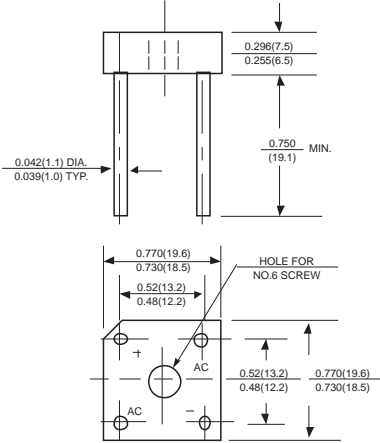




# KPBC8005 THRU KPBC810 AND BR805 THRU BR810 SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 8.0 Amperes

## BR-8



Dimensions in inches and (millimeters)

## FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Ideal for printed circuit boards
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 260°C/10 seconds, at 5 lbs. (2.3kg) tension

## MECHANICAL DATA

**Case:** Molded plastic body

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Polarity:** Polarity symbols marked on case

**Mounting:** Thru hole for #6 serew, 5in.-lbs. torque max.

**Weight:** 0.20 ounce, 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 current derate by 20%.

	SYMBOLS	KPBC 8005 BR805	KPBC 801 BR81	KPBC 802 BR82	KPBC 804 BR84	KPBC 806 BR86	KPBC 808 BR88	KPBC 810 BR810	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 output rectified current at	$I_{AV}$	$T_C=50^{\circ}C$ (Note 1)							8.0	Amps
		$T_C=100^{\circ}C$ (Note 1)							6.0	
		$T_A=50^{\circ}C$ (Note 2)							6.0	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$								125.0	Amps
Rating for Fusing( $t<8.3ms$ )	$I^2t$								64	A <sup>2</sup> 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	$I_R$	$T_A=25^{\circ}C$							10	$\mu A$
		$T_A=100^{\circ}C$							1.0	mA
Isolation voltage from case to leads	$V_{ISO}$								2500	$V_{AC}$
Typical Thermal Resistance (Note 1)	$R_{qJA}$								6.0	$^{\circ}C/W$
Operating junction temperature range	$T_J$								-55 to +125	$^{\circ}C$
storage temperature range	$T_{STG}$								-55 to +150	$^{\circ}C$

NOTES:

1. Unit mounted on 8.7" x 8.7" x 0.24" thick (22x22x0.6cm) Al. plate.

2. Unit mounted on P.C. board with 0.47" x 0.47" (12x12mm) copper pads, 0.375" (9.5mm) lead length.

# RATINGS AND CHARACTERISTIC CURVES KPBC8005 THRU KPBC810 AND BR805 THRU BR810

