



# DATA SHEET

## W005M~W10M

### 1.0 AMPERES MINIATURE SINGLE-PHASE SILICON BRIDGE

**VOLTAGE** 50 to 1000 Volts **CURRENT** 1.0 Amperes

AM

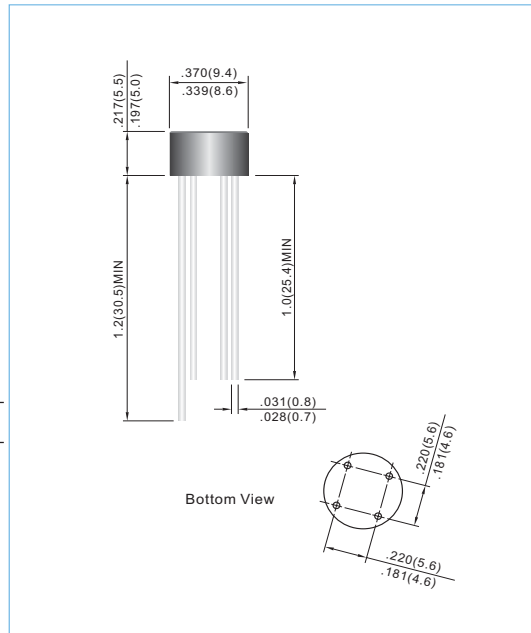
Unit: inch (mm)

#### FEATURES

- Plastic material used carries Underwriters Laboratory recognition.
- High surge dielectric strength.
- Typical  $I_R$  LESS Than 1uA.
- Exceeds environmental standards of MIL-STD-19500
- Ideal for printed circuit board.
- High temperature soldering guaranteed: 265°C/10 seconds/ .375" (9.5 mm) lead length/5 lbs. (2.3kg) tension
- Pb free product are available : 99% Sn can meet RoHS environment substance directive request

#### MECHANICAL DATA

Case: Reliable low cost construction utilizing molded plastic technique  
 Terminals: Leads solderable per MIL-STE-750, Method 2026  
 Mounting Position: Any  
 Weight: 0.04 ounces, 1.1 grams.



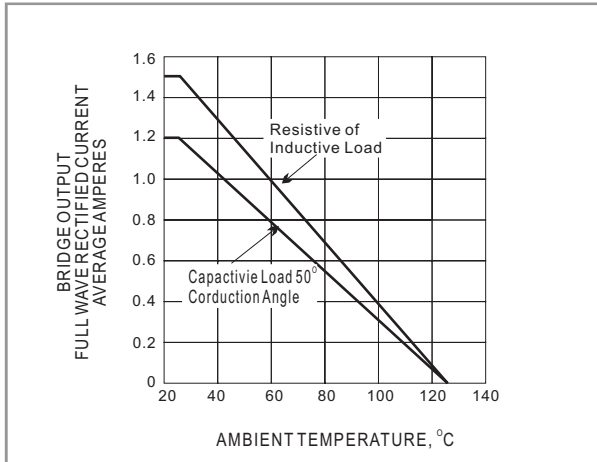
#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%.

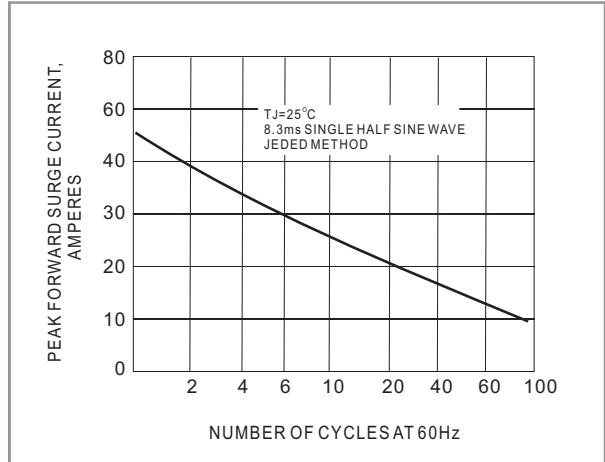
PARAMETER	SYMBOL	W005M	W01M	W02M	W04M	W06M	W08M	W10M	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current .375" (9.5mm) Lead Length at $T_A=25^\circ C$	$I_{AV}$	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50.0							A
$I^2t$ Rating for fusing ( $t < 8.35ms$ )	$I^2t$	5.0							A <sup>2</sup> s
Maximum Forward Voltage Drop per Element at 1.0A	$V_F$	1.0							V
Maximum DC Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	$I_R$	10.0 1000							$\mu A$
Typical Junction capacitance per bridge element (Note 1)	$C_J$	24							pF
Operating Junction Temperature Range	$T_J$	-55 to + 125							°C
Storage Temperature Range	$T_{STG}$	-55 to + 150							°C

NOTES:

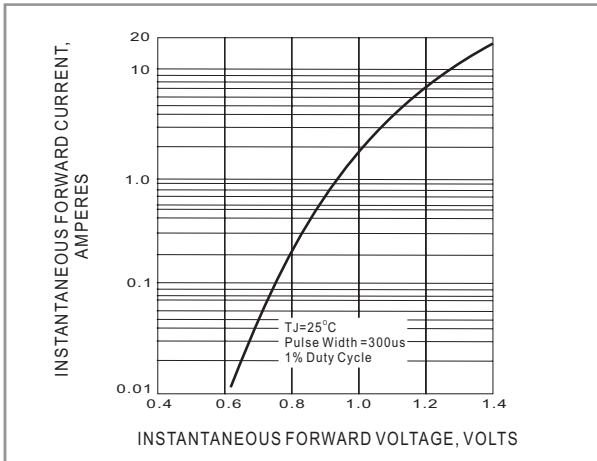
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.



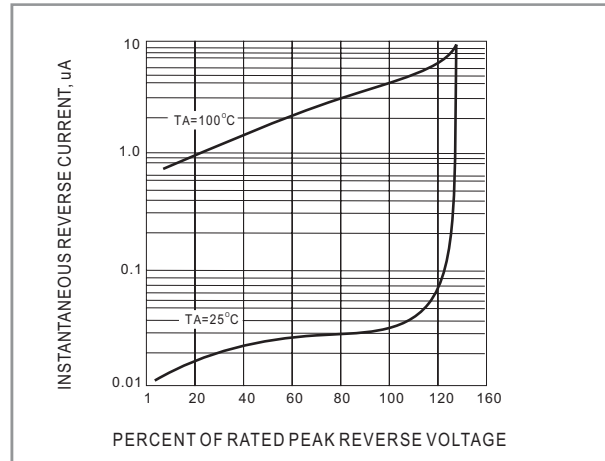
**Fig. 1 DERATING CURVE OUTPUT RECTIFIED CURRENT**



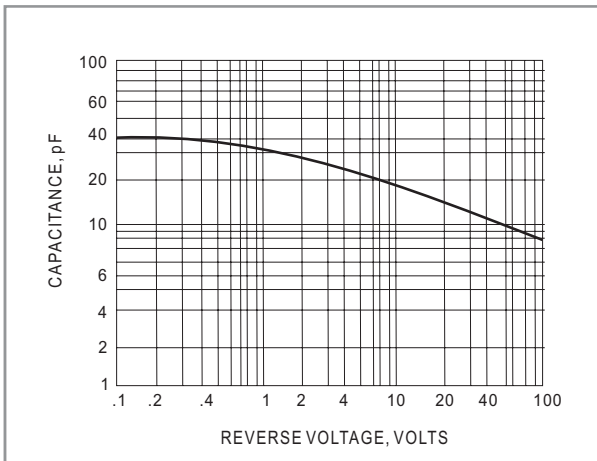
**Fig. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD CURRENT**



**Fig. 3 TYPICAL FORWARD CHARACTERISTIC**



**Fig. 4 TYPICAL REVERSE CHARACTERISTICS**



**Fig. 5 TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT**