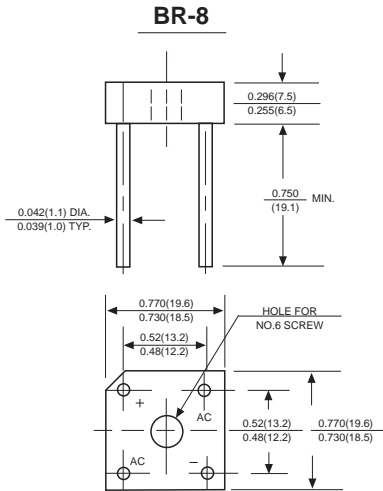


KPBC8005 THRU KPBC810 AND BR805 THRU BR810

SILICON BRIDGE RECTIFIERS

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



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 current at	$I_{(AV)}$	$T_C=50^{\circ}C$ (Note 1)							8.0	Amps
rectified current at		$T_C=100^{\circ}C$ (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 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	I_R	$T_A=25^{\circ}C$							10	mA
		$T_A=100^{\circ}C$							1.0	mA
Isolation voltage from case to leads	V_{ISO}	2500							V_{AC}	
Typical Thermal Resistance (Note 1)	R_{qJA}	6.0							°C/W	
Operating junction temperature range	T_J	-55 to +125							°C	
storage temperature range	T_{STG}	-55 to +150							°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.