# Suntan<sub>®</sub> Su<sub>®</sub>

## **KBPC8005 THRU KBPC810**

### SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 8.0 Ampere

#### FEATURES

- ♦ High forward surge current capability
- ◆ Ideal for printed circuit board
- ♦ High isolation voltage from case to leads
- ♦ High temperature soldering guaranteed:

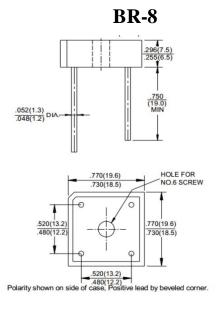
260°C /10 second, at 5 lbs. (2.3kg) tension.

#### Mechanical Data

- ♦ Case: Molded plastic body
- ◆ Terminal: Lead solderable per MIL-STD-202E

method 208C

- ◆ Polarity: Polarity symbols molded on case
- ♦ Mounting: Thru hole for #6 screw, 5.0 in.-lbs torque max
- ♦ Weight:0. 20ounce, 5.62 grams



**Dimensions in inches and (millimeters)** 

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

#### Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	KBPC 8005	KBPC 801	KBPC 802	KBPC 804	KBPC 806	KBPC 808	KBPC 810	UNIT
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V <sub>RRM</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward		т	8.0							Amps
Rectified Output Current at TC=100 °C		I (AV)								
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		Ifsm	175							Amps
Rating for Fusing(t<8.3ms)		I <sup>2</sup> t	64							$A^2S$
Maximum Instantaneous Forward Voltage at 4.0A		VF	1.0							Volts
Maximum DC Reverse Current at rated	Ta=25°C	т	5.0							μAmps
DC blocking voltage	Ta=125℃	— Ir	1.0							mAmps
Isolation Voltage from case to leads		V <sub>ISO</sub>	2500						V <sub>AC</sub>	
Typical Thermal Resistance (Note 1)		Rөjc	6.0							°C/W
Operating Temperature Range		T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range		Tstg	-55 to +150							°C

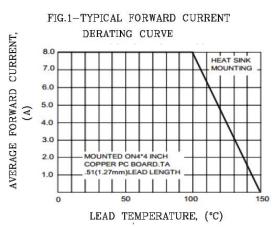
Note: 1. Unit mounted on 8.7"  $\times$  8.7"  $\times$  0.24" thick (22  $\times$  22  $\times$  0.6 cm) Al. plate.

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#### **RATING AND CHARACTERISTIC CURVES KBPC8005 THRU KBPC810**



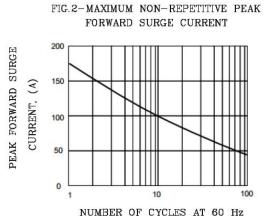


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

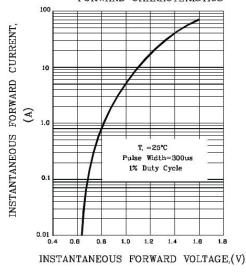


FIG.4-TYPICAL REVERSE CHARACTERISTICS

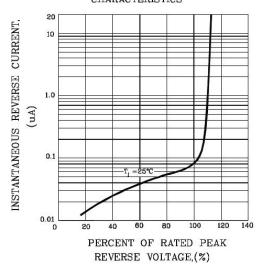
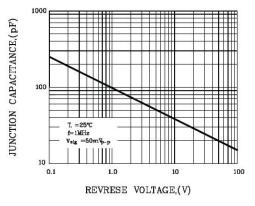


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.