

# W005 thru W10 SERIES

## SINGLE-PHASE SILICON BRIDGE



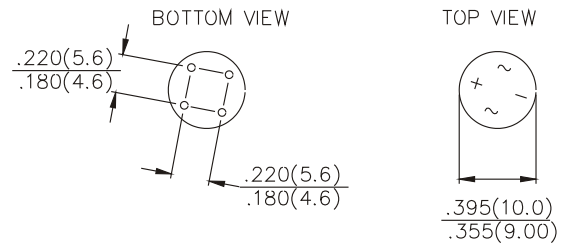
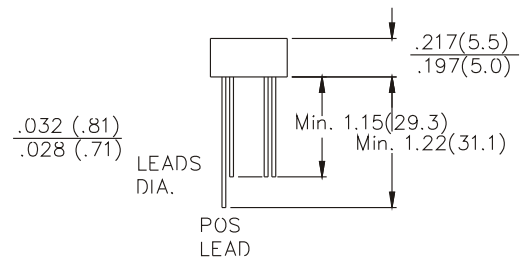
**CHENG-YI  
ELECTRONIC**



### FEATURES

- Surge overload rating-50 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Mounting Position: Any
- Electrically isolated base-1800 volts

VOLTAGE RANGE  
50 TO 1000 VOLTS  
CURRENT  
1.0 Amperes



Dimensions in inches and (millimeters)

### 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%.

		W005	W01	W02	W04	W06	W08	W10	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	$V_{DC}$	60	100	200	400	600	800	1000	V
Maximum Average Forward Output Current @ $T_A=25^\circ\text{C}$	$V_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	30							A
Maximum DC Forward Voltage drop per element at 1.0A DC	$V_F$	1.1							V
Maximum DC Reverse Current at rated @ $T_A=25^\circ\text{C}$ DC Blocking Voltage Per Element @ $T_A=100^\circ\text{C}$	$I_R$	10 1							$\mu\text{A}$ mA
$I^2t$ Rating for fusing( $t < 8.3\text{ms}$ )	$I^2t$	3.7							$\text{A}^2\text{S}$
Operating Temperature Range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

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### RATING AND CHARACTERISTICS CURVES W005 THRU W10

Fig.1 - MAXIMUM FORWARD SURGE CURRENT

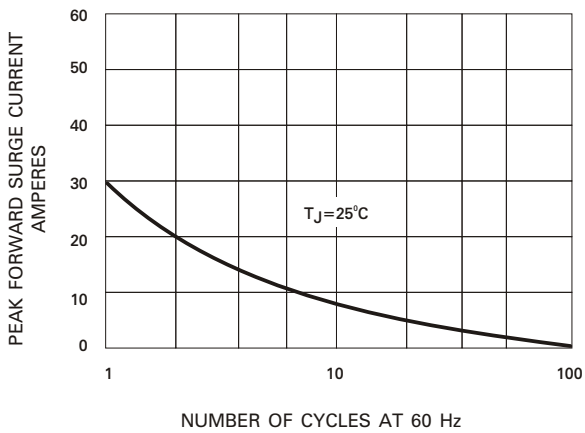


Fig.2 - DERATING CURVE  
OUTPUT RECTIFIED CURRENT

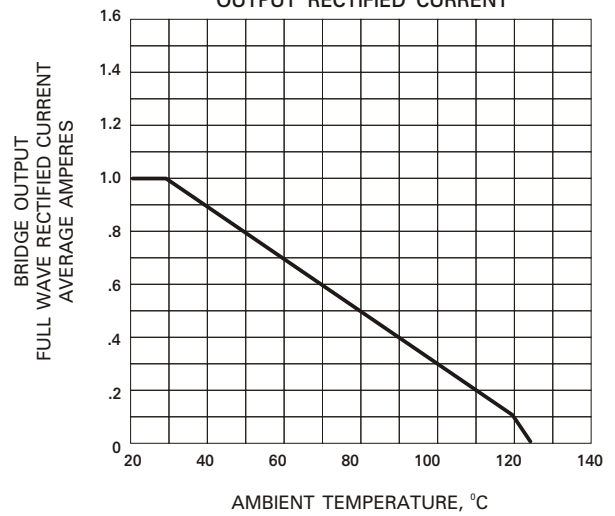


Fig.3 - TYPICAL FORWARD  
CHARACTERISTICS

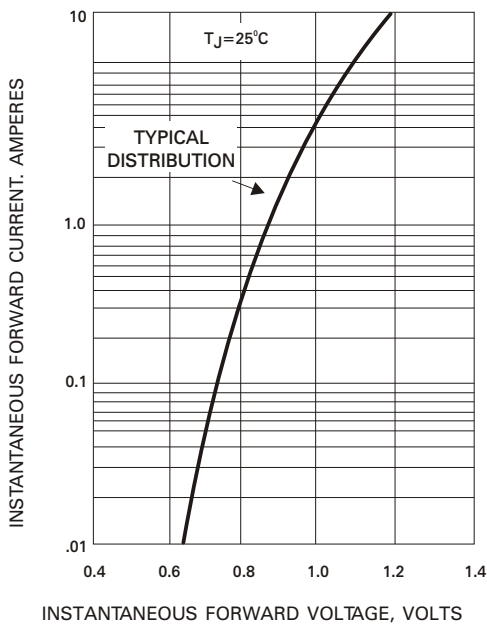


Fig.4 - TYPICAL REVERSE  
CHARACTERISTICS

