

<u>2W005G - 2W10G</u>

2.0A GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop, High Current Capability

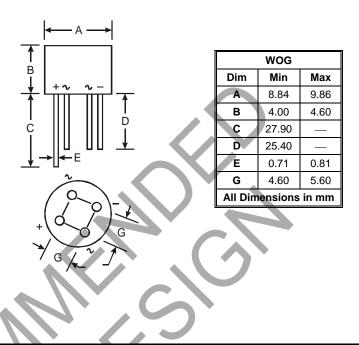
NOT RECOMMENDED

FOR NEW DESIGN

- Surge Overload Rating to 60A Peak
- Ideal for Printed Circuit Boards
- Case to Terminal Isolation Voltage 1500V
- UL Listed Under Recognized Component Index, File Number E94661
- Lead Free Finish, RoHS Compliant (Date Code 0514+)
 (Note 3)

Mechanical Data

- Case: WOG
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Finish Silver. Plated Leads Solderable per MIL-STD-202, Method 208 ⁽²³⁾
- Polarity: As marked on Body
- Marking: Type Number
- Weight: 1.3 grams (approximate)



@T_A = 25°C unless otherwise specified

Maximum Ratings and Electrical Characteristics

Single phase, half wave, 60Hz, resistive or inductive load.

| For capacitive load, derate current by 20%. | | | | | | | | | |
|--|----------------------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|------|
| Characteristic | Symbol | 2W 005G | 2W 01G | 2W 02G | 2W 04G | 2W 06G | 2W 08G | 2W 10G | Unit |
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} Vrwm Vr | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current $@ T_A = 25^{\circ}C$ | lo | 2.0 | | | | | А | | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load per element | IFSM | 60 | | | | A | | | |
| Forward Voltage (per element) $@$ I _F = 2.0A | V_{FM} | 1.1 | | | | V | | | |
| Peak Reverse Current @ T _A = 25°C at Rated DC Blocking Voltage @ T _A = 125°C | | 5.0 500 | | | | μA | | | |
| Typical Total Capacitance (Note 2) | CT | 16 | | | pF | | | | |
| Typical Thermal Resistance Junction to Case (Note 1) | $R_{	extsf{	heta}JC}$ | 40 | | | | °C/W | | | |
| Operating and Storage Temperature Range | T _{j,} T _{STG} | -65 to +150 | | | | °C | | | |

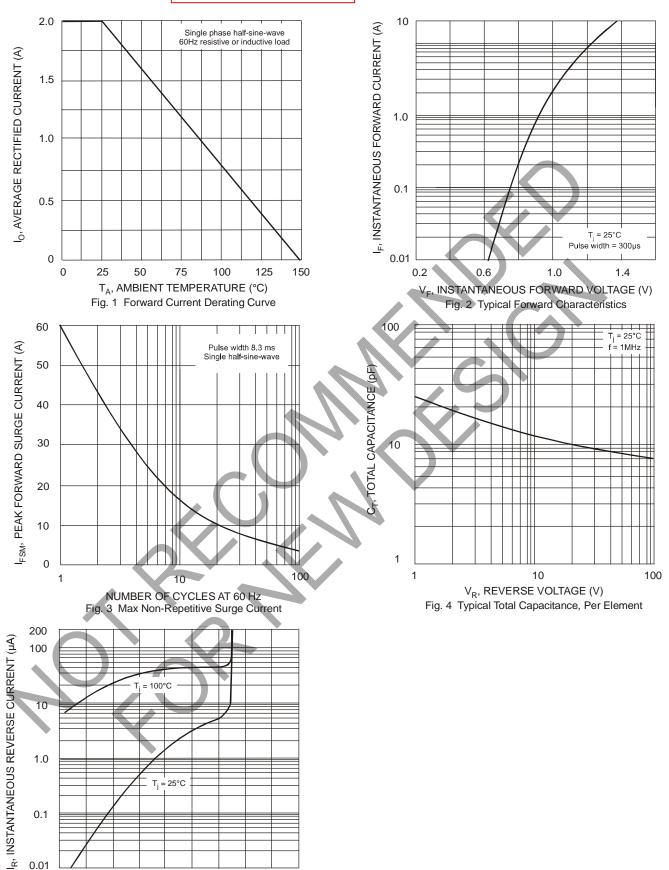
1. Thermal resistance from junction to case mounted on PC board with 13 x 13mm (0.03mm thick) land areas.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. EC Directive 2002/95/EC (RoHS) revision 13.2.2003. Glass and high temperature solder exemptions applied, see EU Directive Annex Notes 5 and 7.

Notes:





NOT RECOMMENDED FOR NEW DESIGN

0.1

0.01

0

40

80 PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics

120

160



Ordering Information (Note 4)

| Device | Packaging | Shipping |
|--------|-----------|----------|
| 2W005G | WOG | 1K Bulk |
| 2W01G | WOG | 1K Bulk |
| 2W02G | WOG | 1K Bulk |
| 2W04G | WOG | 1K Bulk |
| 2W06G | WOG | 1K Bulk |
| 2W08G | WOG | 1K Bulk |
| 2W10G | WOG | 1K Bulk |

Notes: 4. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

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