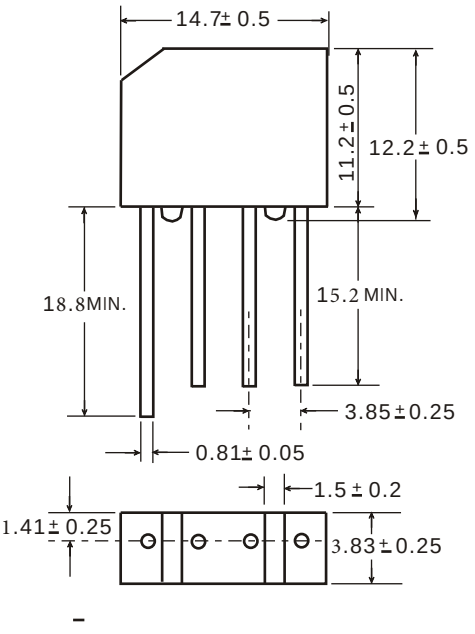
KBP301 thru KBP307

3.0 A Single-Phase GPP Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V



Dimensions in millimeters(1mm =0.0394")

• Features

- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Ideal for printed circuit board mounting
- High surge current capability
- High temperature soldering guaranteed 265℃/10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique
Terminals: Plated leads solderable per MIL-STD-202, Method 208
Mounting Position: Any
Weight: 0.10 ounce, 2.53 grams (approx)

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	KBP301	KBP302	KBP303	KBP304	KBP305	KBP306	KBP307	unit
Maximum repetitive 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 output current at TA=50°C	IF(AV)	3.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	50							A
Rating for fusing (t<8.3ms)	I^2t	10							A^2sec
Typical thermal resistance per element (1)	ReJA	50.0							°C / W
Typical junction capacitance per element (2)	Cj	24							pF
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							℃

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	KBP301	KBP302	KBP303	KBP304	KBP305	KBP306	KBP307	Unit
Maximum instantaneous forward voltage drop per leg at 2.0	VF	1.1							V
Maximum DC reverse current at rated DC blocking voltage per element TA =25°C TA =100°C	IR	10 500							μA

Notes: (1)Thermal resistance from Junction to Ambemt on P.C.board mounting.
(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

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Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

KBP301 thru KBP307

Fig. 1 Derating Curve for Output Rectified Current

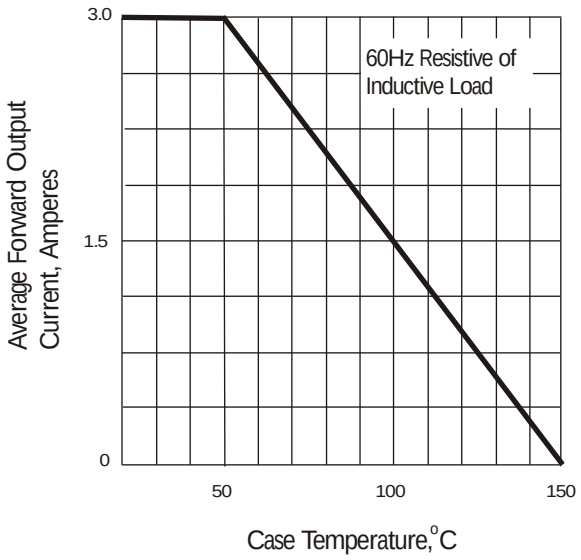


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

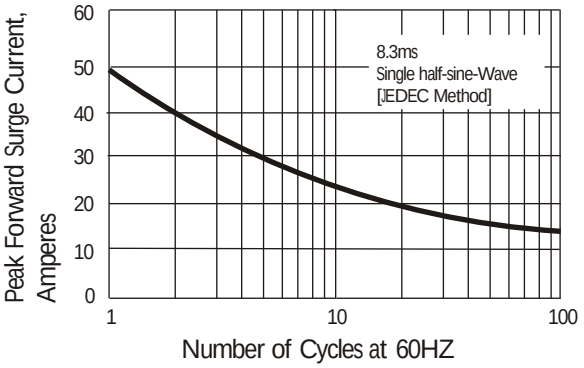


Fig. 3 Typical Instantaneous Forward Characteristics

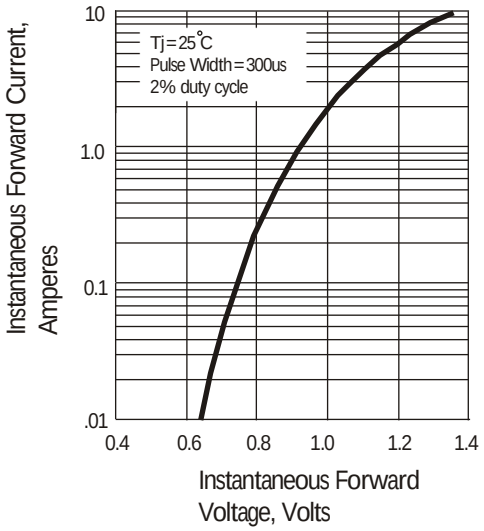


Fig. 4 Typical Reverse Characteristics

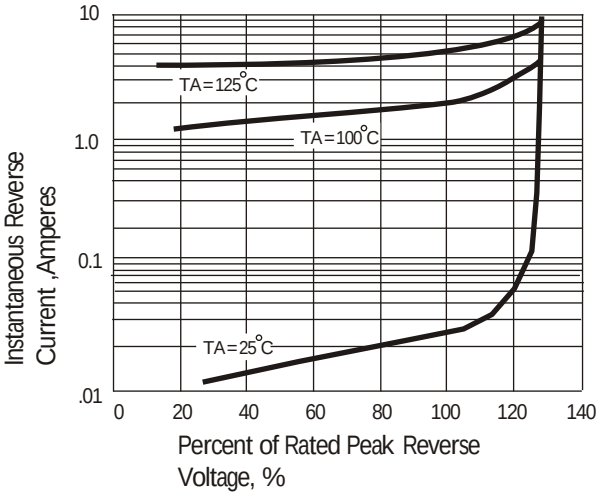
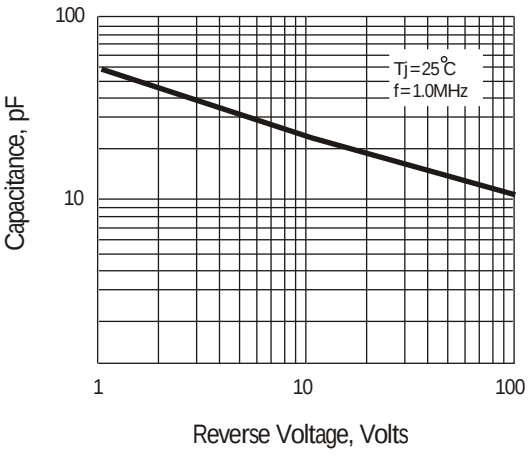


Fig. 5 Typical Junction Capacitance



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