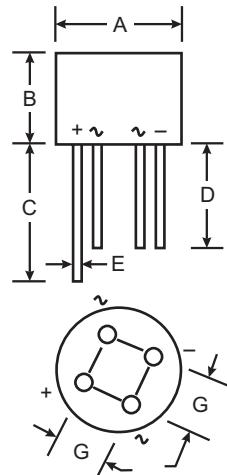


Features

- 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
- UL Listed Under Recognized Component Index, File Number E94661
- **Lead Free Finish, RoHS Compliant (Note 3)**

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
- Polarity: As marked on Body
- Marking: Type Number
- Weight: 1.3 grams (approximate)



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

Maximum Ratings and Electrical Characteristics

• $T_A = 25^\circ\text{C}$ 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_{RRM} V_{RWM} V_R	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 (Note 1) @ $T_A = 25^\circ\text{C}$	I_O				1.5				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load per element (JEDEC Method)	I_{FSM}				50				A
Forward Voltage (per element) @ $I_F = 1.5\text{A}$	V_{FM}				1.0				V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_{RM}				5.0	500			μA
Typical Total Capacitance (Note 2)	C_T				12				pF
Typical Thermal Resistance Junction to Case (Note 1)	$R_{\theta JC}$				84				K/W
Operating and Storage Temperature Range	T_j, T_{STG}				-65 to +150				$^\circ\text{C}$

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. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.

