

KBP303-A thru KBP309-A

3 A single-phase Bridge Rectifier

Rectifier Reverse voltage 50 to 1000V

KBP

Features

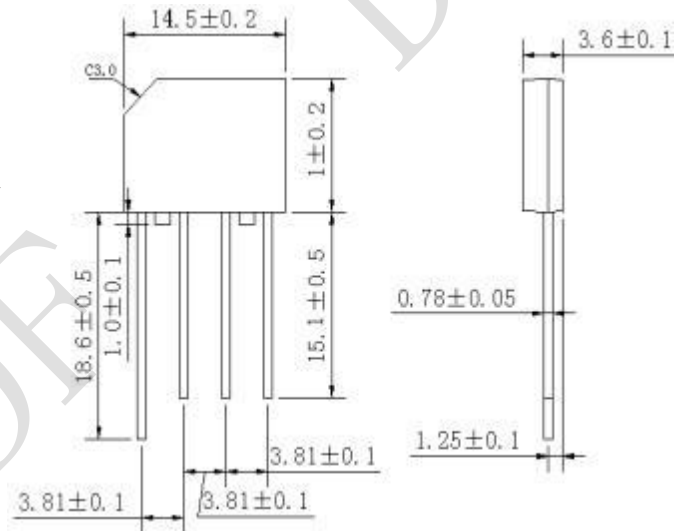
- This series is UL listed under the Recognized Component Index, file number E484648
- Ideal for printed circuit board mounting
- The plastic material used carries underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 265°C / 10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Mounting position: Any



Dimensions in millimeters (1mm = 0.0394")

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		KBP30 3-A	KBP30 5-A	KBP30 7-A	KBP30 9-A	unit
Maximum repetitive peak reverse voltage	VRRM		300	500	700	900	V
Maximum RMS bridge input voltage	VRMS		140	280	420	560	V
Maximum DC blocking voltage	VDC		300	500	700	900	V
Maximum average forward rectified output current at TA=40°C	IF(AV)		3.0				A
Peak forward surge current single sine-wave superimposed on rated load (JE DEC Method)	IFSM		80				A
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		KBP30 3-A	KBP30 5-A	KBP30 7-A	KBP30 9-A	Unit
Maximum instantaneous forward voltage drop per leg at 3.0 A	VF		1.1				V
Maximum DC reverse current at rated TA=25°C DC blocking voltage per element TA=125°C	IR		10 500				UA

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

Rating and characteristic curves(TA=25 °C unless otherwise noted).

KBP3005-A thru KBP310-A

Fig. 1 Derating Curve for Output Rectified Current

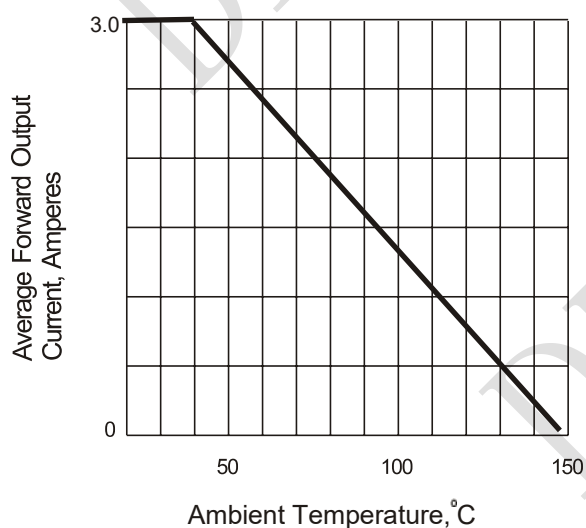


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

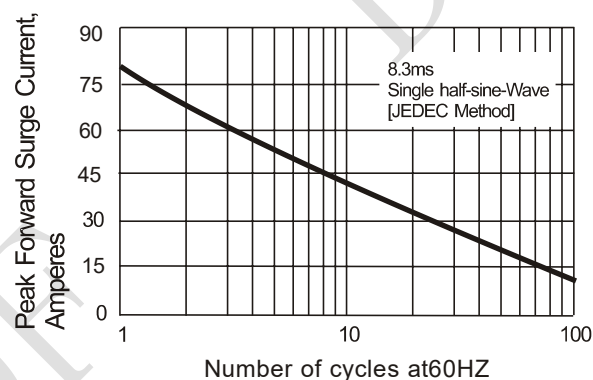


Fig. 3 Typical Instantaneous Forward Characteristics

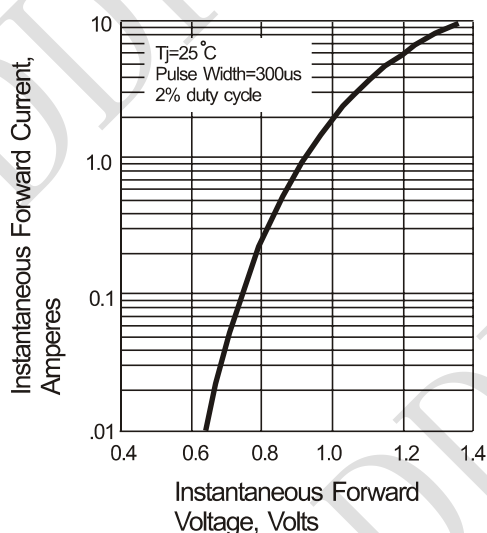


Fig. 4 Typical Reverse Characteristics

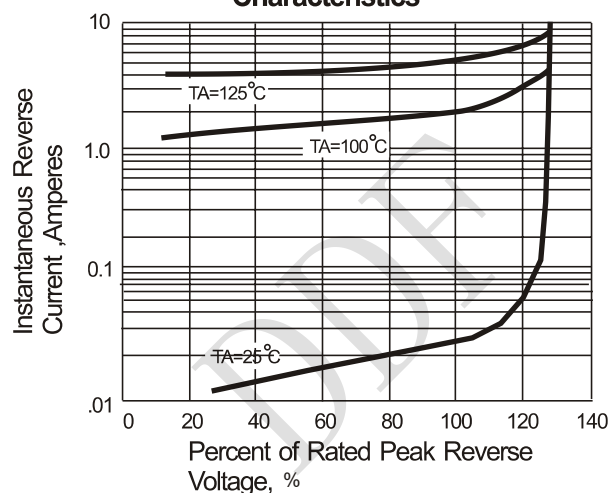


Fig.5 Typical Junction capacitance

