KBP3005 THRU KBP310

Single Phase 3.0 AMPS. Glass Passivated Bridge Rectifiers

Voltage Range: 50 to 1000 Volts Current: 3.0 Amperes

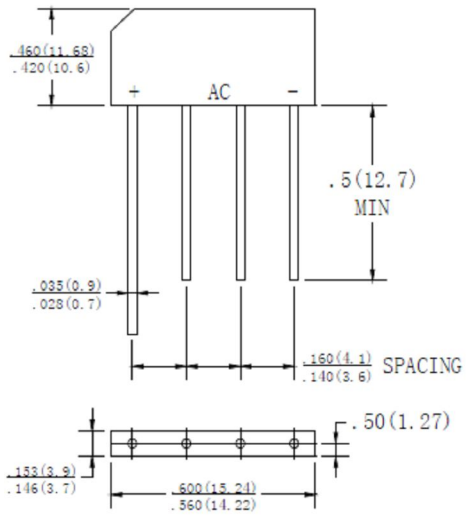
Features

- UL Recognized File # E-230084
- Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- High temperature soldering guaranteed:
  250℃ / 10 seconds / 0.375" (9.5mm)
  lead length at 5 lbs., (2.3 kg) tension

Mechanical Data

- Case: Molded plastic
- Lead: solder plated
- Polarity: As marked

KBP



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

Type Number		KBP 3005	KBP 301	KBP 302	KBP 304	KBP 306	KBP 308	KBP 310	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA=50°C	I(AV)	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	80							A
Maximum Instantaneous Forward Voltage @ 15A	V_F	1.1							V
Maximum DC Reverse Current @ TA=25℃ rated DC blocking voltage per leg TA = 125℃	I_R	10 500							μA
Typical Thermal Resistance (Note)	$R_{\theta JA}$ $R_{\theta JL}$	30 11							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

NOTE： Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.47X0.47"(12X12mm) **Copper Pads**

RATING AND CHARACTERISTIC CURVES

FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELELMENT

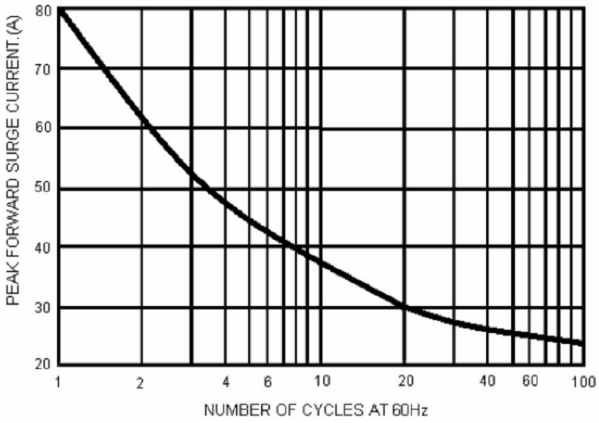


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

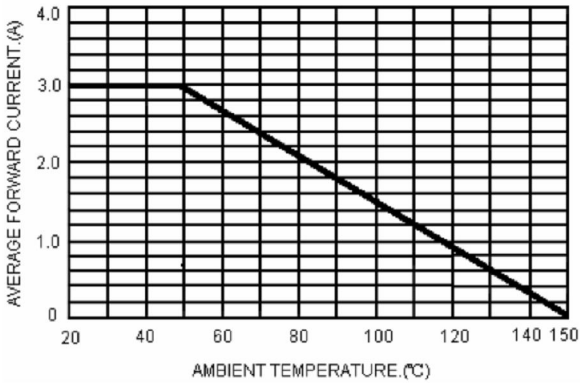


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

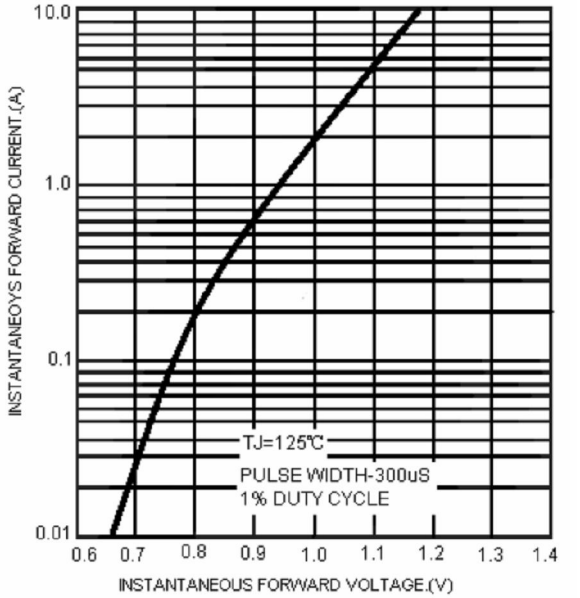


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT