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W005G - W10G

Features

- Surge overload rating: 50 amperes peak.
- Glass passivated junction.
- Ideal for printed circuit board.
- Reliable low cost construction technique results in inexpensive product.
- UL certified, UL #E96005.



1.5 Ampere Glass Passivated Bridge Rectifiers

Absolute Maximum Ratings* T_A = 25°C unless otherwise noted

| Symbol | Parameter | Value | Units |
|--------------------|--|-------------|------------|
| I _{F(AV)} | Average Rectified Current @ T _A = 50°C | 1.5 | A |
| I _{FSM} | Non-repetitive Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method) | 50 | A |
| P _D | Total Device Dissipation Derate above 25°C | 3.47 28 | W mW/°C |
| R _{θJA} | Thermal Resistance, Junction to Ambient,** per leg | 36 | °C/W |
| R _{θJL} | Thermal Resistance, Junction to Lead,** per leg | 11 | °C/W |
| T _{stg} | Storage Temperature Range | -55 to +150 | °C |
| T _J | Operating Junction Temperature | -55 to +150 | °C |

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

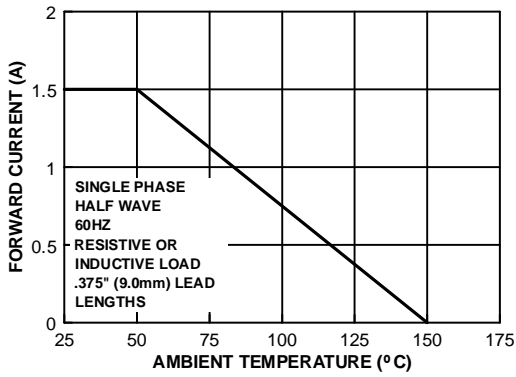
**Device mounted on PCB with 0.375" (9.5 mm) lead length.

Electrical Characteristics T_A = 25°C unless otherwise noted

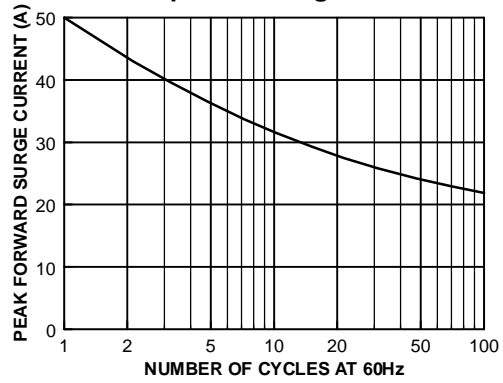
| Symbol | Parameter | Device | | | | | | | Units |
|------------------|---|------------|-----|-----|-----|-----|-----|------|------------------|
| | | 005G | 01G | 02G | 04G | 06G | 08G | 10G | |
| V _{RRM} | Maximum Repetitive Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| V _{RMS} | 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 _{RM} | Maximum Instantaneous Reverse Leakage, total bridge @ rated V _R T _A = 25°C T _A = 125°C | 5.0 500 | | | | | | | μA μA |
| V _{FM} | Maximum Instantaneous Forward Voltage Drop, per bridge @ 1.0 A | 1.0 | | | | | | | V |
| | I ² t rating for fusing t < 8.3 ms | 10 | | | | | | | A ² s |
| C | Typical Junction Capacitance, per leg V _R = 4.0 V, f = 1.0 MHz | 15 | | | | | | | pF |

Typical Characteristics

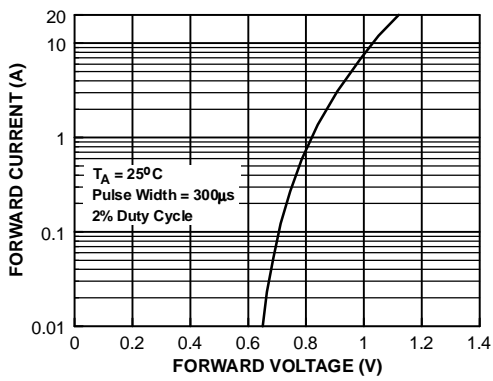
Forward Current Derating Curve



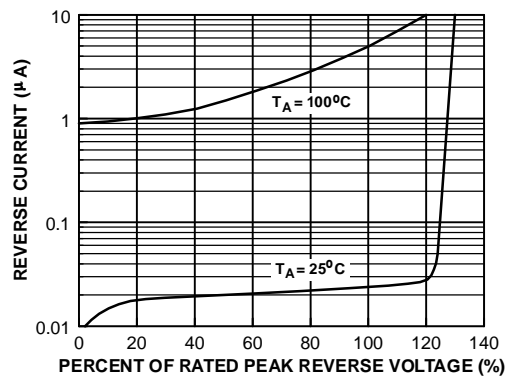
Non-Repetitive Surge Current



Forward Characteristics



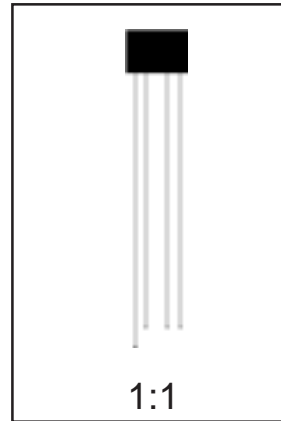
Reverse Characteristics



WOB Package Dimensions



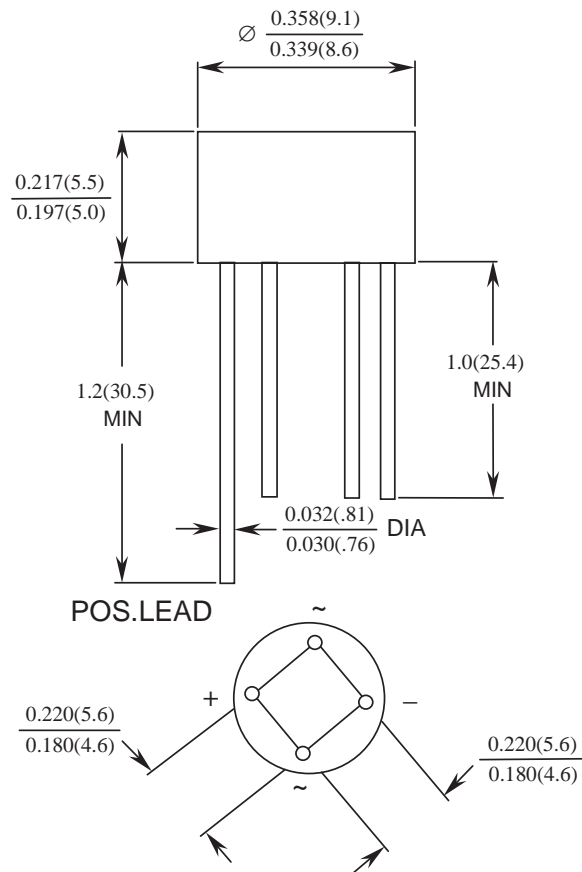
WOB (FS PKG Code R5)



Scale 1:1 on letter size paper

Dimensions shown below are in:
inches [millimeters]

Part Weight per unit (gram): 1.1



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|--------------------------|------------------------|---|
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