



2W005G - 2W10G

Features

- Glass passivated junction.
- Ideal for printed circuit board.
- Reliable low cost construction technique results in inexpensive product.
- High surge current capability.
- UL certified, UL #E96005.



WOB

Bridge Rectifiers (Glass Passivated)

Absolute Maximum Ratings*

$T_A = 25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Value | | | | | | | Units |
|-------------|---|-------------|-----|-----|-----|-----|-----|------|------------------|
| | | 005G | 01G | 02G | 04G | 06G | 08G | 10G | |
| V_{RRM} | Maximum Repetitive Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| V_{RMS} | Maximum RMS Bridge Input Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| V_R | DC Reverse Voltage (Rated V_R) | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| $I_{F(AV)}$ | Average Rectified Forward Current, @ $T_A = 50^\circ\text{C}$ | 2.0 | | | | | | | A |
| I_{FSM} | Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave | 60 | | | | | | | A |
| T_{stg} | Storage Temperature Range | -55 to +150 | | | | | | | $^\circ\text{C}$ |
| T_J | Operating Junction Temperature | -55 to +150 | | | | | | | $^\circ\text{C}$ |

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

| Symbol | Parameter | Value | Units |
|-----------------|---|-------|---------------------------|
| P_D | Power Dissipation | 3.13 | W |
| $R_{\theta JA}$ | Thermal Resistance, Junction to Ambient,* per leg | 40 | $^\circ\text{C}/\text{W}$ |
| $R_{\theta JL}$ | Thermal Resistance, Junction to Lead,* per leg | 15 | $^\circ\text{C}/\text{W}$ |

*Device mounted on PCB with 0.375" (9.5 mm) lead length.

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Device | Units |
|--------|---|--------|----------------------|
| V_F | Forward Voltage, per bridge @ 2.0 A | 1.1 | V |
| I_R | Reverse Current, per leg @ rated V_R $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$ | 5.0 | μA |
| | | 500 | μA |
| | I^2t rating for fusing $t < 8.3$ ms | 10 | A^2s |
| C_T | Total Capacitance, per leg $V_R = 4.0$ V, $f = 1.0$ MHz | 19 | pF |

Bridge Rectifiers (Glass Passivated)

(continued)

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Typical Characteristics

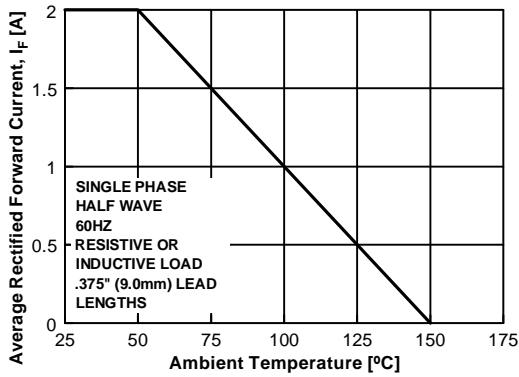


Figure 1. Forward Current Derating Curve

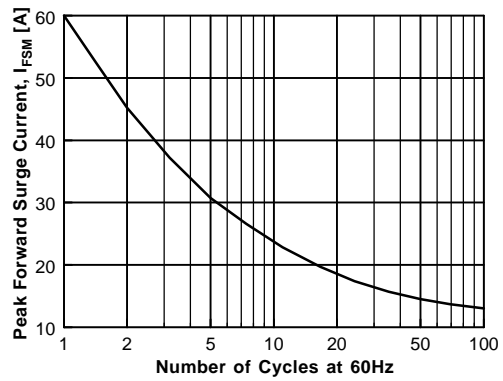


Figure 2. Non-Repetitive Surge Current

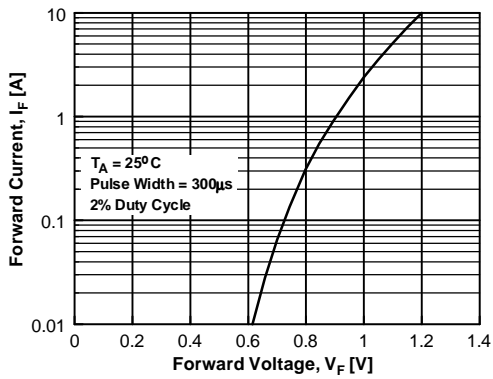


Figure 3. Forward Voltage Characteristics

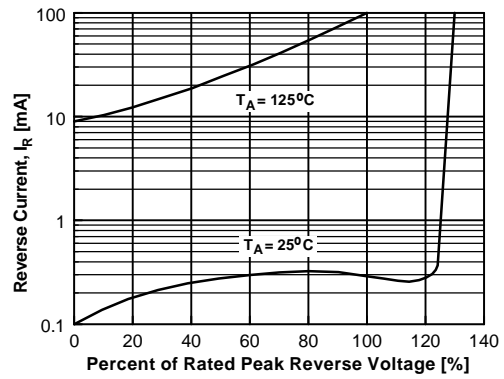


Figure 4. Reverse Current vs Reverse Voltage

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