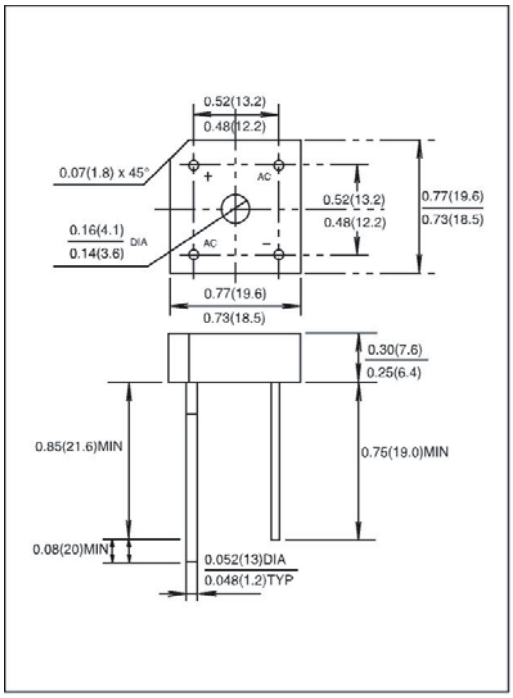
SINGLE-PHASE BRIDGE RECTIFIER

KBPC8005 THRU KBPC810

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

FEATURES

- Low cost
- This series is UL recognized
- 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.



MECHANICAL DATA

- Case: Molded plastic body
- Terminal: Lead solderable per MIL - STD - 202E method 208C
- Polarity: Polarity symbols marked on case.
- Mounting: Thru hole for #6 screw, 5 in,- lbs. Torqute Max.
- Weight: 0.20 ounce, 5.62 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25˚C ambient temperature unless otherwise specified
Single phase, half wave, 60Hz, resistive or inductive load.
Maximum Repetitive Peak Reverse Voltage
For capacitive load derate current by 20%

		SYMBOLS	KBPC 8005	KBPC 801	KBPC 802	KBPC 804	KBPC 806	KBPC 808	KBPC 810	
Maximum Recurrent 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	TC=50˚C(Note1)	I(AV)	8.0							Amps
	TA=50˚C(Note2)		6.0							
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)		Ifsm	125							Amps
Rating for Fusing (t<8.3ms)		I^2t	64							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 4.0A		VF	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	TA=25˚C	IR	10							μA
	TA=100˚C	HTIR	1.0							mA
Isolation Voltage from case to leads.		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1)		RTHjc	6.0							˚C/W
Operating Temperature Range		T_J	(-55 to +125)							˚C
Storage Temperature Range		T_{STG}	(-55 to +150)							

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

Lead Free
RoHS Compliant

RATINGS AND CHARACTERISTIC CURVES

KPBC8005 THRU KPBC810

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

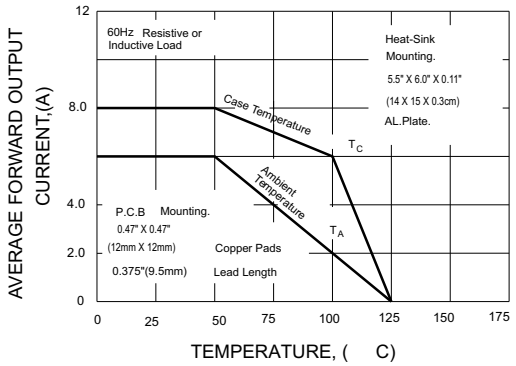


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

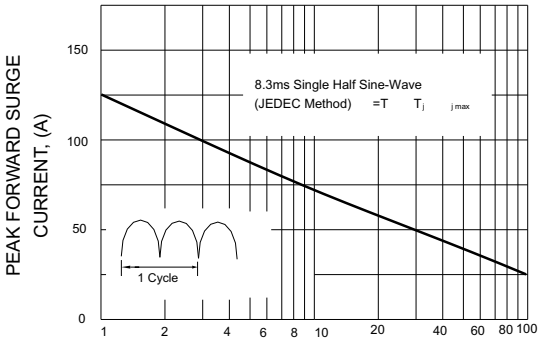


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

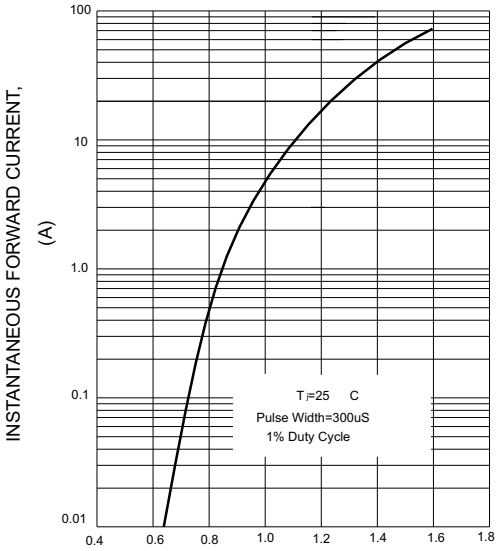


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

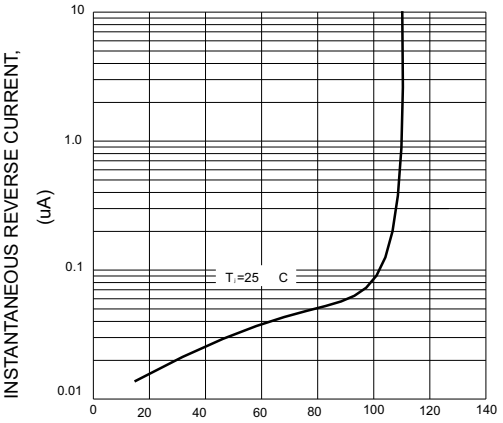


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT