

## 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 ℃ /10 seconds at 5 lbs (2.3kg) tension



# Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
KBP307	KBP		500

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KBP

### MAXIMUM RATINGS (Ta=25 unless otherwise noted)

Parameter	Symbol	KBP307	unit
Maximum repetitive peak reverse voltage	VRRM	800	V
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	А
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	80	A
Rating for fusing ( t<8.3ms)	l <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	μA

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** ( $TA=25^{\circ}C$ Unless otherwise noted)

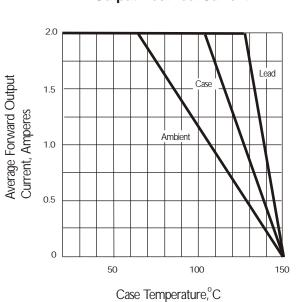
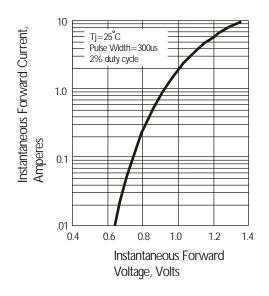


Fig. 1 Derating Curve for Output Rectified Current

#### Fig. 3 Typical Instantaneous Forward Characteristics



Forward Surge Current 60 Peak Forward Surge Current, 8.3ms 50 Single half-sine-Wave [JEDEC Method] 40 30 20 Amperes 10 0 10 100 1 Number of Cycles at 60HZ Fig. 4 Typical Reverse Characteristics 10 TA=125° TA=100°0 1.0 Instantaneous Reverse Current ,Amperes 0.1 TA=25°C .01

Fig. 2 Maximum Non-repetitive Peak



60

Percent of Rated Peak Reverse

80

100

120

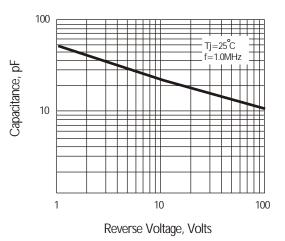
140

0

20

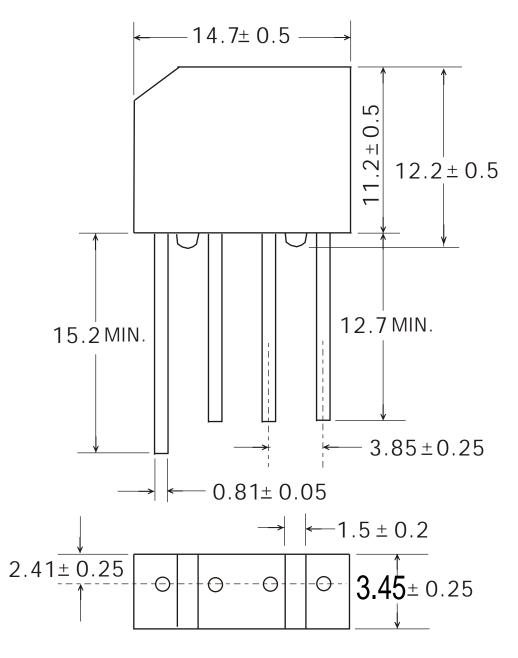
40

Voltage, %





# KBP Package Outline Dimensions



Dimensions in millimeters(1mm =0.0394")



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