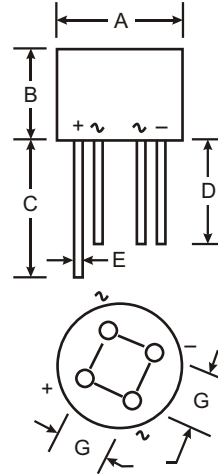


### Features

- Glass Passivated Die Construction
- Diffused Junction
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 50A Peak
- Ideal for Printed Circuit Boards
- Case to Terminal Isolation Voltage 1500V
- Plastic Material: UL Flammability Classification Rating 94V-0
- UL Listed Under Recognized Component Index, File Number E94661



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, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Also Available in Lead Free Plating (Matte Tin Finish). Please see Ordering Information, Note 4, on Page 3
- Polarity: As marked on Body
- Weight: 1.3 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

### 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	W005G	W01G	W02G	W04G	W06G	W08G	W10G	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 (Note 1) @ T <sub>A</sub> = 25°C	I <sub>O</sub>	1.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load per element (JEDEC Method)	I <sub>FSM</sub>	50							A
Forward Voltage (per element) @ I <sub>F</sub> = 1.5A	V <sub>FM</sub>	1.0							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>	12							pF
Typical Thermal Resistance Junction to Case (Note 1)	R <sub>θJC</sub>	84							K/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.

