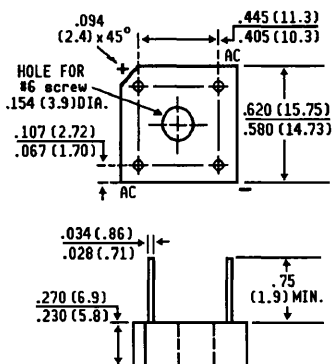
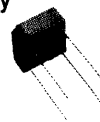


KBPC1005 THRU KBPC110

GLASS PASSIVATED SINGLE-PHASE SILICON BRIDGE RECTIFIER
VOLTAGE - 50 to 1000 Volts CURRENT - 3.0 Amperes

FEATURES

- ◆ This series is UL recognized under component index, file number E54214
- ◆ High temperature metallurgically bonded internal rectifiers
- ◆ Plastic material used carries Underwriters Laboratory flammability recognition 94V-O
- ◆ Glass passivated cavity - free rectifier junctions
- ◆ Typical I_R less than $0.1 \mu A$
- ◆ High temperature soldering guaranteed: 265° C / 10 seconds / .375", (9.5mm) lead length / 5lbs., (2.3 kg) tension



Polarity shown on side of case: positive lead by beveled corner

Dimensions in inches and millimeters

MECHANICAL DATA

- Case:** Void-free plastic package
- Terminals:** Plated leads solderable per MIL-STD-202, Method 208
- Mounting:** Thru hole for #6 screw
- Mounting Position:** Any
- Weight:** 0.2 ounces, 5.5 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified
 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

	SYMBOLS	KBPC 1005	KBPC 101	KBPC 102	KBPC 104	KBPC 106	KBPC 108	KBPC 110	UNITS
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 $T_C=50^\circ C$ (Note 1) $T_A=25^\circ C$ (Note 2)	$I_{(AV)}$				3.0				Amps
Peak Forward Surge Current Single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}				50.0				Amps
Maximum Instantaneous Forward Voltage drop per element at 1.5A	V_F				1.1				Volts
Maximum DC Reverse Leakage at Rated DC Blocking Voltage per element $T_A=25^\circ C$ $T_A=100^\circ C$	I_R				10.0				μA
Typical Junction Capacitance per element (Note 3)	C_J				20.0				pf
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$				10.0				$^\circ C/W$
Operating Temperature Range	T_J				-50 to +150				$^\circ C$
Storage Temperature Range	T_{STG}				-50 to +150				$^\circ C$

NOTES:

1. Bridge mounted on a 4" x 4" x .11 THK (10.5cm x 10.5cm x 0.3cm.) AL PLate
2. Bridge mounted on P.C. Board .375", (9.5mm) lead lengths with .47" sq. (12 mm sq.) Copper Pads
3. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

RATINGS AND CHARACTERISTIC CURVES KBPC1005 THRU KBPC110

FIG. 1 — DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

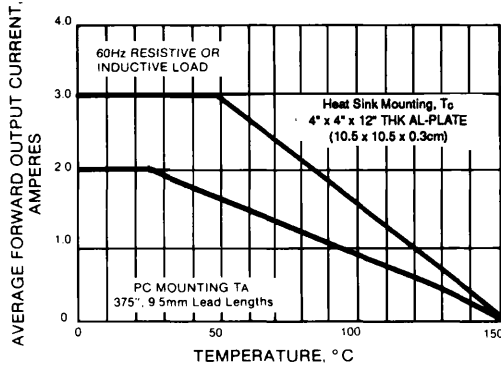


FIG. 2 — MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

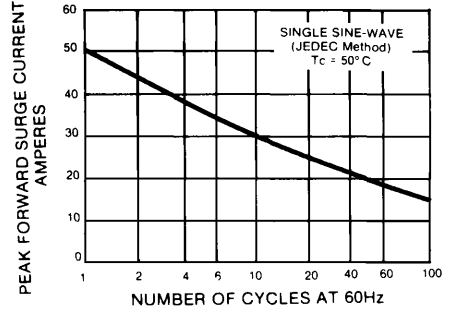


FIG. 3 — TYPICAL FORWARD CHARACTERISTICS PER ELEMENT

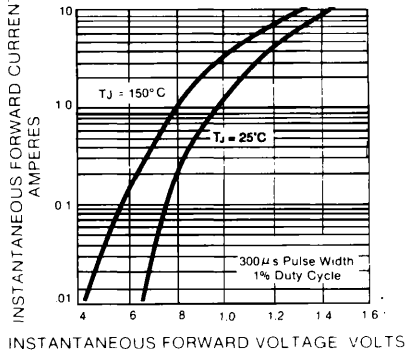


FIG. 4 — TYPICAL REVERSE CHARACTERISTICS

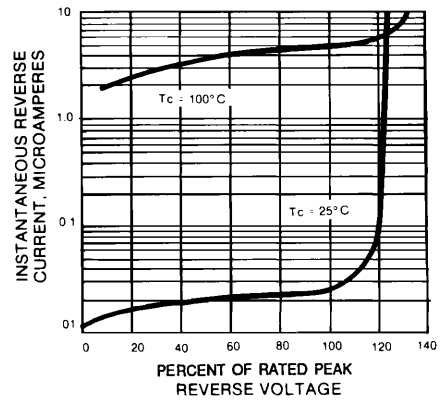


FIG. 5 — TYPICAL JUNCTION CAPACITANCE PER ELEMENT

