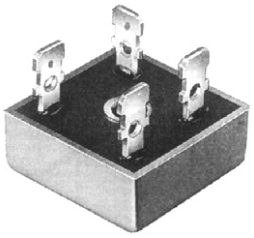
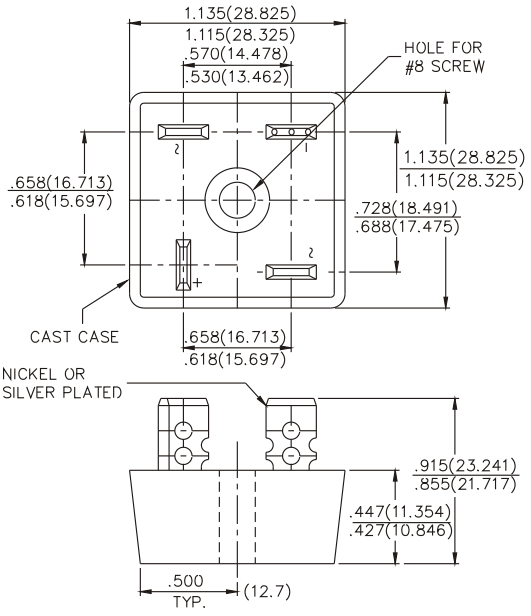
KBPC25 SERIES

SINGLE-PHASE SILICON BRIDGE

CHENG-YI
ELECTRONIC



VOLTAGE RANGE
50 TO 1000 VOLTS PRV
CURRENT
25 Amperes



FEATURES

- Surge overload rating-300 amperes peak
- Low forward voltage drop
- Mounting Position: Any
- Electrically isolated base-1800 Volts
- Solderable .25"FASTON terminals
- Materials use carries U/L recognition
- UL recognized file #E149311

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 25005	KBPC 2501	KBPC 2502	KBPC 2504	KBPC 2506	KBPC 2508	KBPC 2510	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°C	$V_{(AV)}$	25							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load(JEDEC Mehtod)	I_{FSM}	300							A
Maximum DC Forward Voltage drop per element at 12.5A DC	V_F	1.2							V
Maximum DC Reverse Current @ T_A=25°C	I_R	10							μA
at rated DC Blocking Voltage @ T_A=100°C		1							μA
I^2t Rating for fusing (t<8.3ms)	I^2t	373							A^2S
Typical Thermal Resistance(Note.1)	$R\theta JC$	2.5							°C/W
Operating Temperature Range	T_J	-55 to +125							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

KBPC25 SERIES

SINGLE-PHASE SILICON BRIDGE

CHENG-YI
ELECTRONIC

RATING AND CHARACTERISTICS CURVES
KBPC25 SERIES

Fig.1 - MAXIMUM FORWARD SURGE CURRENT

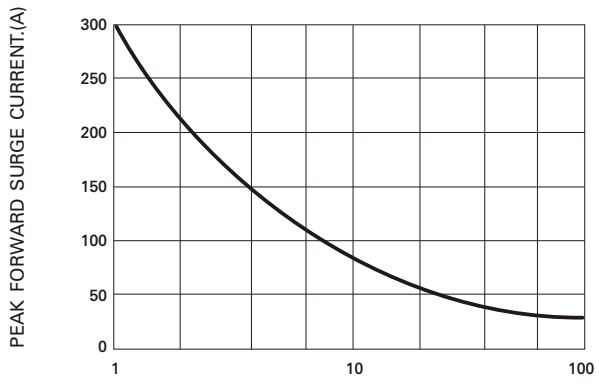


Fig.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

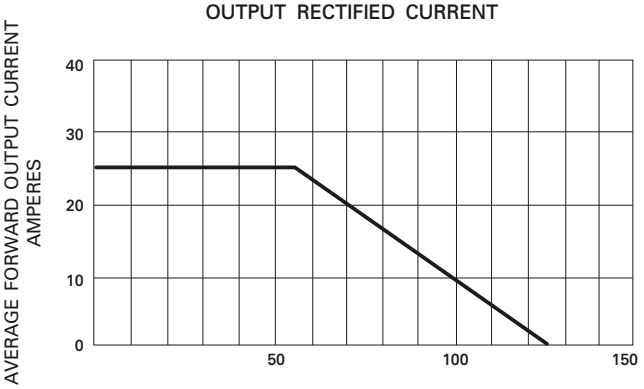


Fig.3 - TYPICAL FORWARD CHARACTERISTICS

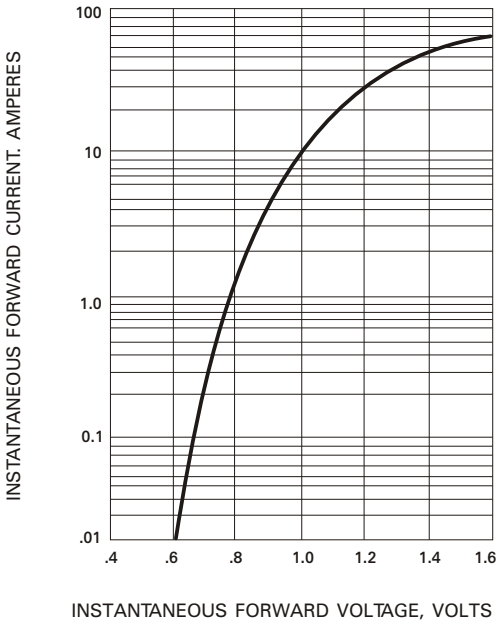


Fig.4 - TYPICAL REVERSE CHARACTERISTICS