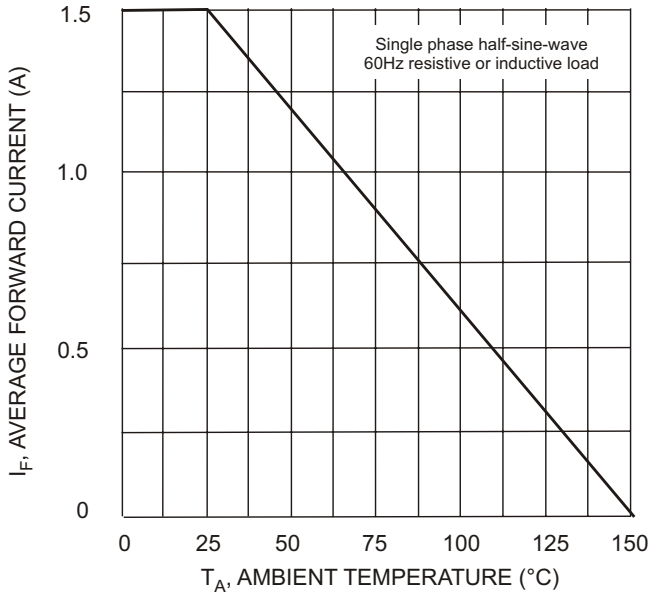


Fig. 1 Forward Current Derating Curve

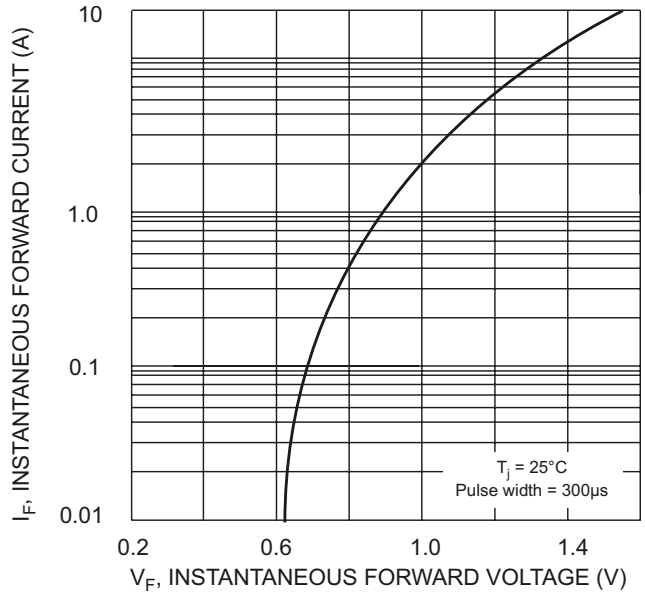


Fig. 2 Typical Forward Characteristics

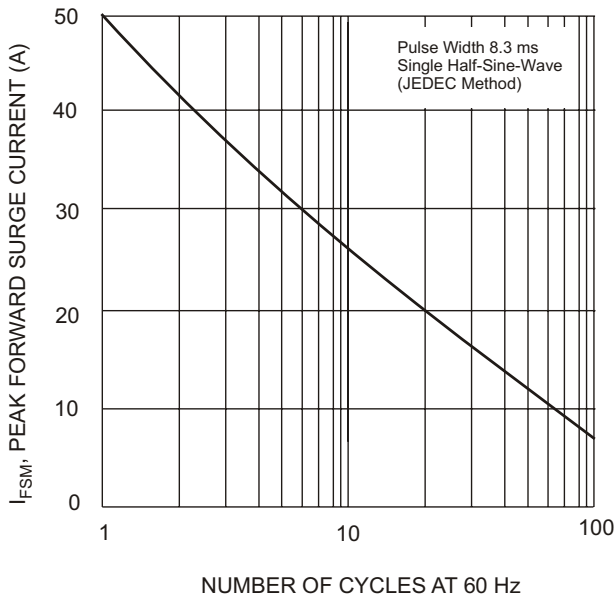


Fig. 3 Max Non-Repetitive Surge Current

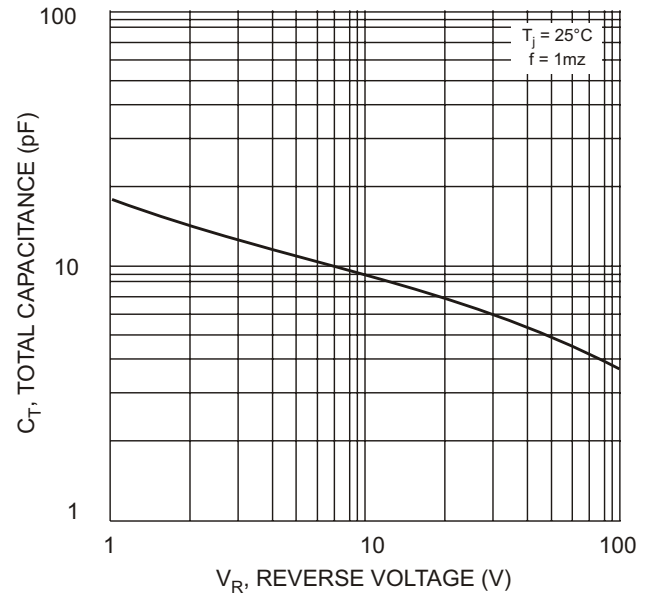


Fig. 4 Typical Total Capacitance

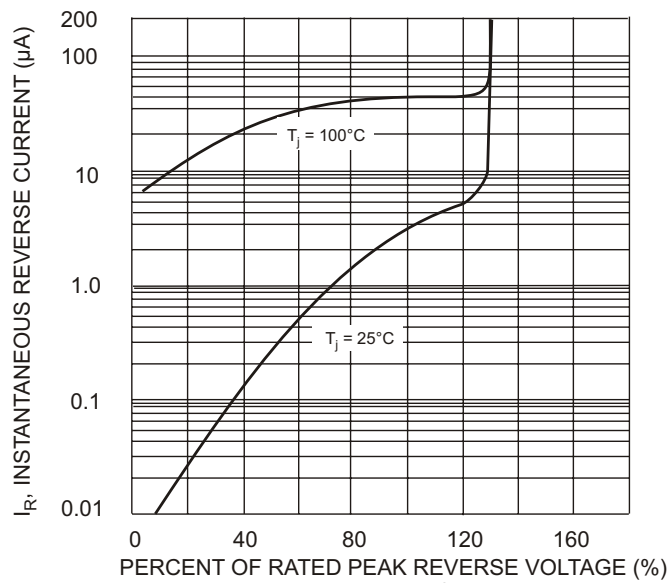


Fig. 5 Typical Reverse Characteristics

**Ordering Information** (Note 3)

<b>Device</b>	<b>Packaging</b>	<b>Shipping</b>
W005G-7	WOG	1K Bulk
W01G-7	WOG	1K Bulk
W02G-7	WOG	1K Bulk
W04G-7	WOG	1K Bulk
W06G-7	WOG	1K Bulk
W08G-7	WOG	1K Bulk
W10G-7	WOG	1K Bulk

- Notes:
3. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.
  4. For Lead Free version (with Lead Free terminal finish) part number, please add "-F" suffix to part number above.  
Example: W04G-7-F.