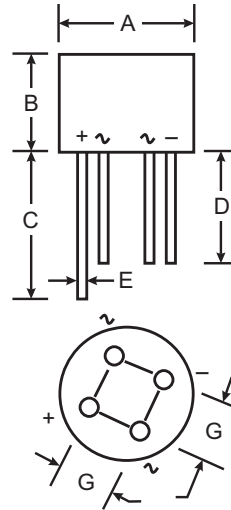


### Features

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



WOG		
Dim	Min	Max
A	8.84	9.86
B	4.00	4.60
C	27.90	—
D	25.40	—
E	0.71	0.81
G	4.60	5.60
All Dimensions in mm		

### Mechanical Data

- Case: WOG
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish — Silver. Plated Leads Solderable per MIL-STD-202, Method 208 (e3)
- Polarity: As marked on Body
- Marking: Type Number
- Weight: 1.3 grams (approximate)

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Single phase, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	2W005G	2W01G	2W02G	2W04G	2W06G	2W08G	2W10G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T <sub>A</sub> = 25°C	I <sub>O</sub>	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load per element	I <sub>FSM</sub>	60							A
Forward Voltage (per element) @ I <sub>F</sub> = 2.0A	V <sub>FM</sub>	1.1							V
Peak Reverse Current @ T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 125°C	I <sub>RM</sub>	5.0 500							μA
Typical Total Capacitance (Note 2)	C <sub>T</sub>	16							pF
Typical Thermal Resistance Junction to Case	R <sub>θJC</sub>	40							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150							°C

- Notes:
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*.

