

Bridge Rectifier

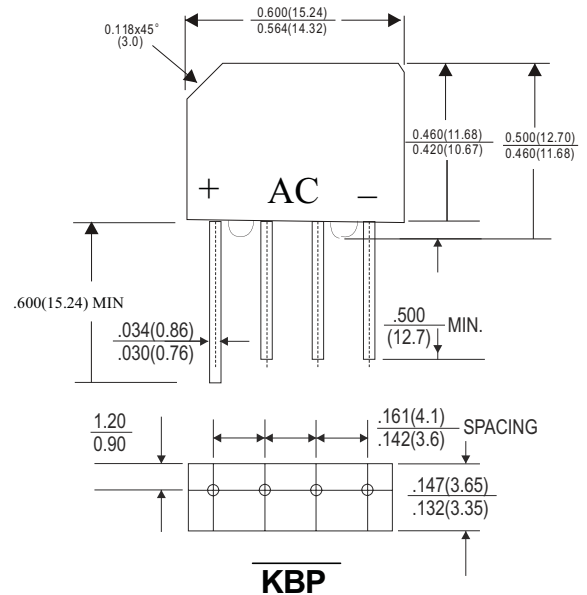
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Polarity : As marked on Body
- Weight : 0.06 ounces, 1.7 grams
- Mounting position : Any

Marking:KBP3005-KBP310



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	KBP 3005	KBP 301	KBP 302	KBP 304	KBP 306	KBP 308	KBP 310	UNIT
Maximum recurrent peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @TA=50°C	IF	3.0							A
I ² t Rating for fusing (t < 8.3ms)	I ² t	26							A ² sec
Peak forward surge current, single sine-wave superimposed on rated load (JEDEC method)	IFSM	80							A
Maximum instantaneous Forward Voltage Drop per element at 1.5A DC	VF	1.1							V
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C	IR	5.0 500							uA
Typical junction capacitance per leg(note1)	CJ	25							pF
Typical Thermal Resistance Per leg (note2)	RθJA RθJC	30 11							°C/W
Operating & Storage Temperature Range	TJ&TSTG	-55 to +150							°C

note1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts

note2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.47x0.47" (12x12mm) copper pads.

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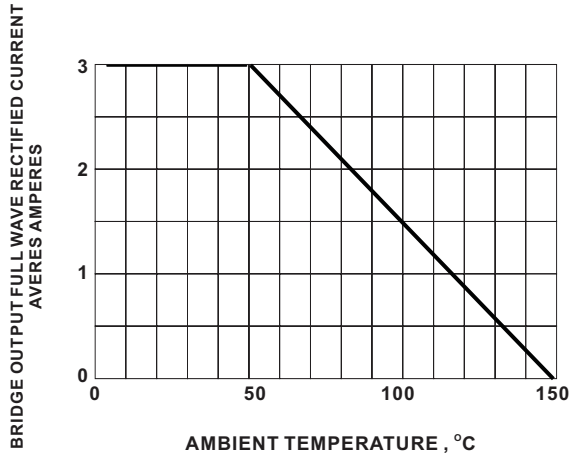


Fig.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

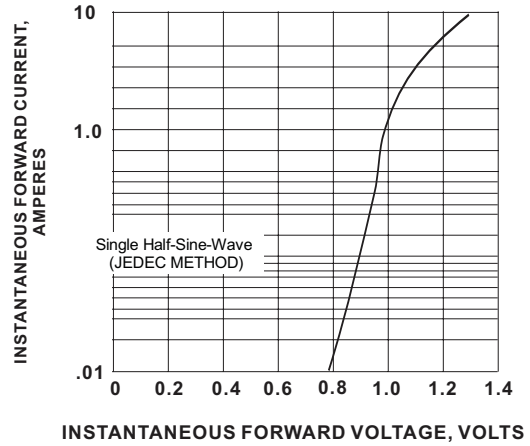


Fig.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

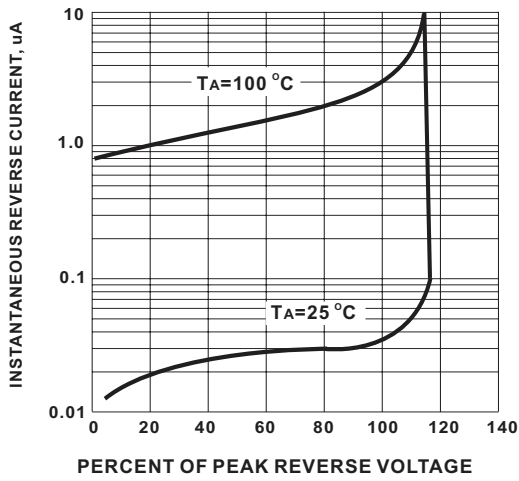


Fig.3 TYPICAL PEAK REVERSE CHARACTERISTICS

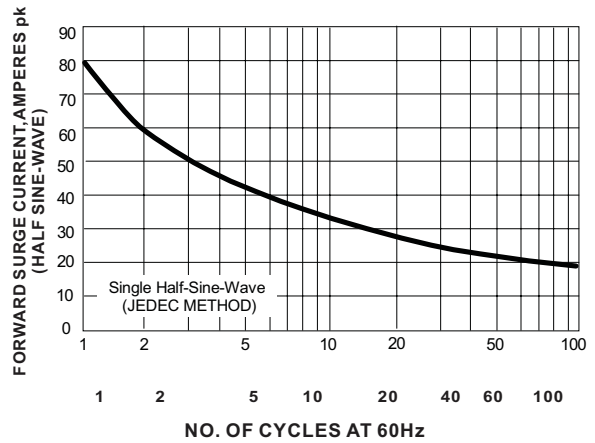


Fig.4 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT