

# W005M thru W10M

## SINGLE-PHASE SILICON BRIDGE



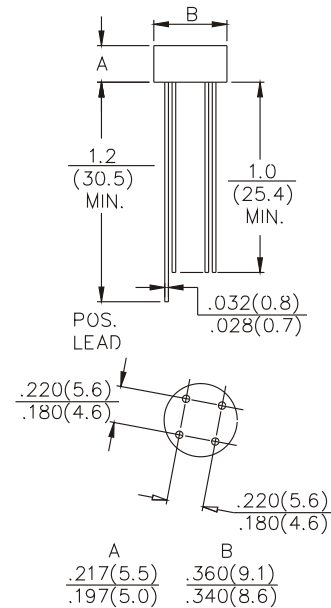
**CHENG-YI  
ELECTRONIC**



### FEATURES

- High reverse voltage to 1000V
- Surge overload ratings to 50 amperes peak
- Good for printed circuit board assembly
- Mounting position: Any
- Weight: 1.20 grams

VOLTAGE RANGE  
50 TO 1000 VOLTS  
CURRENT  
1.5 Amperes



### MAXIMUM RATINGS AND ELECTRICAL 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%.

#### MAXIMUM RATINGS (At $T_A=25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOLS	W005M	W01M	W02M	W04M	W06M	W08M	W010M	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 Current at @ $T_A=25^\circ\text{C}$	$I_O$	1.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50							A
Operating Temperature Range	$T_J$	-55 to +125							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

#### ELECTRICAL CHARACTERISTICS (At $T_A=25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS		W005M	W01M	W02M	W04M	W06M	W08M	W010M	UNITS
Maximum Forward Voltage drop per element of 1.0A DC	$V_F$	1.0							V
Maximum Reverse Current at Rated DC Blocking Voltage per element	@ $T_A=25^\circ\text{C}$	10							$\mu\text{A}$
	@ $T_A=100^\circ\text{C}$	1							mA

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### RATING AND CHARACTERISTICS CURVES W005M THRU W10M

Fig.1 - MAXIMUM NON-REPETITIVE  
FORWARD SURGE CURRENT

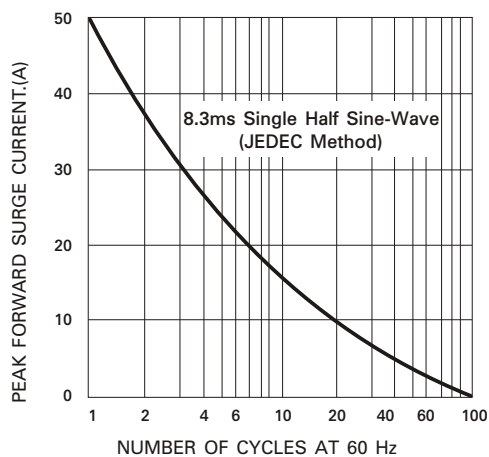


Fig.2 - TYPICAL FORWARD CURRENT  
DERATING CURVE

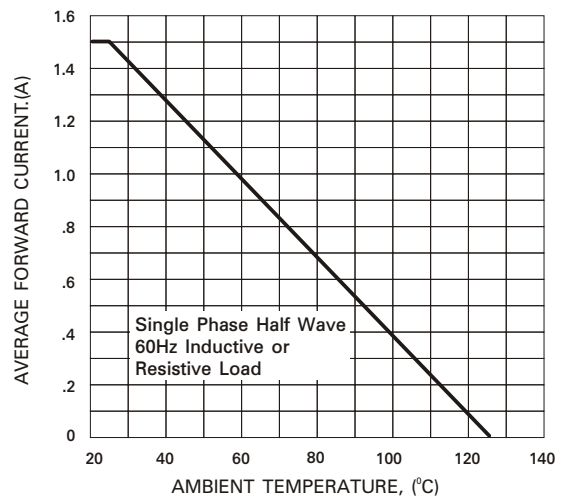


Fig.3 - TYPICAL INSTANTANEOUS FORWARD  
CHARACTERISTICS

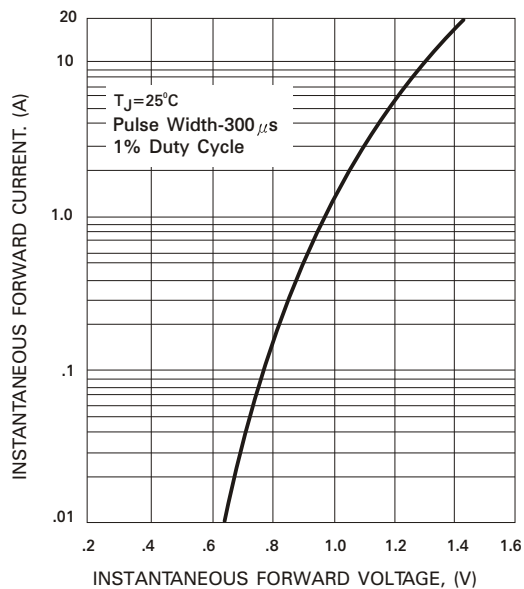


Fig.4 - TYPICAL REVERSE CHARACTERISTICS

