

# 2W005G THRU 2W10G

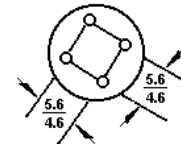
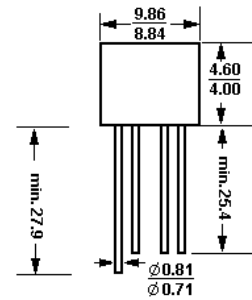
## GLASS PASSIVATED BRIDGE RECTIFIERS

Reverse Voltage – 50 to 1000 Volts

Forward Current – 2.0 Amperes

### Features

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Reliable low cost construction utilizing molded epoxy technique results in inexpensive product



Dimensions in mm

### Mechanical Data

- Case: Molded plastic
- Polarity: As marked on Body
- Mounting position: Any

### Absolute Maximum Ratings and Characteristics

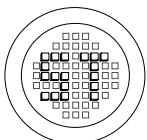
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

|   | Symbols         | 2W005G      | 2W01G | 2W02G | 2W04G | 2W06G | 2W08G | 2W10G | Units              |
|---|-----------------|-------------|-------|-------|-------|-------|-------|-------|--------------------|
| Maximum recurrent peak reverse voltage  | $V_{RRM}$       | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V                  |
| Maximum RMS voltage   | $V_{RMS}$       | 35          | 70    | 140   | 280   | 420   | 560   | 700   | V                  |
| Maximum DC blocking voltage   | $V_{DC}$        | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V                  |
| Maximum average forward rectified current at $T_A = 25^\circ\text{C}$   | $I_{(AV)}$      | 2           |       |       |       |       |       |       | A                  |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)                 | $I_{FSM}$       | 60          |       |       |       |       |       |       | A                  |
| Maximum forward voltage at 2.0A DC  | $V_F$           | 1.1         |       |       |       |       |       |       | V                  |
| Maximum DC reverse current @ $T_J = 25^\circ\text{C}$<br>at rated DC blocking voltage @ $T_J = 125^\circ\text{C}$ | $I_R$           | 5<br>500    |       |       |       |       |       |       | $\mu\text{A}$      |
| Typical junction capacitance per element (Note 1)   | $C_J$           | 25          |       |       |       |       |       |       | pF                 |
| Typical thermal resistance (Note 2)   | $R_{\theta JA}$ | 40          |       |       |       |       |       |       | $^\circ\text{C/W}$ |
| Operating temperature range   | $T_J$           | -55 to +150 |       |       |       |       |       |       | $^\circ\text{C}$   |
| Storage temperature range   | $T_S$           | -55 to +150 |       |       |       |       |       |       | $^\circ\text{C}$   |

Notes: (1) Measured at 1MHz and applied reverse voltage of 4V DC.

(2) Thermal resistance junction to ambient.



®

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## RATINGS AND CHARACTERISTIC CURVES (2W005G THRU 2W10G)

FIG.1-FORWARD CURRENT DERATING CURVE

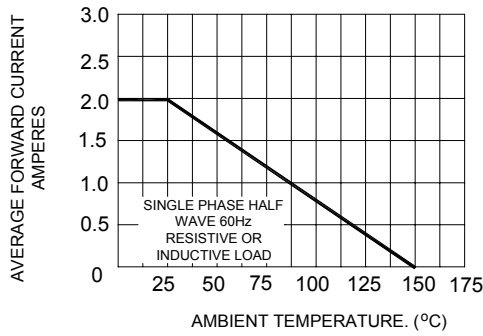


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

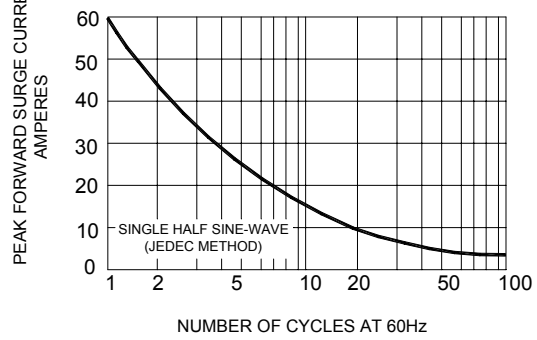


FIG.3-TYPICAL, JUNCTION CAPACITANCE

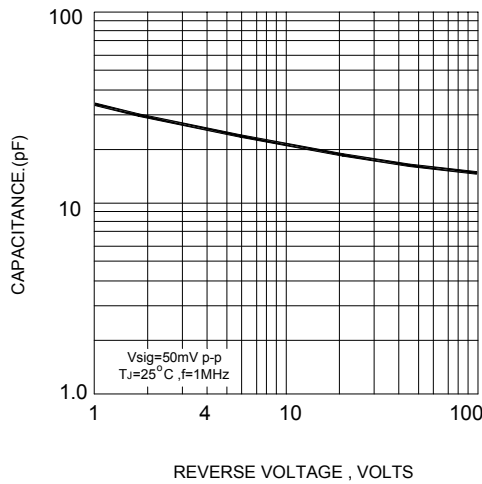


FIG.4-TYPICAL FORWARD CHARACTERISTICS

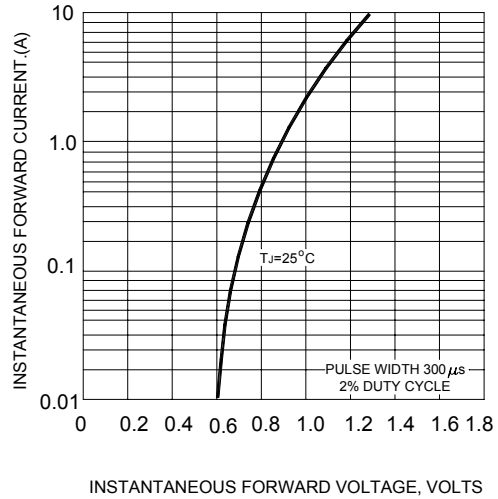
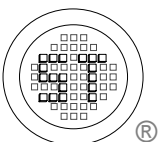
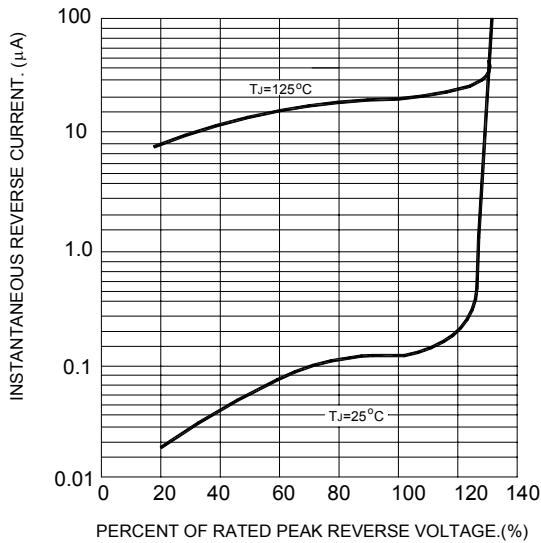
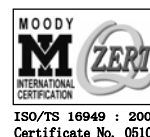


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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ISO/TS 16949 : 2002  
 Certificate No. 05103



ISO 14001  
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ISO 9001 : 2000  
 Certificate No. 658-199-01-04

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