

### FEATURES

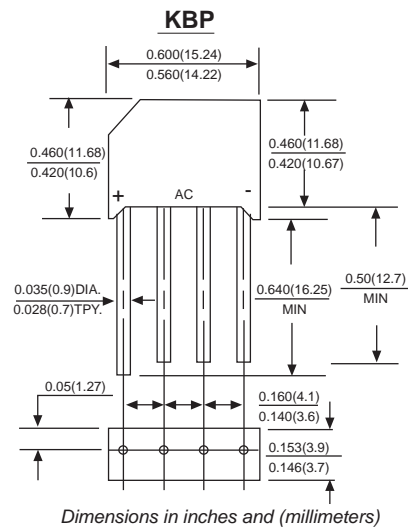
- \* Ideal for printed circuit board
- \* Low forward voltage
- \* Low leakage current
- \* Polarity: marked on body
- \* Mounting position: Any
- \* Weight: 4.8 grams

### VOLTAGE RANGE

600 to 1000 Volts

### CURRENT

3.0 Ampere



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	KBP306	KBP308	KBP310	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	600	800	1000	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Length at $T_A=50$	$I_{(AV)}$	3.0			Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	70			Amp
Maximum Forward Voltage at 3.0A DC and 25	$V_F$	1.1			Volts
Maximum Reverse Current at $T_A=25$ at Rated DC Blocking Voltage $T_A=100$	$I_R$	10.0 500			uAmp
Typical Junction Capacitance (Note 1)	$C_J$	25			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	30			/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	16			/W
Operating and Storage Temperature Range	$T_J, T_{stg}$	-55 to +150			

#### NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375" (9.5mm) lead length P.C.B. Mounted.

## RATING AND CHARACTERISTIC CURVES (KBP306 THRU KBP310)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

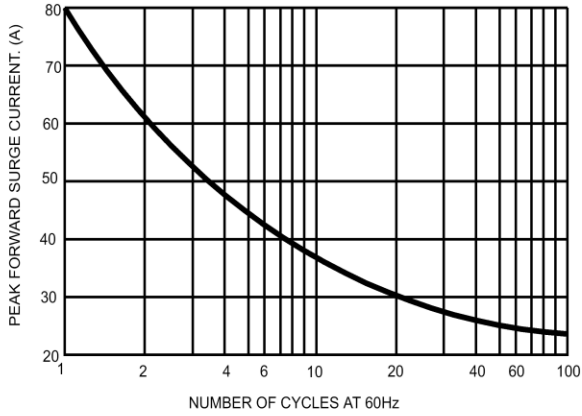


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

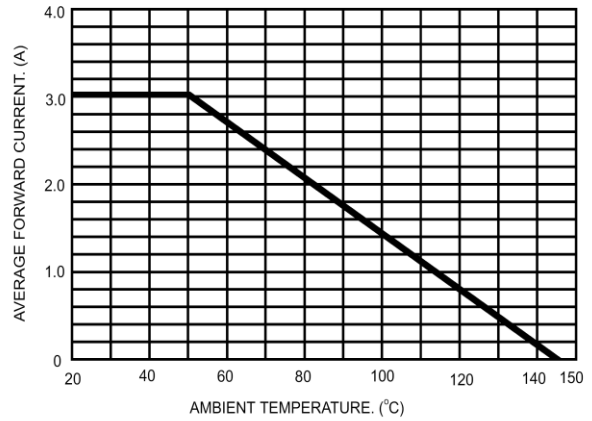


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

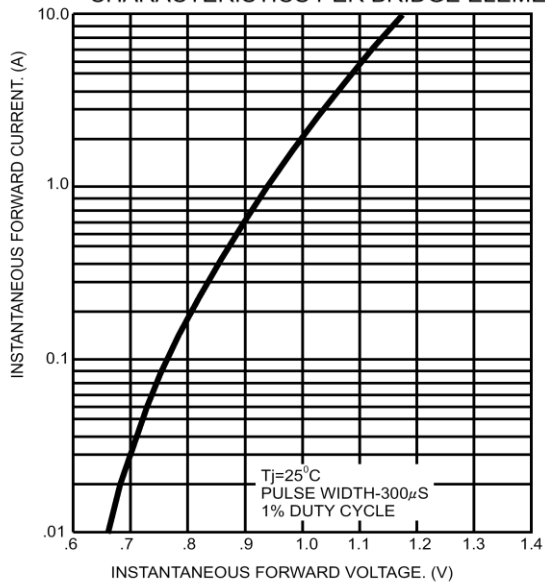


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

