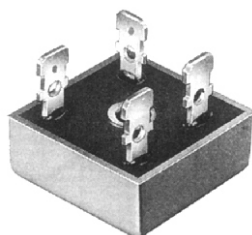


KBPC50 SERIES

SINGLE-PHASE SILICON BRIDGE



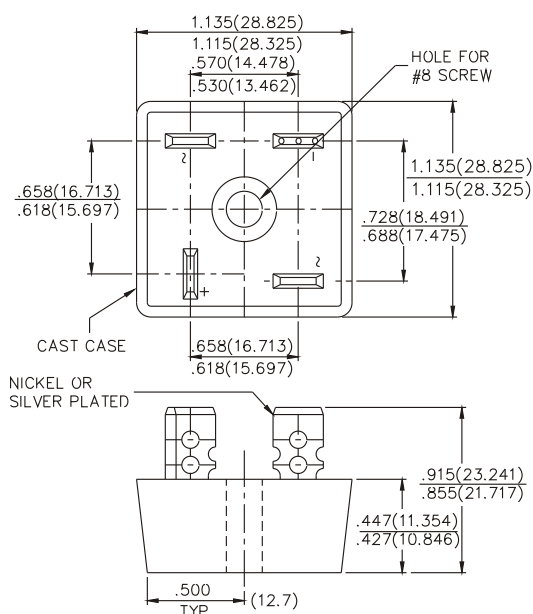
**CHENG-YI
ELECTRONIC**



FEATURES

- Surge overload rating-400 Amperese peak
- Low forward voltage drop
- Mounting position:Any
- Electrically isolated base-1800 Volts
- Solderable .25" FASTON terminals
- Materials used carries U/L recognition

VOLTAGE RANGE
50 TO 1000 VOLTS PRV
CURRENT
50 Amperes



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load, 60 Hz. For capacitive load, derate current by 20%.

		KBPC 50005	KBPC 5001	KBPC 5002	KBPC 5004	KBPC 5006	KBPC 5008	KBPC 5010	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 Output Current @ $T_C=55^\circ\text{C}$	$V_{(AV)}$	50							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load(JEDEC Mehtod)	I_{FSM}	400							A
Maximum DC Forward Voltage drop per bridge element at 25.0A DC	V_F	1.2							V
Maximum DC Reverse Current at rated DC Blocking Voltage per bridge element @ $T_A=25^\circ\text{C}$	I_R	10							μA
@ $T_A=100^\circ\text{C}$		1							μA
$I^2 t$ Rating for fusing ($t < 8.3\text{ms}$)	$I^2 t$	737							A^2S
Typical Thermal Resistance(Note.1)	$R\theta_{JC}$	2.5							$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

KBPC50 SERIES

SINGLE-PHASE SILICON BRIDGE



**CHENG-YI
ELECTRONIC**

RATING AND CHARACTERISTICS CURVES KBPC50005 THRU KBPC5010

Fig. 1 - MAXIMUM FORWARD SURGE CURRENT

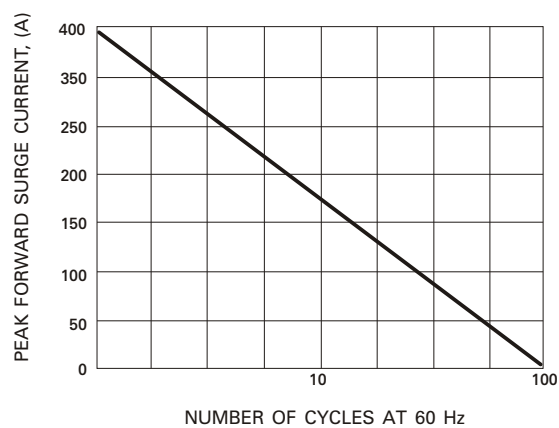


Fig. 2 - DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

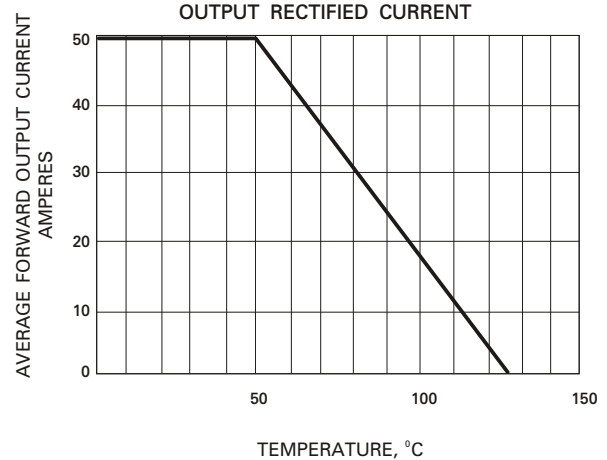


Fig. 3 - TYPICAL FORWARD
CHARACTERISTICS

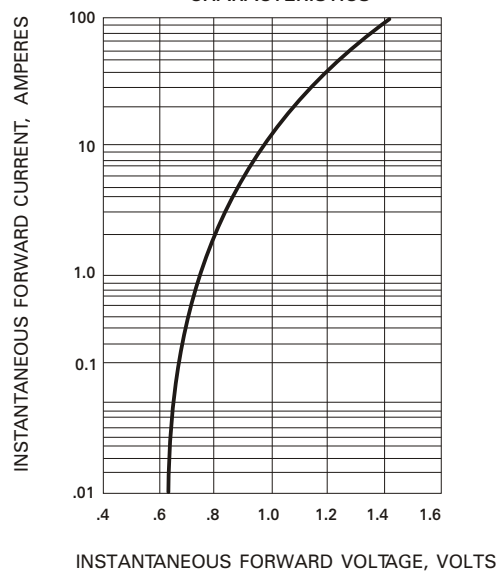


Fig. 4 - TYPICAL REVERSE
CHARACTERISTICS