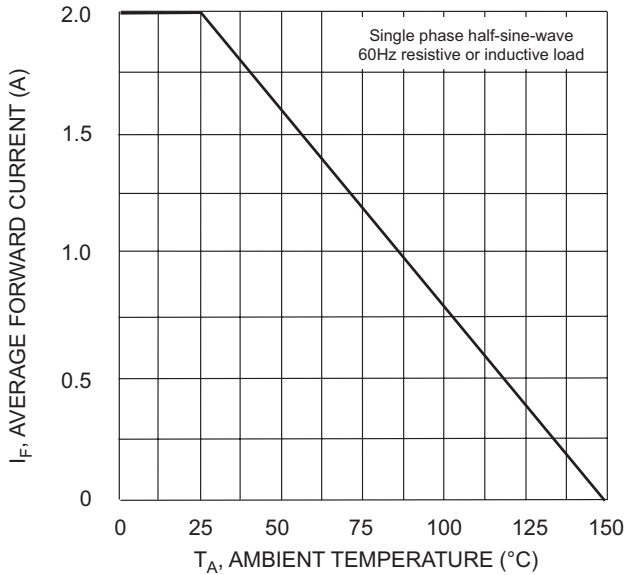


Fig. 1 Forward Current Derating Curve

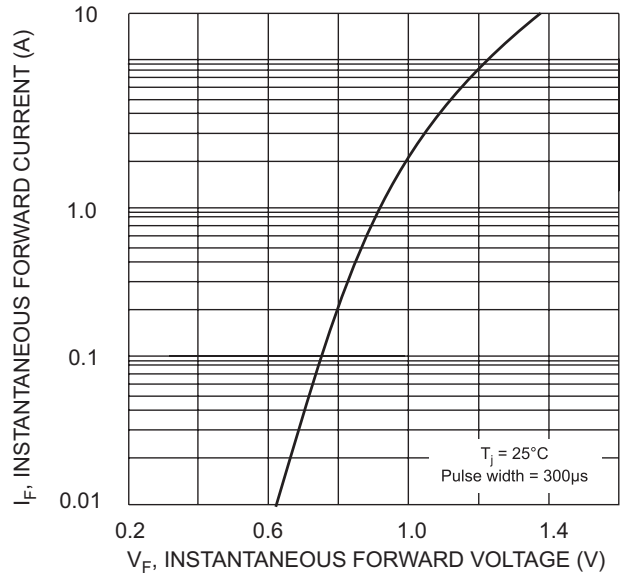


Fig. 2 Typical Forward Characteristics

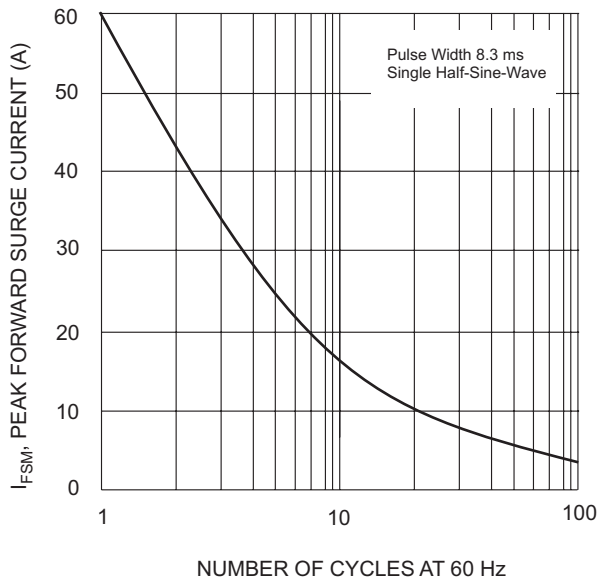


Fig. 3 Max Non-Repetitive Surge Current

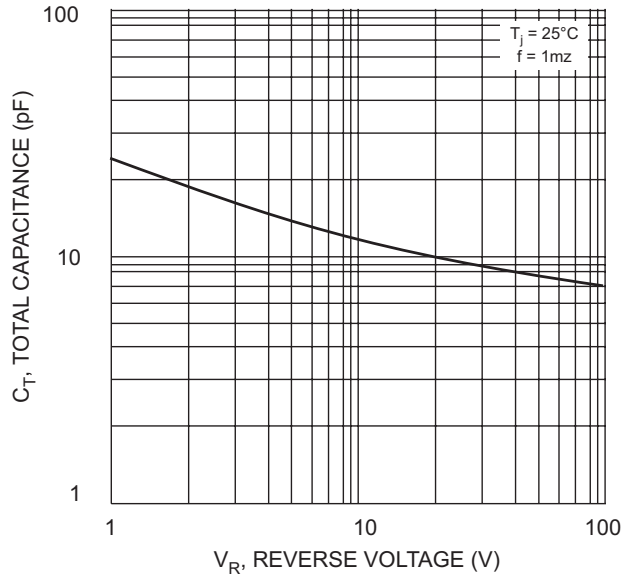


Fig. 4 Typical Total Capacitance, Per Element

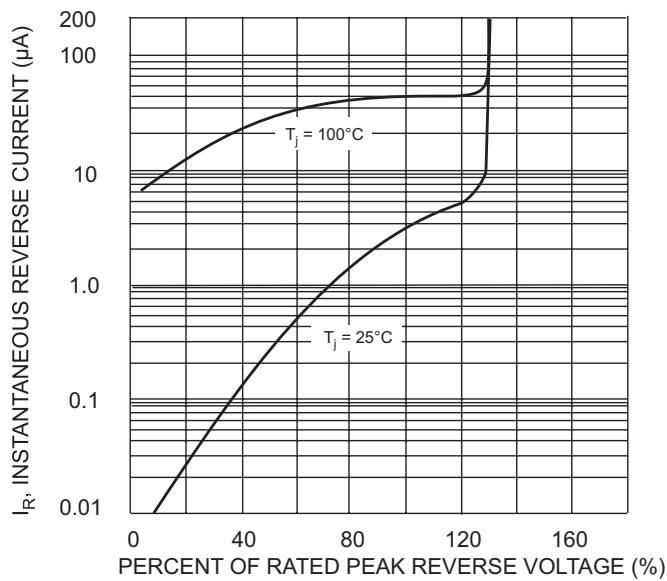


Fig. 5 Typical Reverse Characteristics

**Ordering Information** (Note 4)

<b>Device</b>	<b>Packaging</b>	<b>Shipping</b>
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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