

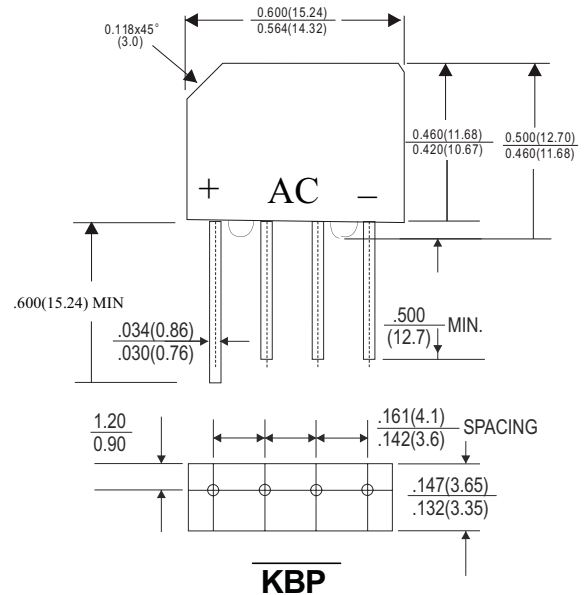
KBP3005 --- KBP310

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



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.

KBP3005 --- KBP310 CHARACTERISTIC CURVES

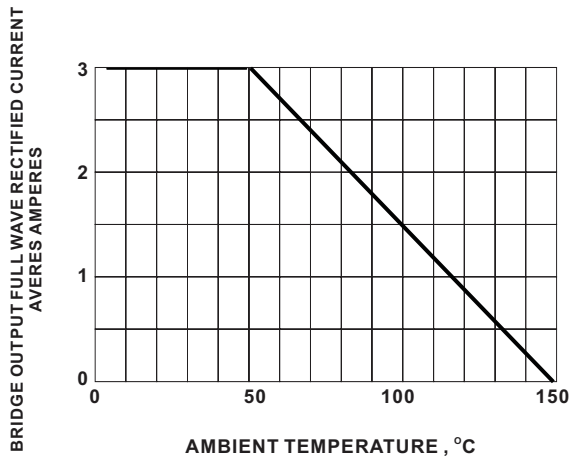


Fig.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

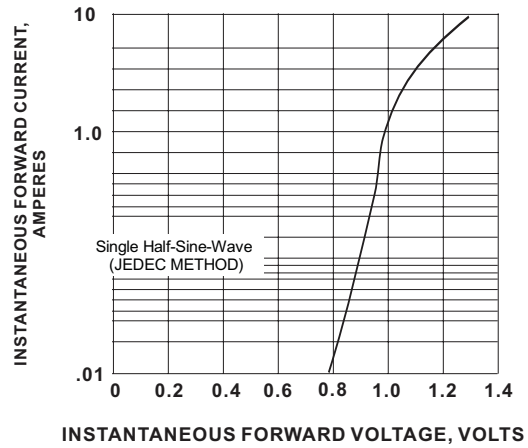


Fig.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

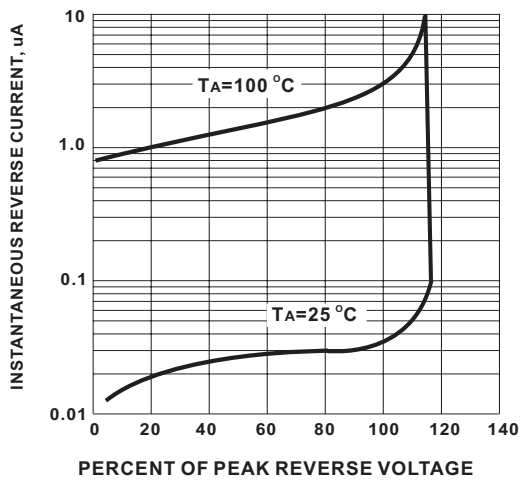


Fig.3 TYPICAL PEAK REVERSE CHARACTERISTICS

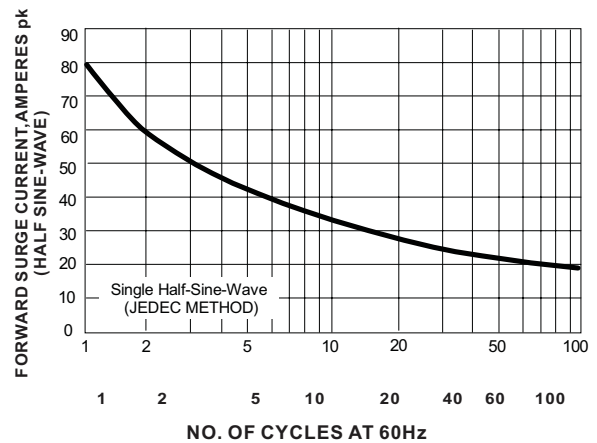


Fig.4 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT