

#### **Features**

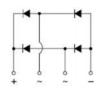
- This series is UL listed under the Recognized Component Index, file number E142814
- Ideal for printed circuit board mounting
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 265°C /10 seconds at 5 lbs (2.3kg) tension



**KBP** 

## **Package Marking and Ordering Information**

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Product ID	Pack	Marking	Qty(PCS)	
KBP307	KBP	KBP307	500	



## Maxmim Ratings (Ta=25 unless otherwise noted)

Parameter	Symbol	KBP307	Unit
Maximum repetitive peak reverse voltage	VRRM	800	٧
Maximum RMS bridge input voltage	VRMS	560	V
Maximum DC blocking voltage	VDC	800	V
Maximum average forward rectified output current at TA=50°C	IF(AV)	3.0	Α
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	80	Α
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t	15.0	A <sup>2</sup> sec
Typical thermal resistance per element (1)	ReJA	10.0	°C/W
Typical junction capacitance per element (2)	Cj	25.0	pF
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150	°C

### **Electrical Characteristics**

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

Parameter	Symbol	KBP307	Unit
Maximum instantaneous forward voltage drop per leg at 3.0A	VF	1.1	V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR	10 500	μΑ

**Notes:** (1)Thermal resistance from Junction to Ambemt on P.C.board mounting. (2)Measured at 3.0MHz and applied reverse voltage of 4.0 volts.



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

Fig. 1 Derating Curve for Output Rectified Current

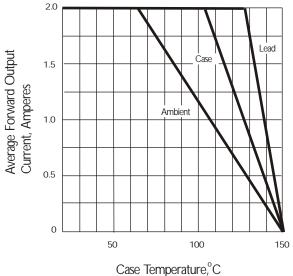


Fig. 3 Typical Instantaneous Forward Characteristics

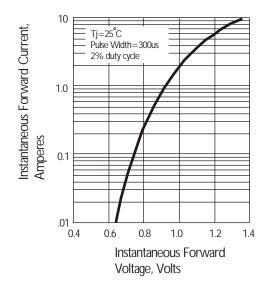


Fig. 2 Maximum Non-repetitive Peak ForwardSurge Current

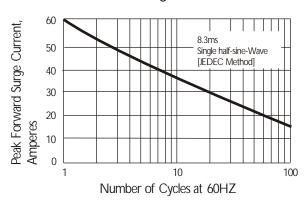


Fig. 4 Typical Reverse Characteristics

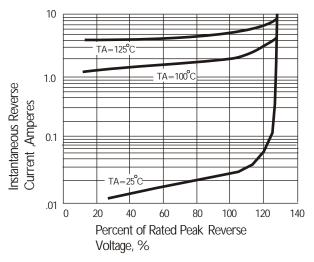
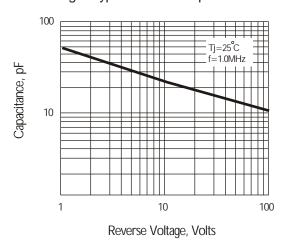


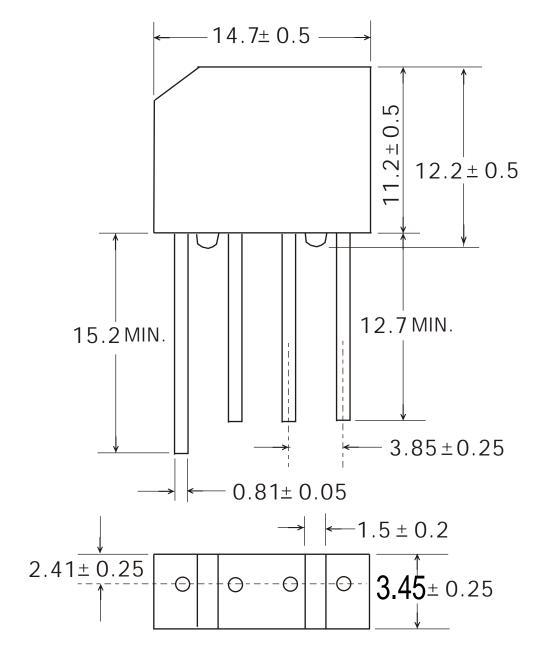
Fig. 5 Typical Junction Capacitance





# **Package Outline Dimensions**

**KBP** 



Dimensions in millimeters(1mm =0.0394")



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