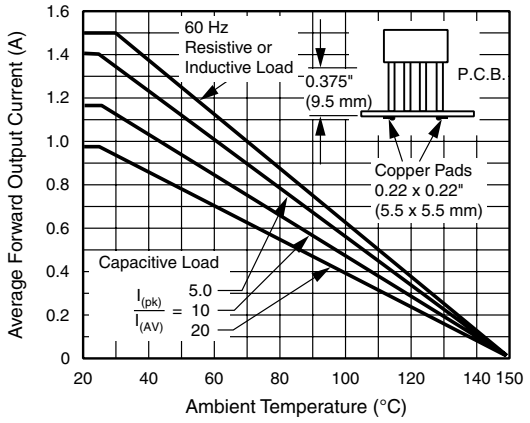



Figure 1. Derating Curve Output Rectified Current

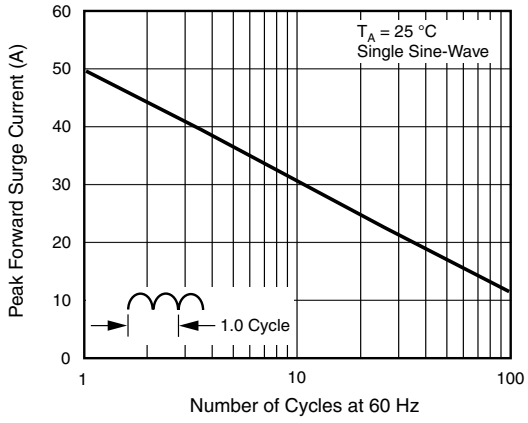



Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

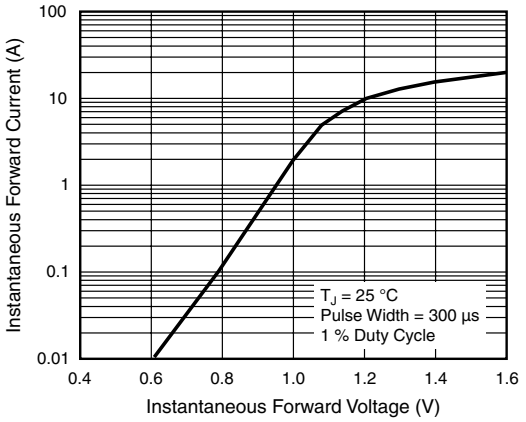



Figure 3. Typical Forward Characteristics Per Diode

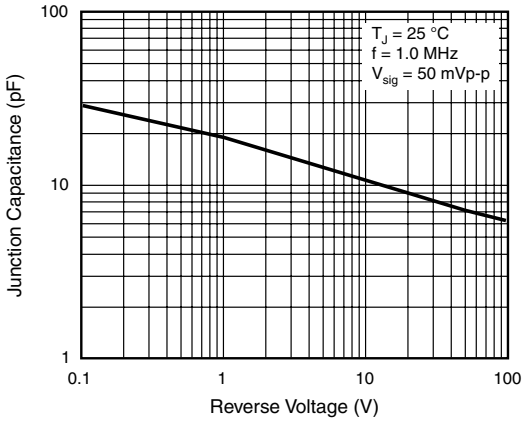



Figure 5. Typical Junction Capacitance Per Diode

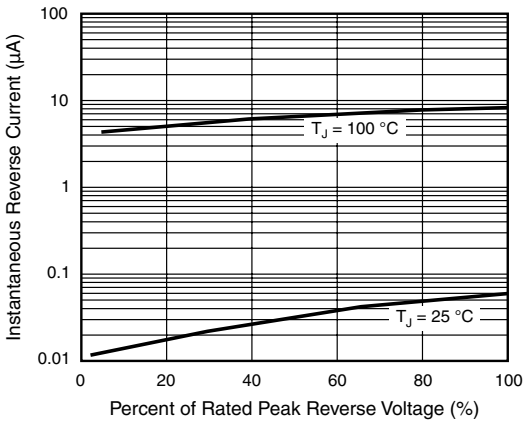



Figure 4. Typical Reverse Leakage Characteristics Per Diode

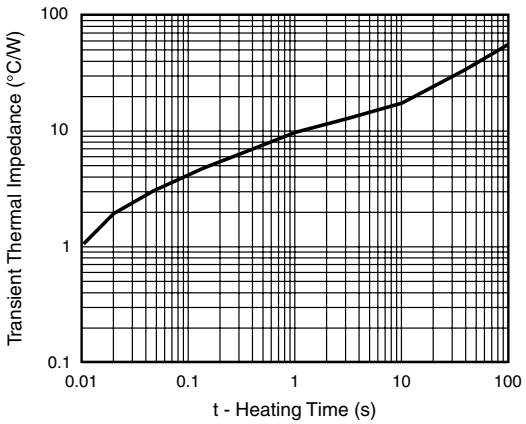
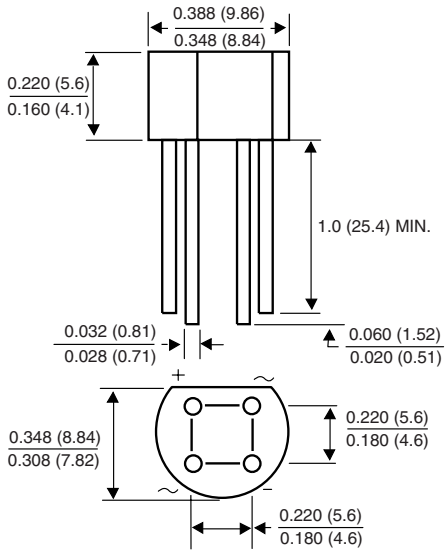



Figure 6. Typical Transient Thermal Impedance

## **PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)

**Case Style WOG**



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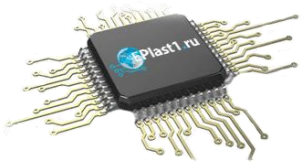
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**Как с нами связаться**

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