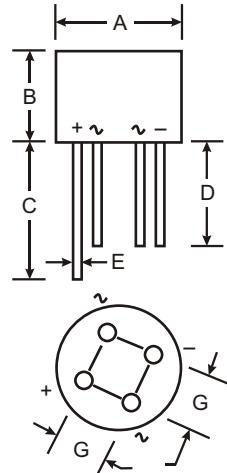


Features

- 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

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



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 $\text{@ } T_A = 25^\circ\text{C}$ 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				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.

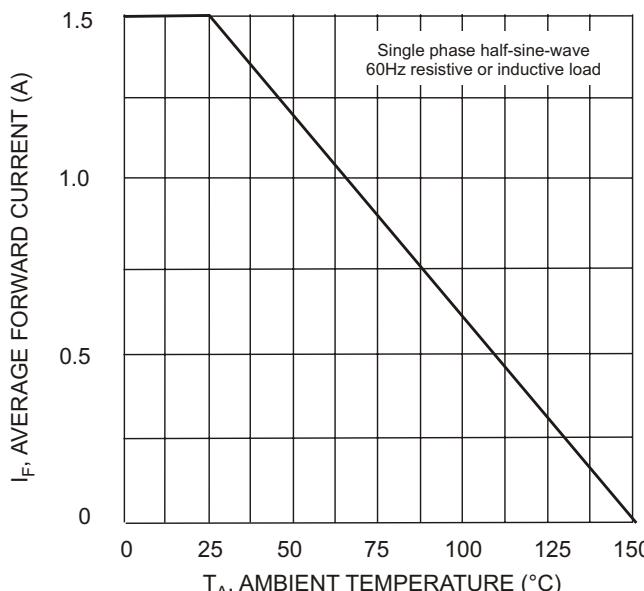


Fig. 1 Forward Current Derating Curve

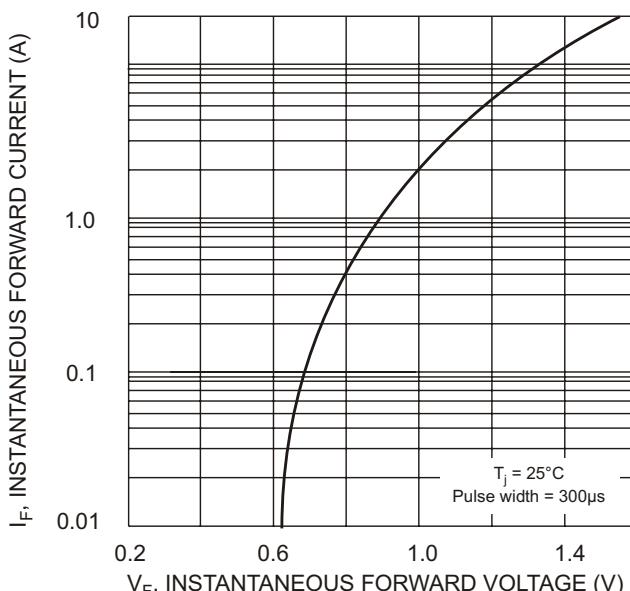


Fig. 2 Typical Forward Characteristics

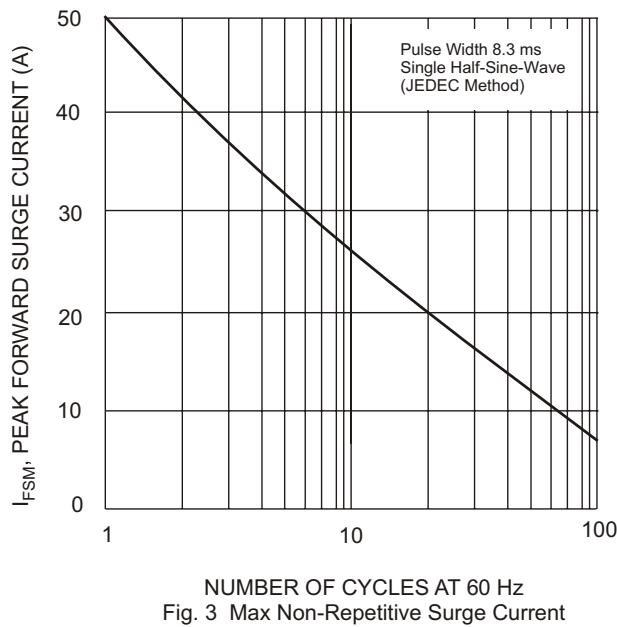


Fig. 3 Max Non-Repetitive Surge Current

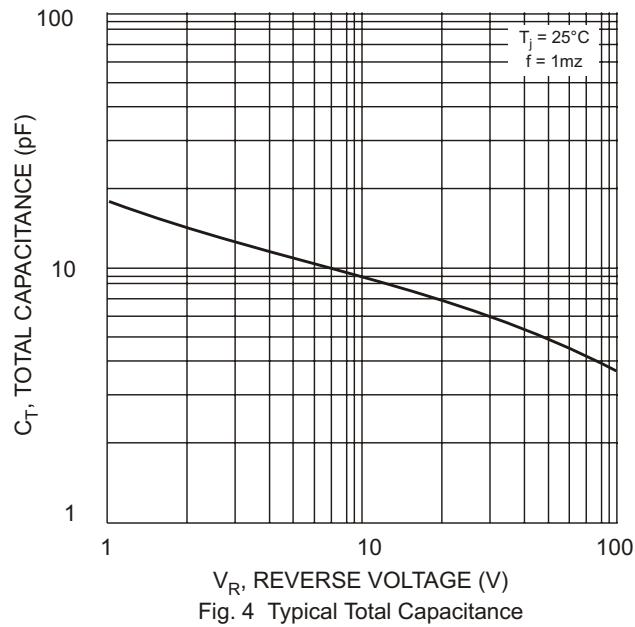


Fig. 4 Typical Total Capacitance

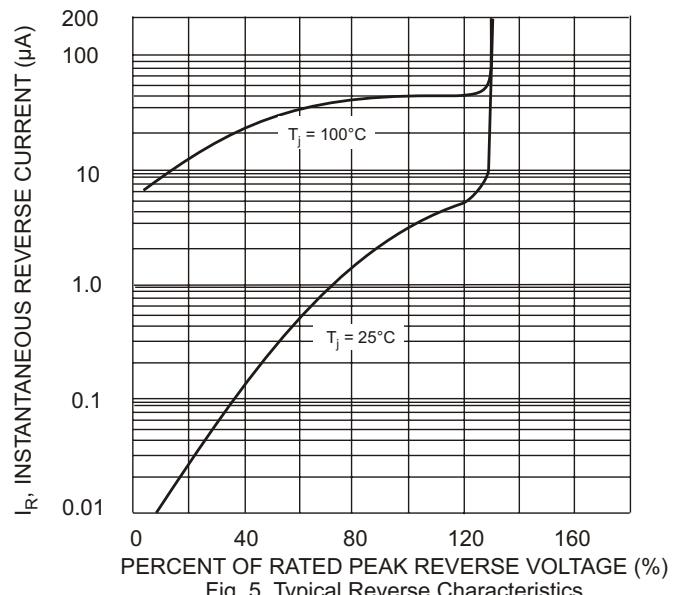


Fig. 5 Typical Reverse Characteristics

Ordering Information (Note 3)

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: 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.