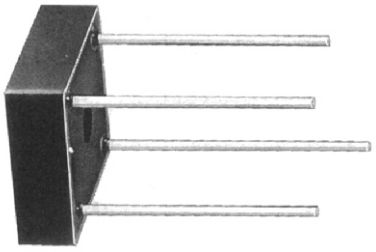
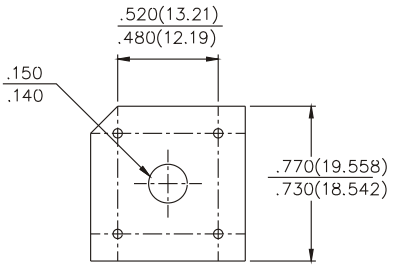
BR10 SERIES

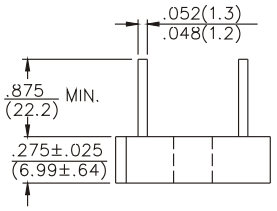
SINGLE-PHASE SILICON BRIDGE

CHENG-YI
ELECTRONIC



VOLTAGE RANGE
50 TO 1000 VOLTS
CURRENT
10 Amperes





Polarity shown on side of case;
positive lead by beveled corner.

Dimensions in inches and (millimeters)

FEATURES

- UL recognized file #E149311
- Surge overload rating-150 amperese peak
- Low forward voltage drop
- Small size: simple installation
- Mounting position:Any
- Electrically isolated base-1800Volts
- Epoxy:UL94-0 Rate flame retardant
- Lead:MIL-STD-202 method 208 quaranteed

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%.

		BR1005	BR101	BR102	BR104	BR106	BR108	BR1010	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 @ T_C=50°C* Output Current @ T_A=50°C**	$V_{(AV)}$	10.0 8.0							A A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	150							A
Maximum DC Forward Voltage drop per element at 5.0A DC	V_F	1.1							V
Maximum DC Reverse Current @ T_A=25°C at rated DC Blocking Voltage @ T_A=100°C	I_R	10 1							μA mA
I^2t Rating for fusing(t<8.3ms)	I^2t	64							A^2S
Typical Thermal Resistance	R θ JC	5							°C/W
Operating Temperature Range	T_J	-55 to +125							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

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RATING AND CHARACTERISTICS CURVES
BR10 SERIES

Fig.1 - MAXIMUM NUN-REPETITIVE
FORWARD SURGE CURRENT

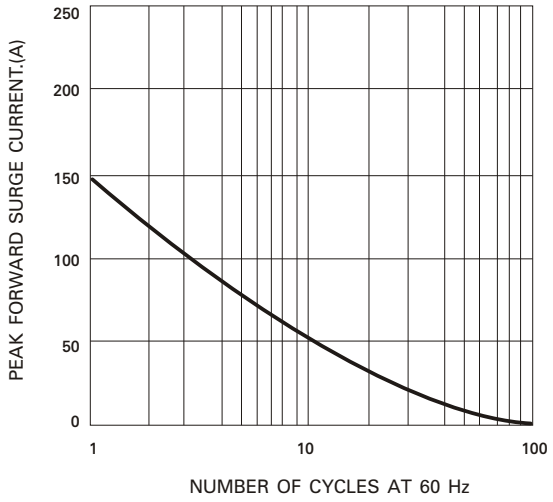

Fig.2 - TYPICAL FORWARD CURRENT
DERATING CURVE

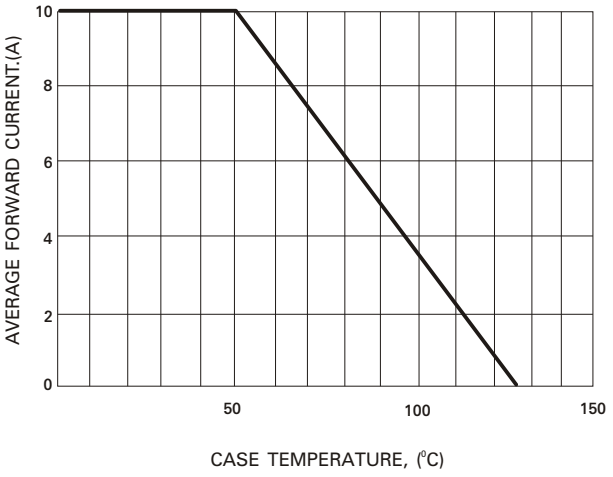

Fig.3 - TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTICS

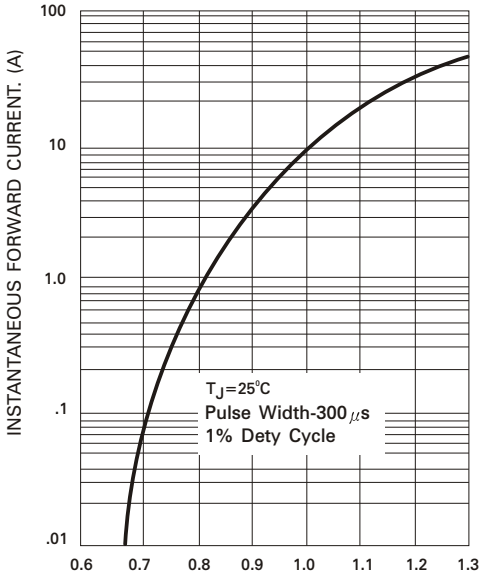

Fig.4 - TYPICAL REVERSE CHARACTERISTICS