



# DATA SHEET

## W005G~W10G

**1.5 AMPERE SILICON MINIATURE SINGLE- PHASE BRIDGES**  
**VOLTAGE - 50 to 1000 Volts CURRENT - 1.5 Amperes**

### FEATURES

- Ratings to 1000V PRV
- Surge overload rating: 30/50 Amperes peak
- Ideal for printed circuit board
- Reliable construction utilizing molded plastic
- Mounting position:Any

### MECHANICAL DATA

Case:Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

Terminals: Leads solderable per MIL-STD-202,

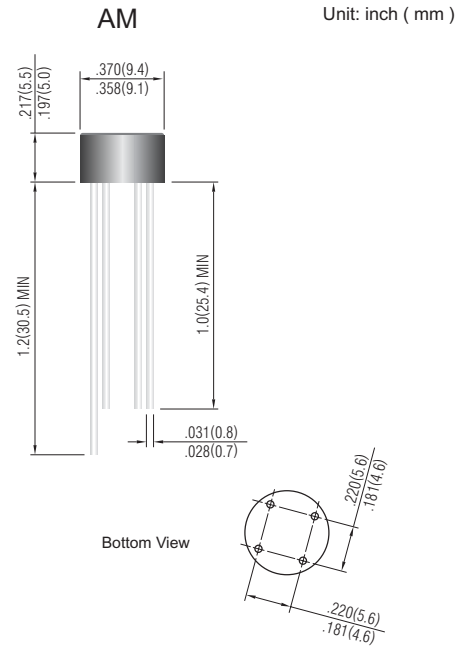
Method 208

Polarity :Polarity symbols marking on body.

Weight: 0.05 ounce, 1.3 grams

Available with 0.50 inch leads(P/N add suffix "S")

For Capacitive load derate current by 20%.



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

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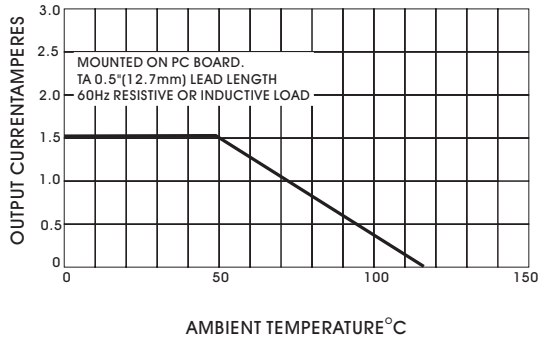
	W005G	W01G	W02G	W04G	W06G	W08G	W10G	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge input Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Current $T_A=50^\circ\text{C}$	1.5							A
Peak Forward Surge Current, 8.3ms singlehalf sine-wave superimposed on rated load	50.0							A
$I^2t$ Rating for fusing ( $t < 8.35$ ms)	10.0							A <sup>2</sup> S
Maximum Forward Voltage Drop per Bridge Element at 1.0A	1.0							V
Maximum Reverse Current at Rated $T_J= 25^\circ\text{C}$	10.0							$\mu\text{A}$
DC Blocking Voltage per element $T_J=100^\circ\text{C}$	1.0							mA
Typical Junction capacitance per leg (Note 1) C <sub>J</sub>	24.0							pF
Typical Thermal resistance per leg (Note 2) R $\theta$ JA	36.0							°C/W
Typical Thermal resistance per leg (Note 2) R $\theta$ JA	13.0							
Operating Temperature Range $T_J$	-55 to +125							°C
Storage Temperature Range $T_A$	-55 to +150							°C

#### NOTES:

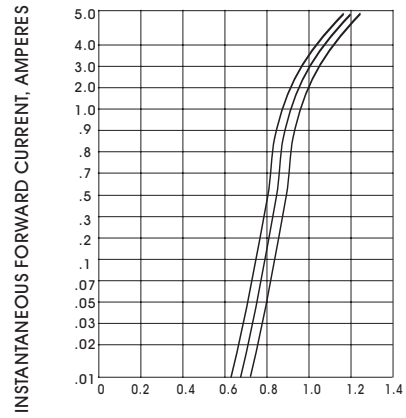
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.47 X 0.47"(12 X 12mm) copper pads.



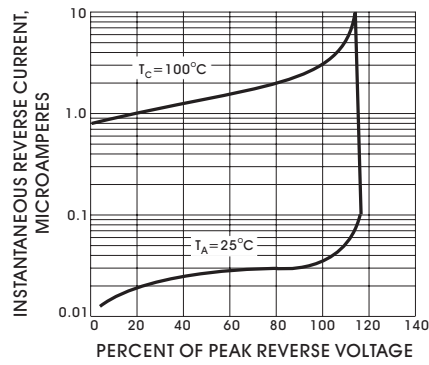
**RATING AND CHARACTERISTIC CURVES**



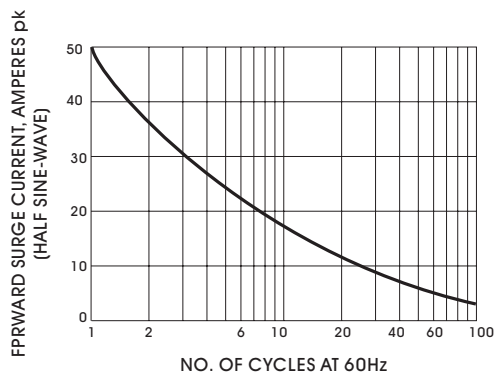
**Fig. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**Fig. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS (25°C)**



**Fig. 3 - TYPICAL PEAK REVERSE CHARACTERISTICS**



**Fig. 4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**