



SINGLE-PHASE BRIDGE RECTIFIER

KBPC8005 THRU KBPC810

**VOLTAGE RANGE
CURRENT**

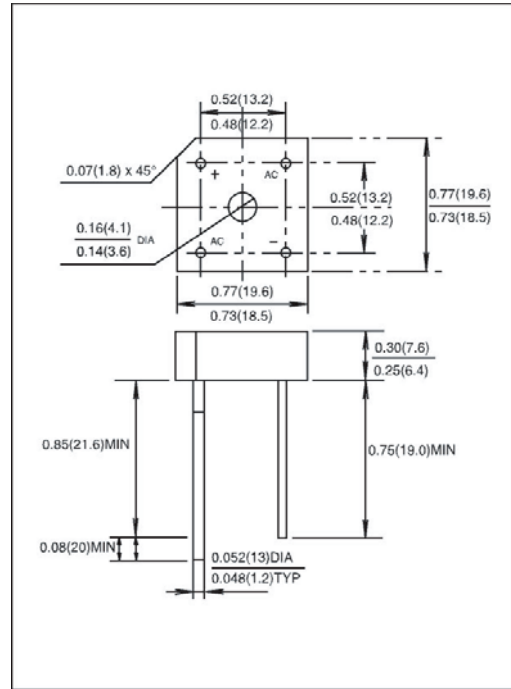
**50 to 1000 Volts
8.0 Ampere**

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. Torque 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)		I_{fsm}	125						Amps	
Rating for Fusing (t<8.3ms)		I^2t	64						A ² s	
Maximum Instantaneous Forward Voltage Drop per bridge element at 4.0A		V_F	1.1						Volts	
Maximum DC Reverse Current at rated DC blocking voltage per element		TA=25°C I_R	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.



FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

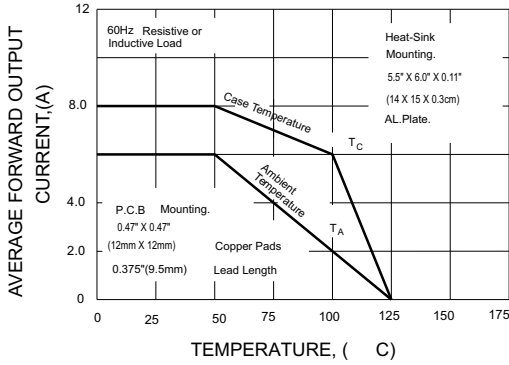


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

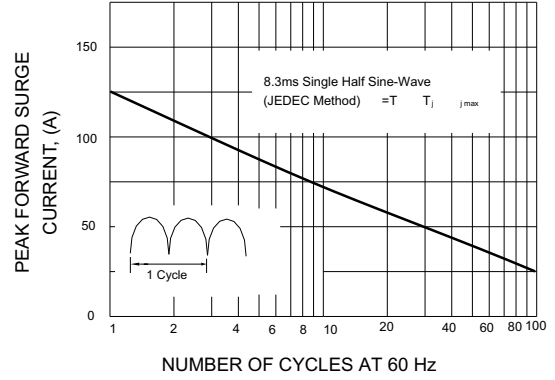


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

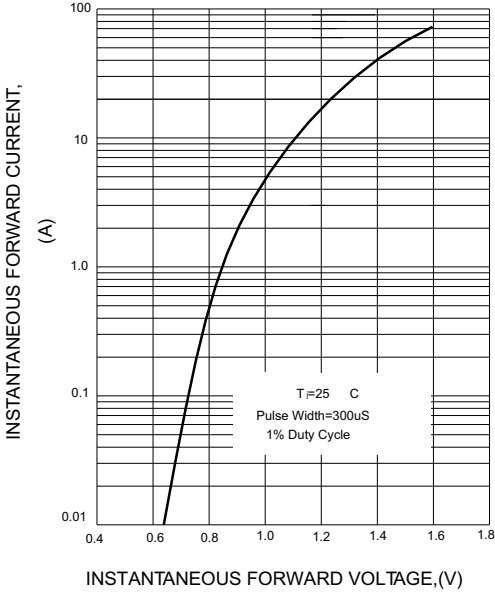


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

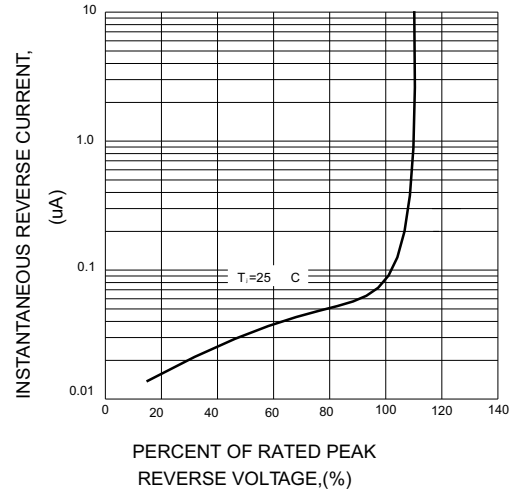


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

