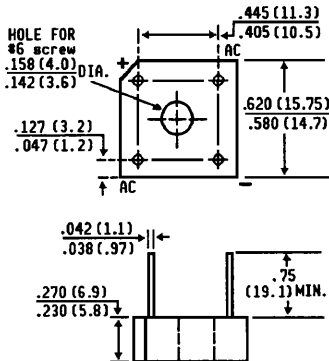


KBPC6005 THRU KBPC610

SINGLE - PHASE SILICON BRIDGE RECTIFIER
VOLTAGE - 50 to 1000 Volts CURRENT - 6.0 Amperes

FEATURES

- ◆ This series is UL recognized under component index, file number E54214
- ◆ Plastic material used carries Underwriters Laboratory Flammability recognition 94V-O
- ◆ High surge capability
- ◆ Ideal for printed circuit board
- ◆ Typical I_R less than $.1 \mu A$
- ◆ High temperature soldering guaranteed $250^\circ C / 10$ 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: Reliable low cost construction utilizing molded plastic technique

Terminals: Plated Lead solderable per MIL-STD-202, Method 208

Mounting Position: Any

Weight: 0.2 ounce, 5.5 gram

Mounting Torque: 5 in. lb. max.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at $25^\circ C$ ambient temperature unless otherwise specified
 Resistive or inductive load, 60 Hz.
 For capacitive load, derate current by 20%

		KBPC 6005	KBPC 601	KBPC 602	KBPC 604	KBPC 608	KBPC 608	KBPC 610	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 $T_C = 100^\circ C$ (Note 1) $T_A = 25^\circ C$ (Note 2)	$I_{(AV)}$				6.0				Amps
Peak Forward Surge Current Single sine-wave superimposed on rated load (JEDEC Method) at $T_J = 150^\circ C$	I_{FSM}				3.0				Amps
Maximum Instantaneous Forward Voltage drop per element at 3.0A	V_F				1.2				Volts
Maximum Reverse Leakage at Rated DC Blocking Voltage $T_A = 25^\circ C$ $T_A = 100^\circ C$	I_R				10.0				μA mA
Maximum A.C. Operating Junction Temperature	T_J				+150				$^\circ C$
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$				8.0				$^\circ C/W$
DC Operating Temperature Range	T_C				-50 to +125				$^\circ C$
Storage Temperature Range	T_{STG}				-50 to +150				$^\circ C$

NOTES:

1. Unit mounted on $6" \times 5.5" \times .11"$ THK (15 cm. x 14 cm. x 0.3 cm.) Al. Plate
2. Unit mounted on P.C. Board at $.375"$, (9.5mm) lead lengths.

RATINGS AND CHARACTERISTIC CURVES KBPC6005 THRU KBPC610

FIG. 1 — DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

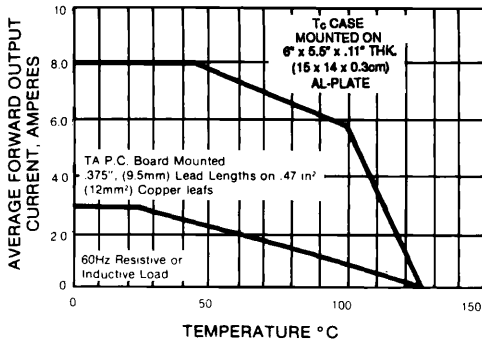


FIG. 2 — MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

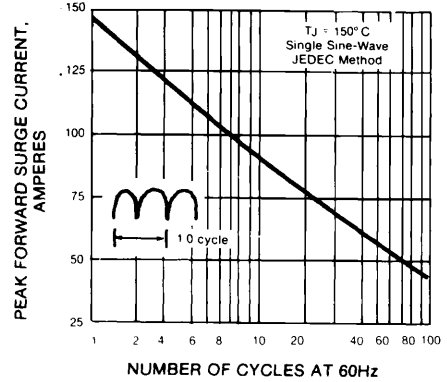


FIG. 3 — TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

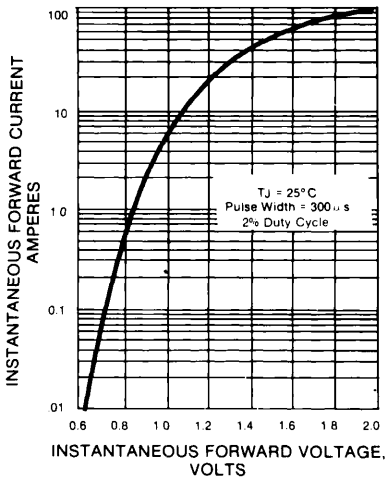


FIG. 4 — TYPICAL REVERSE CHARACTERISTICS PER ELEMENT

