



Bridge Rectifiers

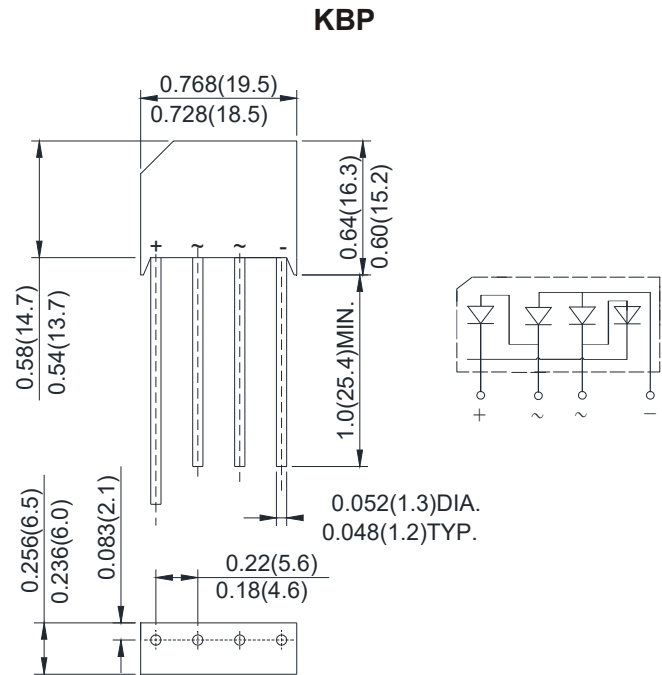
KBP301 THRU KBP310 100 to 1000 V 3.0 A

Typical Applications

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballast, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

Features And Mechanical Data

- Package:KBP
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250 °C/10 seconds at terminals applications.
- Terminals: Tin plated leads, solderable per STD-002 and JESD22-B102
- Polarity: As marked on body



Dimensions in inches and (millimeters)

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%.

	Symbols	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current. Lead Length @Ta(Fig 1)	I(AV)	3.0						Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method) (Rating of per diode)	IFSM	60						Amp
Maximum Instantaneous Peak Forward Voltage @Drop Per Diode at I(AV)	VF	1.1						Volts
Maximum DC reverse current at rated DC blocking voltage per $T_j=25^{\circ}\text{C}$ $T_j=100^{\circ}\text{C}$	IR	5 500						uAmp
Current squared time @1ms≤t≤8.3ms $T_j=25^{\circ}\text{C}$, Rating of per diode	I ² t	15						A ² S
Typical Thermal Resistance	RθJA	30						°C/W
Operating Temperature Range	TJ	-55 to +150						°C
Storage Temperature Range	TSTG	-55 to +150						°C



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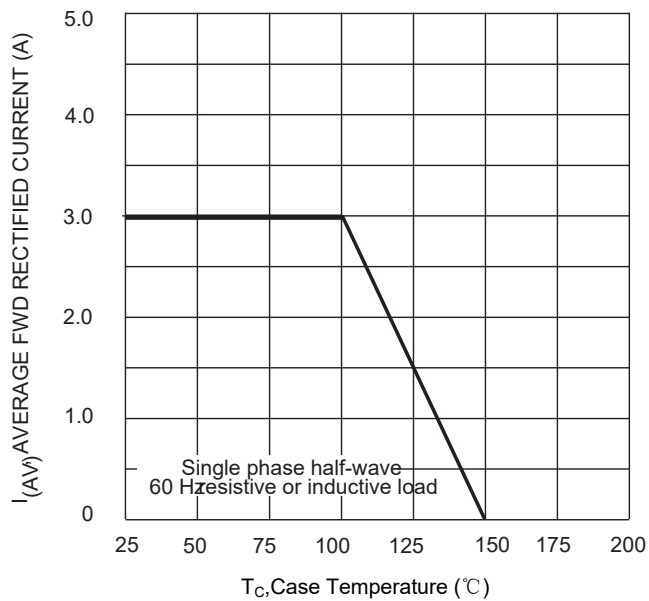