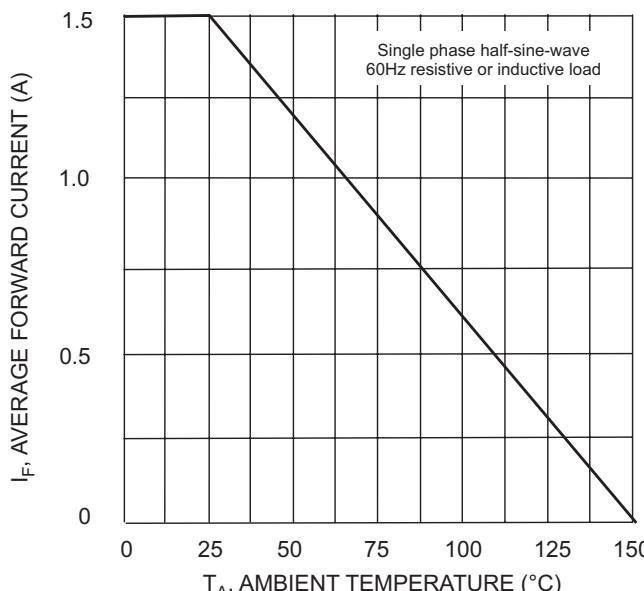


Fig. 1 Forward Current Derating Curve

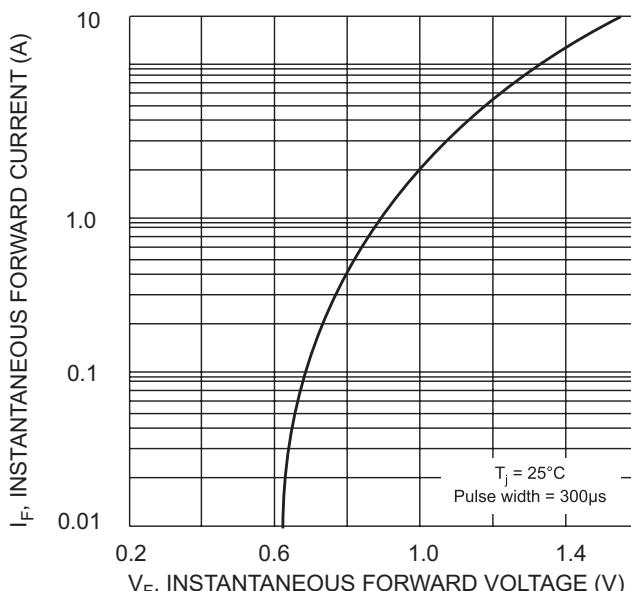


Fig. 2 Typical Forward Characteristics

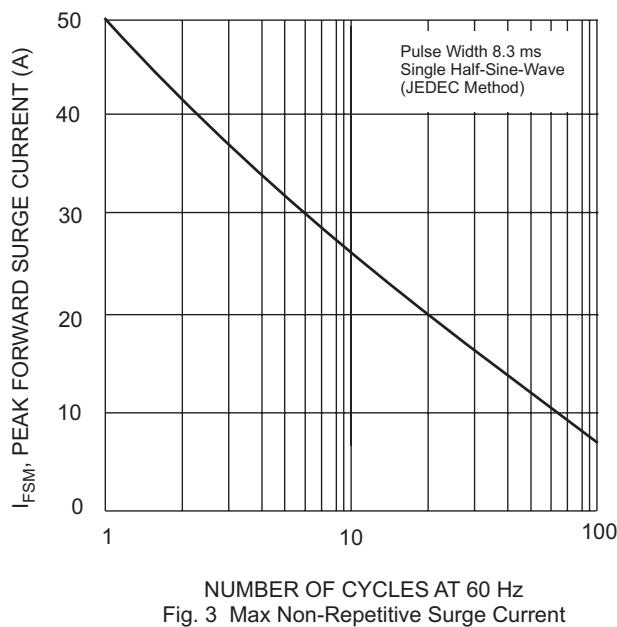


Fig. 3 Max Non-Repetitive Surge Current

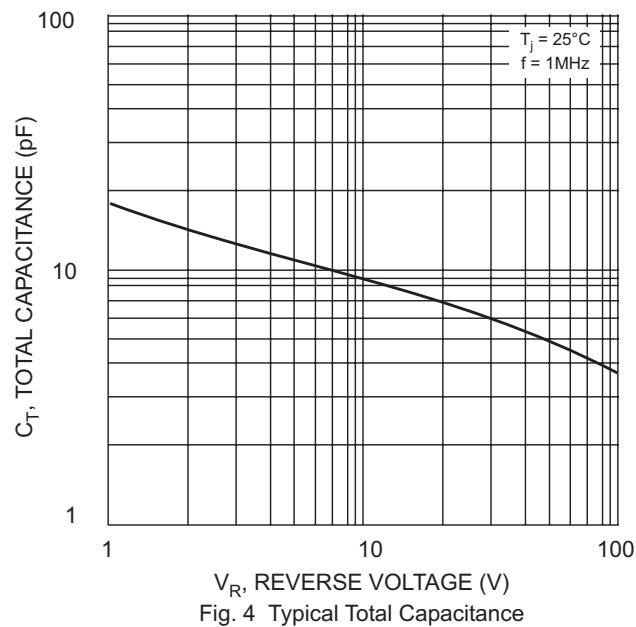


Fig. 4 Typical Total Capacitance

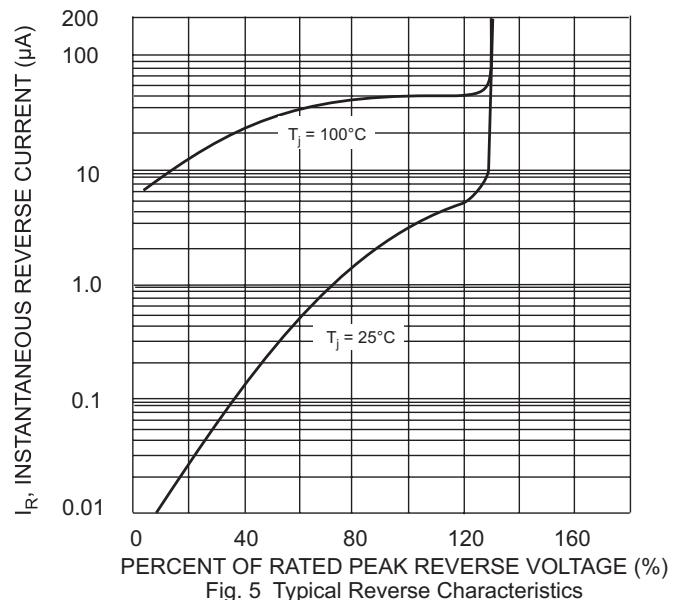


Fig. 5 Typical Reverse Characteristics

Ordering Information (Note 4)

Device	Packaging	Shipping
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: 4. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.