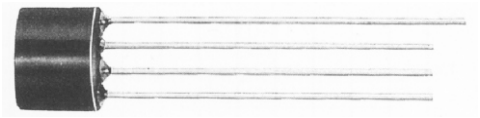
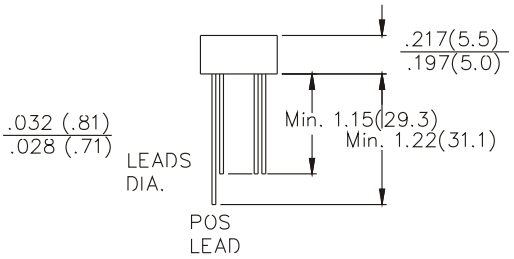
W005 thru W10 SERIES

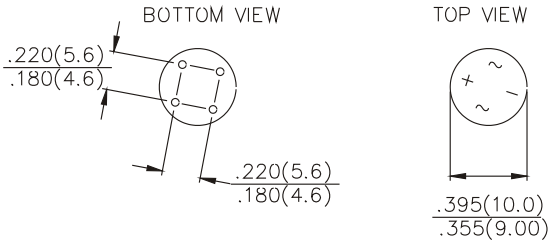
SINGLE-PHASE SILICON BRIDGE

CHENG-YI
ELECTRONIC



VOLTAGE RANGE
50 TO 1000 VOLTS
CURRENT
1.0 Amperes





Dimensions in inches and (millimeters)

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

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°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°C	I_R	10							μA
DC Blocking Voltage Per Element @ T_A=100°C		1							mA
I^2t Rating for fusing(t<8.3ms)	I^2t	3.7							A^2S
Operating Temperature Range	T_J	-55 to +125							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

W005 thru W10 SERIES

SINGLE-PHASE SILICON BRIDGE

CHENG-YI
ELECTRONIC

RATING AND CHARACTERISTICS CURVES
W005 THRU W10

Fig.1 - MAXIMUM FORWARD SURGE CURRENT

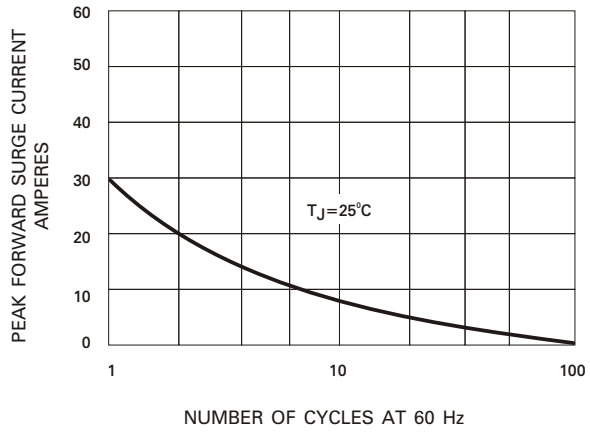


Fig.2 - DERATING CURVE
OUTPUT RECTIFIED CURRENT

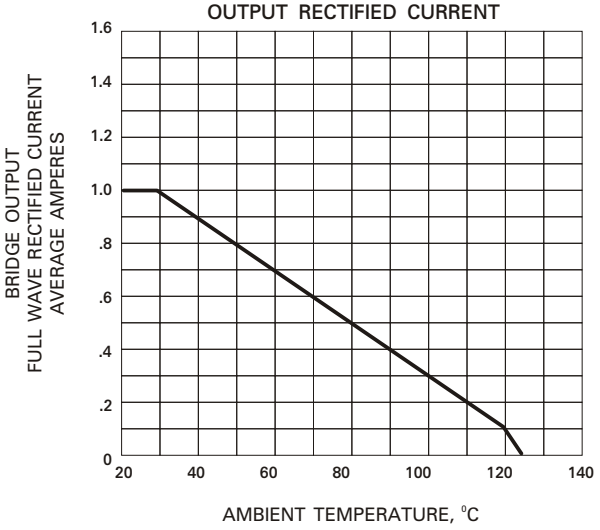


Fig.3 - TYPICAL FORWARD
CHARACTERISTICS

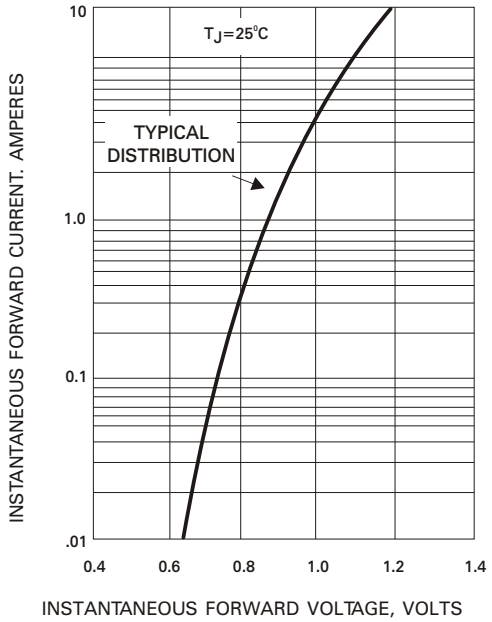


Fig.4 - TYPICAL REVERSE
CHARACTERISTICS