Fig. 1 Forward Derating Curve

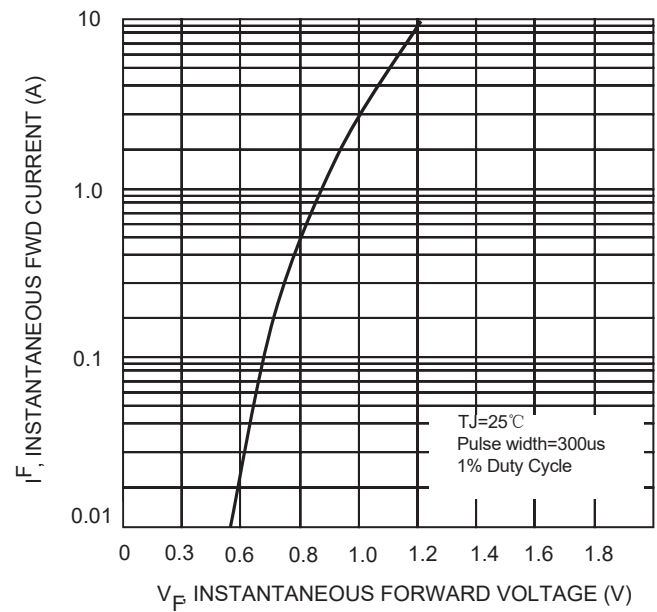


Fig. 2 Typical Forward Characteristics

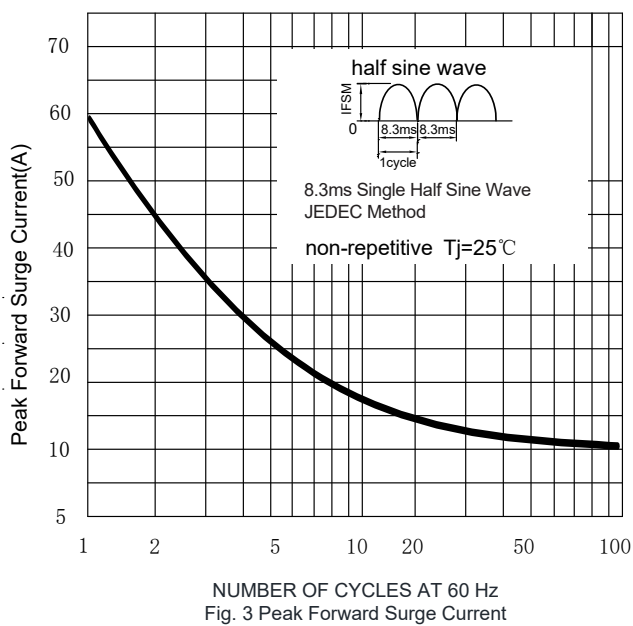


Fig. 3 Peak Forward Surge Current

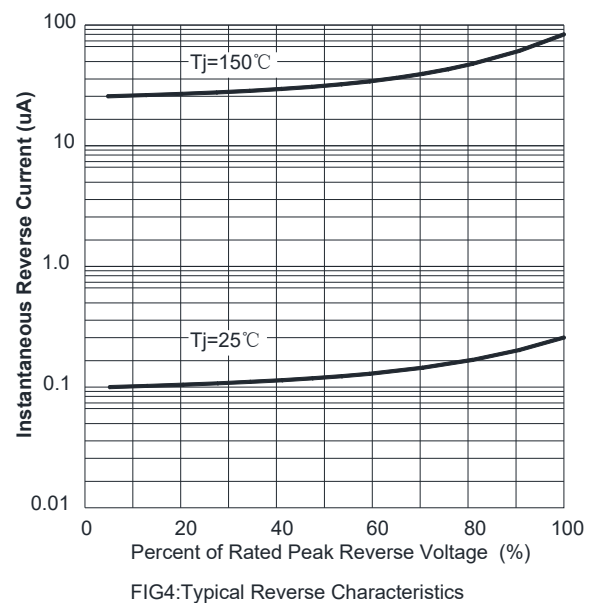


FIG4: Typical Reverse Characteristics