

2W005G THRU 2W10G

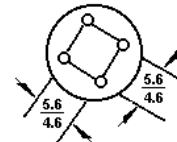
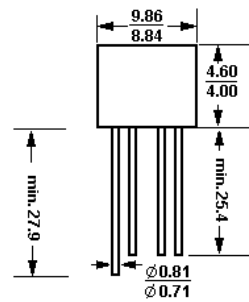
GLASS PASSIVATED BRIDGE RECTIFIERS

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

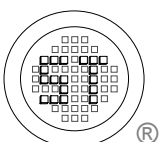
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

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 $T_A = 25^\circ C$	$I_{(AV)}$	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 @ $T_J = 25^\circ C$ at rated DC blocking voltage @ $T_J = 125^\circ C$	I_R	5 500							μA
Typical junction capacitance per element (Note 1)	C_J	25							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	40							$^\circ C/W$
Operating temperature range	T_J	-55 to +150							$^\circ C$
Storage temperature range	T_S	-55 to +150							$^\circ C$

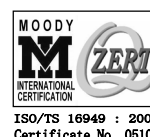
Notes: (1) Measured at 1MHz and applied reverse voltage of 4V DC.

(2) Thermal resistance junction to ambient.



SEMTECH ELECTRONICS LTD.

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Dated : 23/06/2003

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RATINGS AND CHARACTERISTIC CURVES (2W005G THRU 2W10G)

FIG.1-FORWARD CURRENT DERATING CURVE

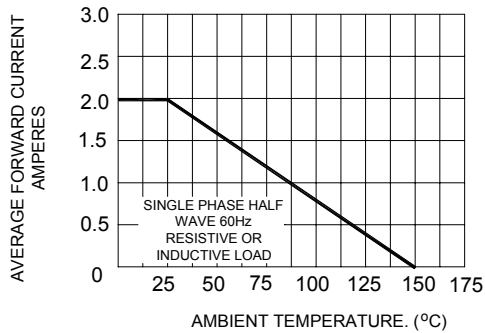


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

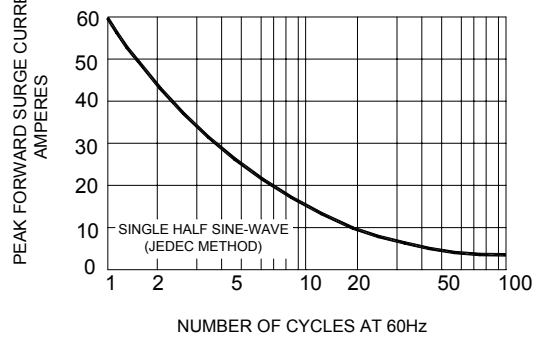


FIG.3-TYPICAL, JUNCTION CAPACITANCE

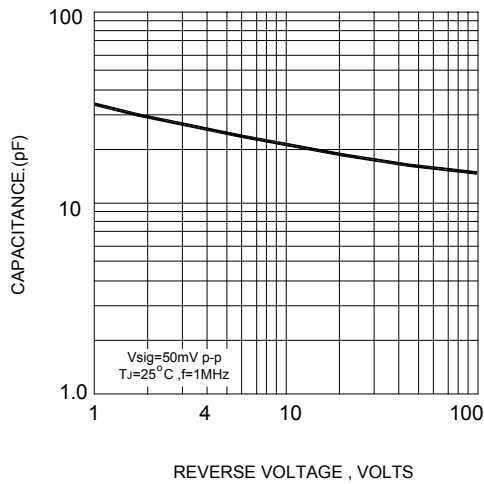


FIG.4-TYPICAL FORWARD CHARACTERISTICS

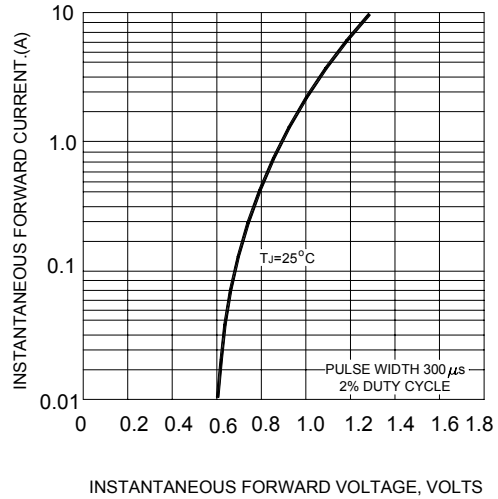
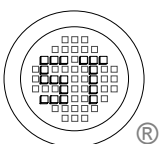
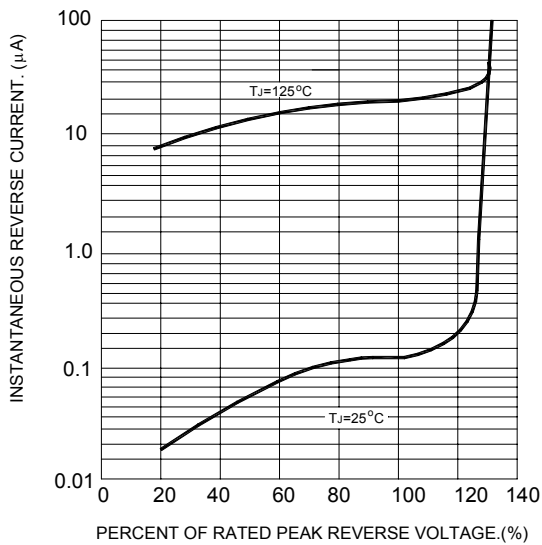
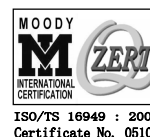


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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