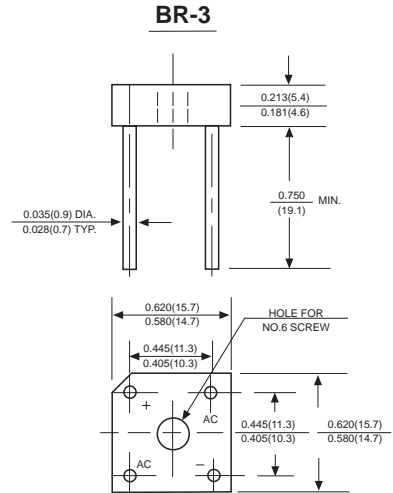


#### FEATURES

- 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 screw, 5in.-lbs. torque max.
- Weight: 0.093 ounce, 2.62 grams



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified.
- Single phase half-wave 60Hz, resistive or inductive load, for current capacitive load derate by 20%.

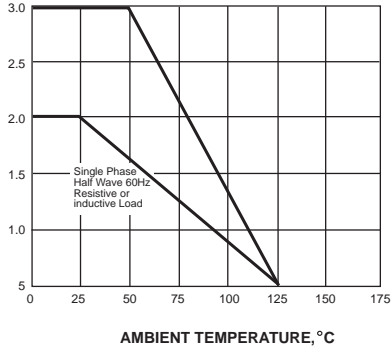
	SYMBOLS	KBPC 1005 BR305	KBPC 101 BR31	KBPC 102 BR32	KBPC 104 BR34	KBPC 106 BR36	KBPC 108 BR38	KBPC 110 BR310	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward output rectified current at $T_A=50^\circ\text{C}$ (Note 2)	$I_{(AV)}$	3.0							Amps
$T_A=25^\circ\text{C}$ (Note 3)		2.0							
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60							Amps
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	15							$\text{A}^2\text{s}$
Maximum instantaneous forward voltage drop per bridge element at 1.5A	$V_F$	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$	$I_R$	10							$\mu\text{A}$
		$T_A=100^\circ\text{C}$							0.5
Typical Junction Capacitance (Note 1)	$C_J$	20							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	12							$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-55 to +125							$^\circ\text{C}$
storage temperature range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

**NOTES:**

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 4.0" x 4.0" x 0.11" thick (10.5x10.5x0.3cm) Al. plate.
3. Unit mounted on P.C. board with 0.5" x 0.5" (12x12mm) copper pads, 0.375" (9.5mm) lead length.

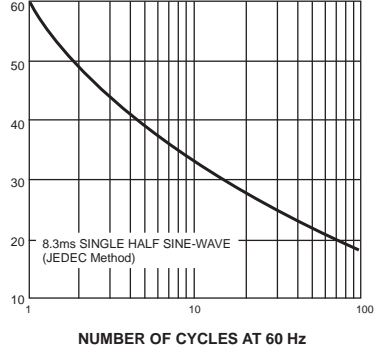
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

**FIG. 1- FORWARD CURRENT DERATING CURVE**

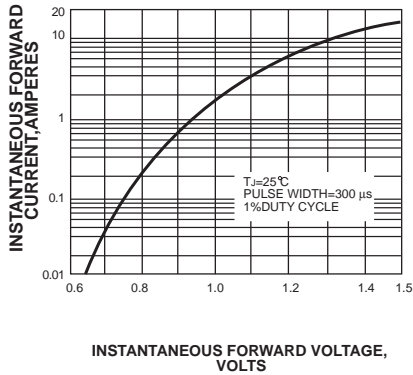


PEAK FORWARD SURGE CURRENT, AMPERES

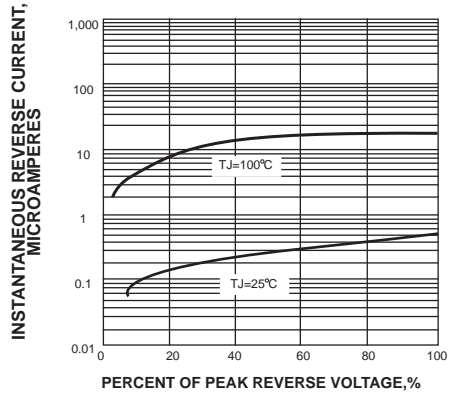
**FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

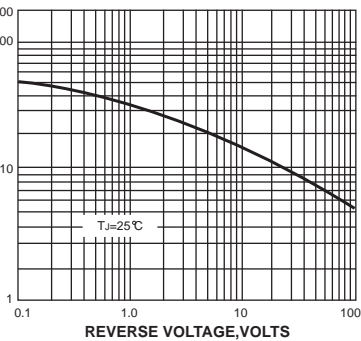


**FIG. 4- TYPICAL REVERSE CHARACTERISTICS**



JUNCTION CAPACITANCE, pF

**FIG. 5- TYPICAL JUNCTION CAPACITANCE**



TRANSIENT THERMAL IMPEDANCE, °C/W

**FIG. 6- TYPICAL TRANSIENT THERMAL IMPEDANCE**

