MASTER INSTRUMENT CORPORATION

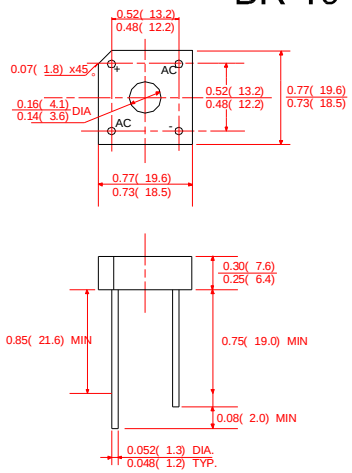
KBPC8005 THRU KBPC810
BR805 THRU BR810

VOLTAGE RANGE **50 to 1000 Volts**
CURRENT **8.0 Amperes**

FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Ideal for printed circuit board
- High isolation voltage from case to leads
- High temperature soldering guaranteed: 260°C/10 second, at 5 lbs. (2.3kg) tension.

BR-10



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: Molded plastic body
- Terminal: Lead solderable per MIL-STD-202E method 208C.
- Polarity: Polarity symbols molded on case
- Mounting: Thru hole for #6 screw, 5.0 in.-lbs torque max.
- Weight:0. 20ounce, 5.62 grams

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%.

		SYMBOLS	BR805 KBPC8005	BR81 KBPC801	BR82 KBPC802	BR84 KBPC804	BR86 KBPC806	BR88 KBPC808	BR810 KBPC810	UNITS
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at	T_C=50℃(Note1)	$I_{(AV)}$	8.0							Amps
	T_C=100℃(Note1)		6.0							
	T_A=50℃(Note2)		6.0							
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	125							Amps
Rating for Fusing(t<8.3ms)		I^2T	64							A^2S
Maximum Instantaneous Forward Voltage at 4.0A		V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T_A=25 °C	I_R	5.0							μAmps
	T_A=150°C		1.0							mAmps
Isolation Voltage from case to leads		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1)		$R_{\theta JC}$	6.0							℃/W
Operating Temperature Range		T_J	-55 to +150							℃
Storage Temperature Range		T_{STG}	-55 to +150							℃

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.

MASTER INSTRUMENT CORPORATION

SINGLE-PHASE BRIDGE RECTIFIER
KBPC8005 THRU KBPC810
BR805 THRU BR810

VOLTAGE RANGE **50 to 1000 Volts**
CURRENT **8.0 Amperes**

FIG.1–TYPICAL FORWARD CURRENT DERATING CURVE

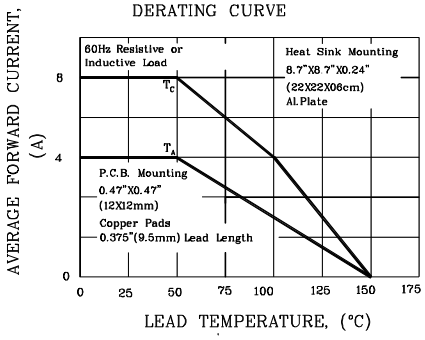


FIG.2–MAXIMUM NON–REPETITIVE PEAK FORWARD SURGE CURRENT

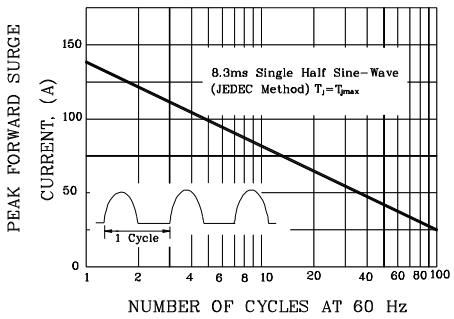


FIG.3–TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

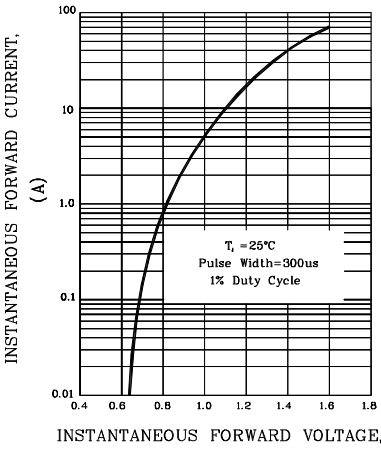


FIG.4–TYPICAL REVERSE CHARACTERISTICS

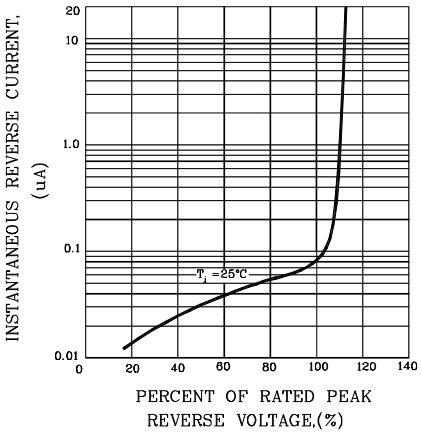


FIG.5–TYPICAL JUNCTION CAPACITANCE

