

FEATURES

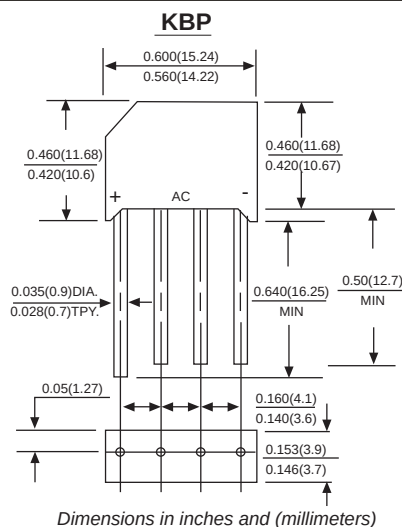
- * Ideal for printed circuit board
- * Low forward voltage
- * Low leakage current
- * Polarity: marked on body
- * Mounting position: Any

VOLTAGE RANGE

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	KBP307	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	Volts
Maximum RMS Voltage	V_{RMS}	700	Volts
Maximum DC Blocking Voltage	V_{DC}	1000	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	3.0	Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80	Amp
Maximum Forward Voltage at 3.0A DC and 25°C	V_F	1.1	Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	10.0 500	μAmp
Typical Junction Capacitance (Note 1)	C_J	25	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	30	°C/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	16	°C/W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150	°C

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 (KBP307)

FIG.2-TYPICAL FORWARD CURRENT

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

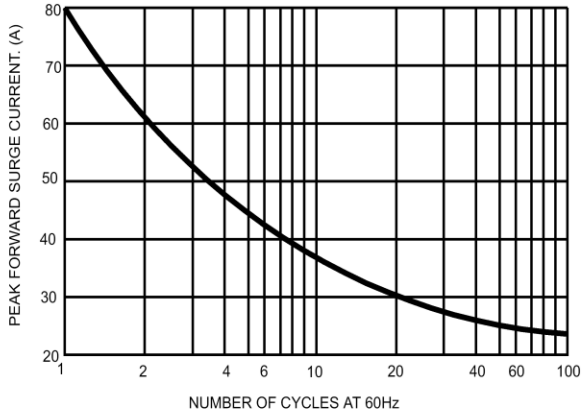


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

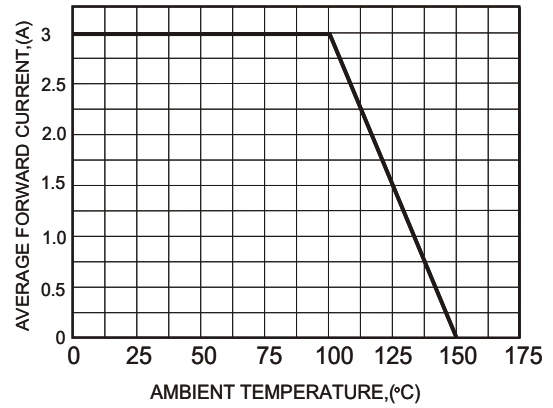


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

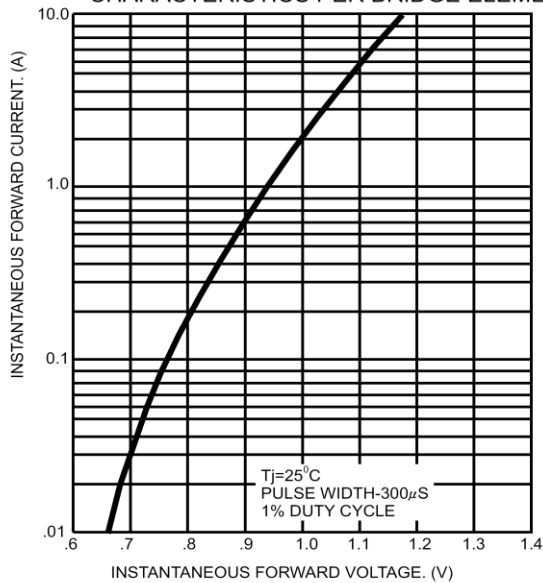


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

