



KBPC1005 thru KBPC1010

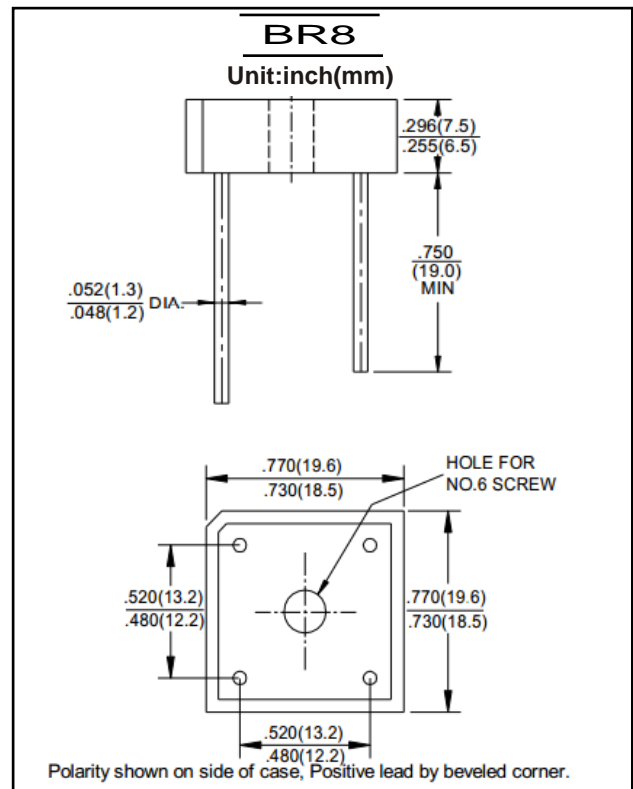
SINGLE-PHASE BRIDGE RECTIFIER

CURRENT 10 .0 Amperes

VOLTAGE 50 to 1000 Volts

FEATURES

- I Rating to 1000V PRV
- I Surge overload rating to 175 Amperes peak
- I Ideal for printed circuit board
- I Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- I Lead solderable per MIL-STD-202 method 208
- I Mounting: thru hole for # 6 screw Mounting



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		KBPC 10005	KBPC 1001	KBPC 1002	KBPC 1004	KBPC 1006	KBPC 1008	KBPC 1010	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS 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 @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	10.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	175.0							A
Maximum instantaneous forward voltage at 5.0 A	V_F	1.0							V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	5.0 0.5							μA mA
Operating junction temperature range	T_J	- 55 ---- + 125							°C
Storage temperature range	T_{STG}	- 55 ---- + 150							°C

NOTES:

1. Unit mounted on 8.7"×8.7"×0.24" thick (22×22×0.6 cm) Al. plate.
2. Unit mounted on P.C.B at 0.375" (9.5mm) lead length with 0.47"×0.47" (12×12mm) copper pads.

SINGLE-PHASE BRIDGE RECTIFIER **KBPC10005 thru KBPC1010**

FIG.1 – PEAK FORWARD SURGE CURRENT

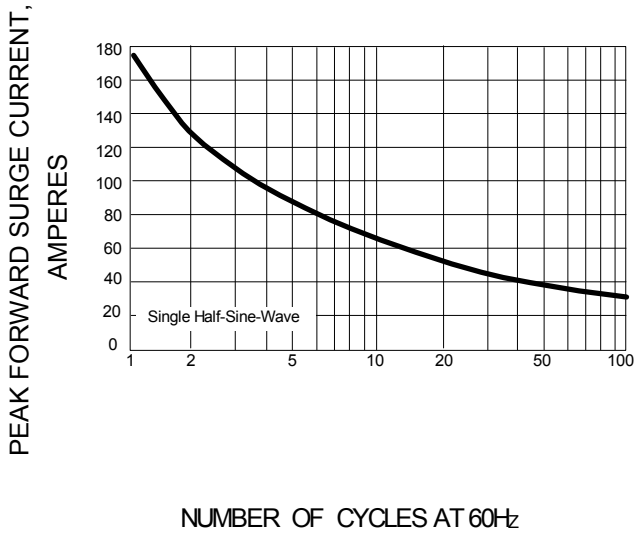


FIG.2 – FORWARD DERATING CURVE

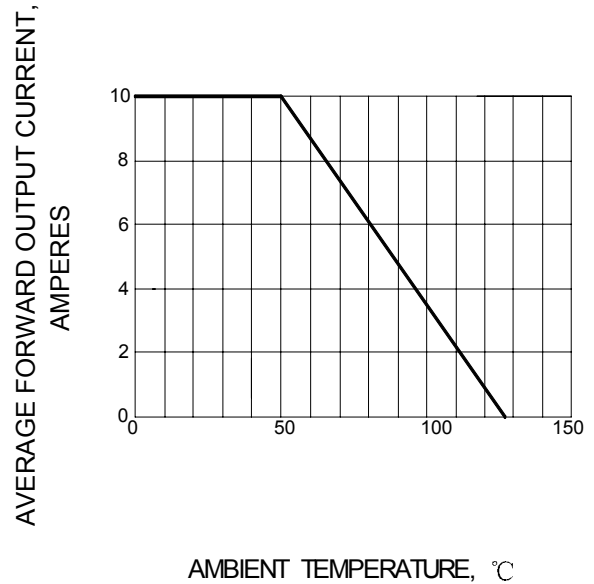


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

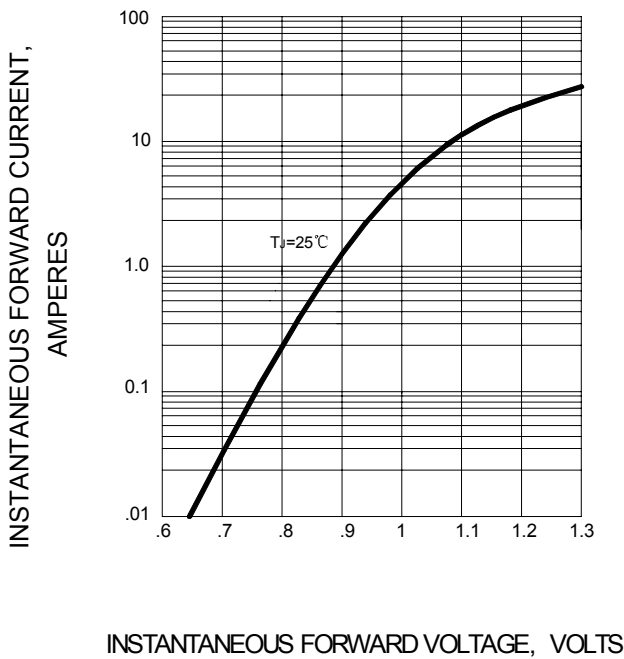


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

