NOT RECOMMENDED FOR NEW DESIGN

2W005G - 2W10G

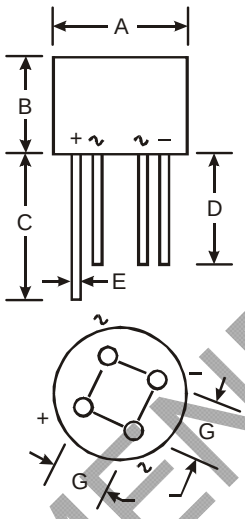
2.0A GLASS PASSIVATED BRIDGE RECTIFIER

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)**

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 e3
- 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°C unless otherwise specified

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} 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 @ T_A = 25°C	I_O	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load per element	I_{FSM}	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	I_{RM}	5.0 500							μA
Typical Total Capacitance (Note 2)	C_T	16							pF
Typical Thermal Resistance Junction to Case (Note 1)	$R_{\theta JC}$	40							°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-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.*

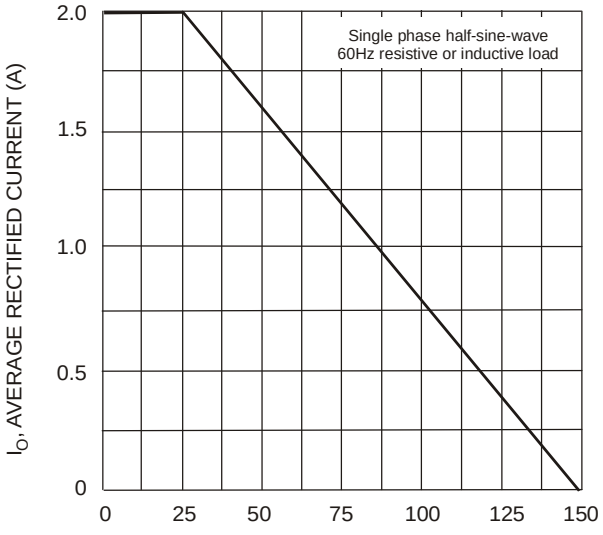


Fig. 1 Forward Current Derating Curve

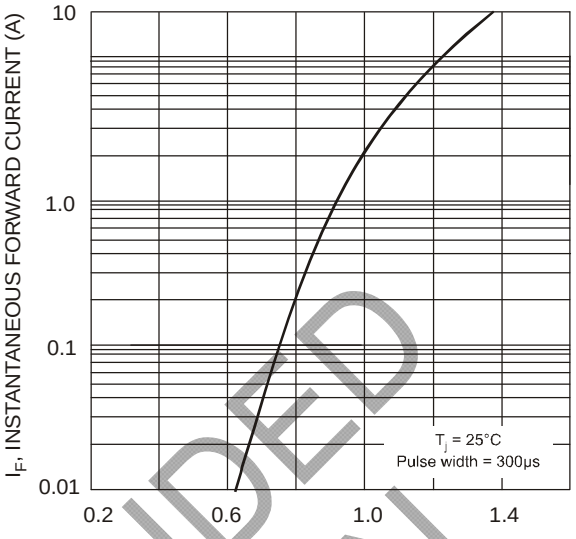


Fig. 2 Typical Forward Characteristics

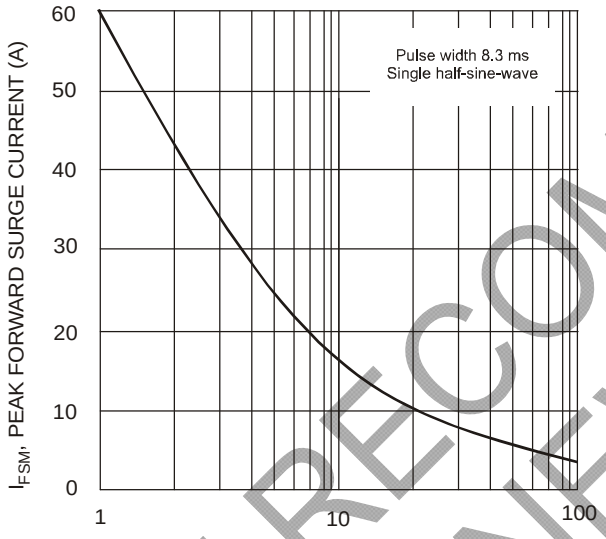


Fig. 3 Max Non-Repetitive Surge Current

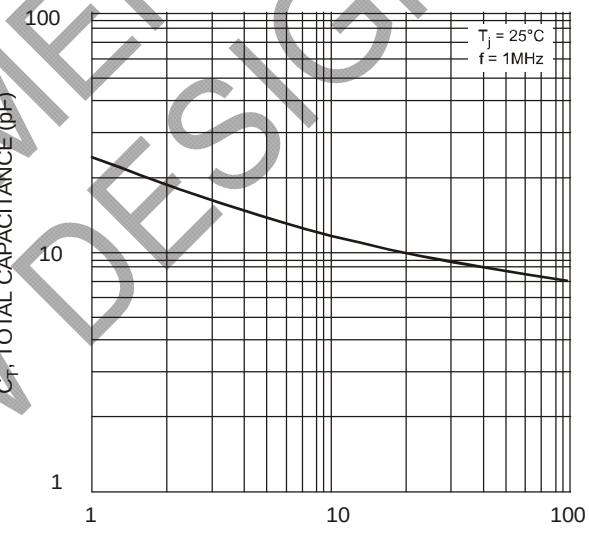


Fig. 4 Typical Total Capacitance, Per Element

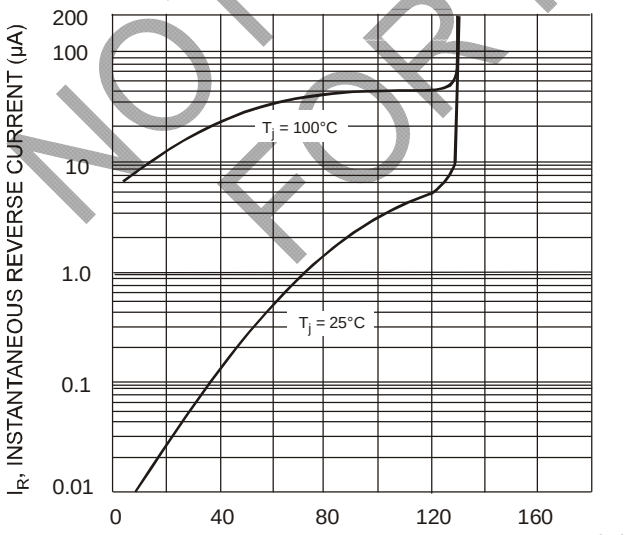


Fig. 5 Typical Reverse Characteristics

Ordering Information (Note 4)

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.