



DATA SHEET

W005G~W10G

1.5 AMPERE SILICON MINIATURE SINGLE-PHASE BRIDGES

VOLTAGE - 50 to 1000 Volts CURRENT - 1.5 Amperes

AM

Unit: inch (mm)

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.

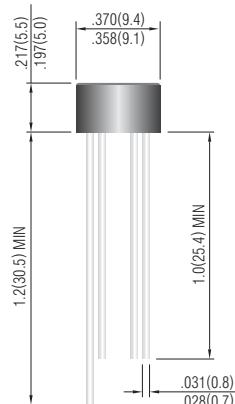
Terminals: Leads solderable per MIL-STD-202, Method 208

Polarity: Polarity symbols marking on body.

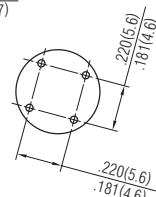
Weight: 0.05 ounce, 1.3 grams

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

For Capacitive load derate current by 20%.



Bottom View



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

For Capacitive load derate current by 20%.

	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 $T_A=50^\circ C$					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			$A^2 S$
Maximum Forward Voltage Drop per Bridge Element at 1.0A					1.0			V
Maximum Reverse Current at Rated $T_J= 25^\circ C$					10.0			μA
DC Blocking Voltage per element $T_J=100^\circ C$					1.0			mA
Typical Junction capacitance per leg (Note 1) CJ					24.0			pF
Typical Thermal resistance per leg (Note 2) $R_{\theta JA}$					36.0			$^\circ C/W$
Typical Thermal resistance per leg (Note 2) $R_{\theta JA}$					13.0			
Operating Temperature Range T_J					-55 to +125			$^\circ C$
Storage Temperature Range T_A					-55 to +150			$^\circ C$

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

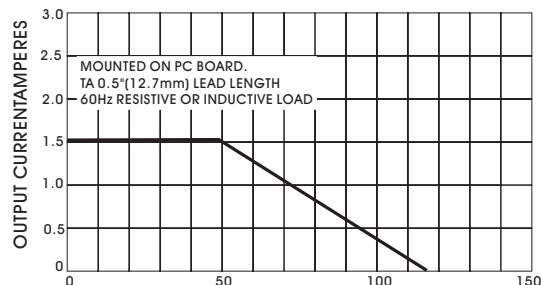


Fig. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

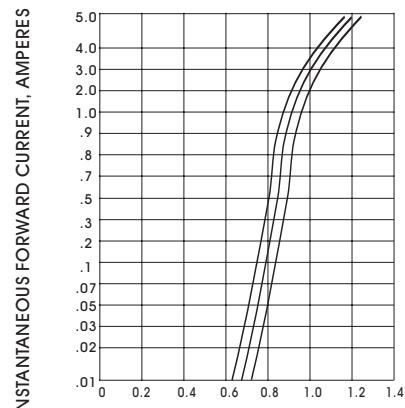


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS (25°C)

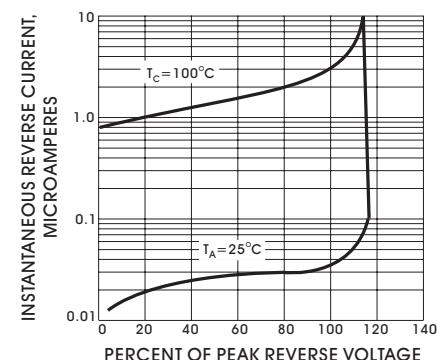


Fig. 3- TYPICAL REAK REVERSE CHARACTERISTICS

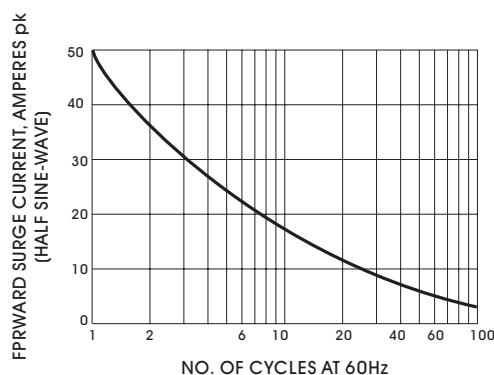


Fig. 4- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT