

W005M THRU W10M

SILICON BRIDGE RECTIFIERS

Reverse Voltage – 50 to 1000 V

Forward Current – 1.5 A

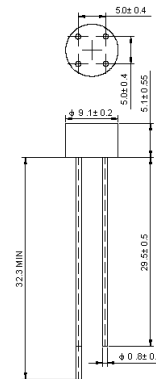
Features

- Rating to 1000 V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Glass passivated chip junction

Mechanical Data

- **Case:** WOB, Molded plastic
- **Polarity:** As marked on Body

WOB

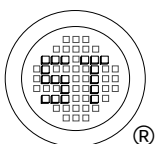


Dimensions in millimeters

Absolute Maximum Ratings and Characteristics

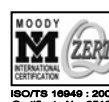
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	W005M	W01M	W02M	W04M	W06M	W08M	W10M	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 Output Current at $T_C = 50\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	1.5							A
Peak Forward Surge Current, 8.3 ms Single Half-Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1							V
Maximum Reverse Current $T_A = 25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_A = 125\text{ }^{\circ}\text{C}$	I_R	5 0.5							μA mA
Operating Junction Temperature Range	T_J	- 55 to + 125							$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150							$^{\circ}\text{C}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



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FIG.1 – PEAK FORWARD SURGE CURRENT

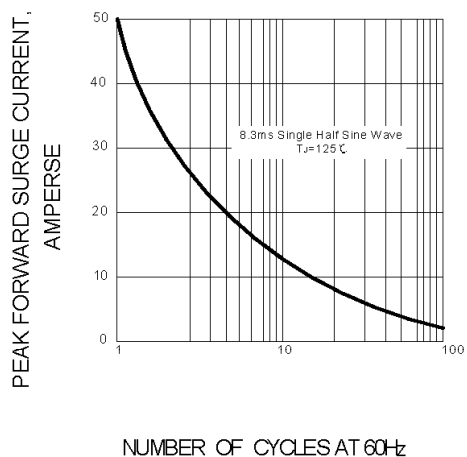


FIG.2 – FORWARD DERATING CURVE

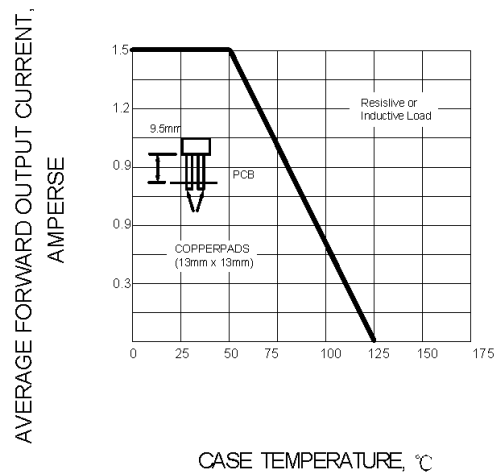


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

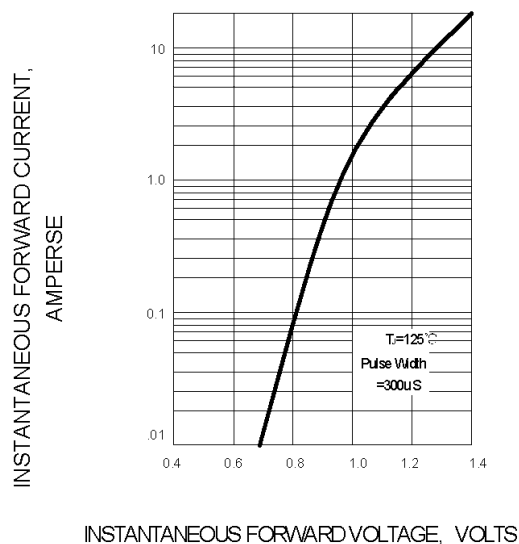
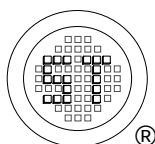
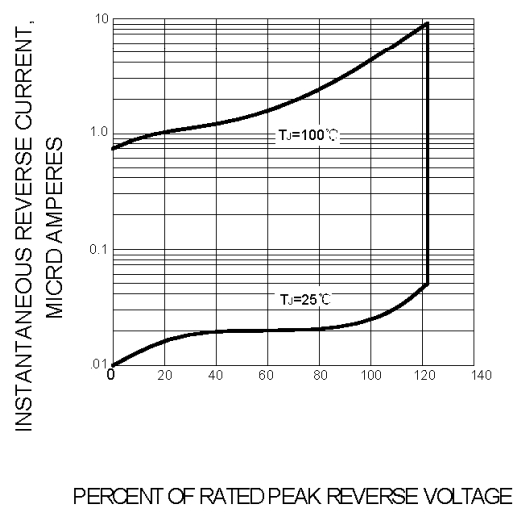
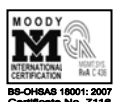
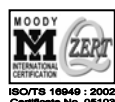


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



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