

KBP3005 THRU KBP310



Bridge Rectifiers

Reverse Voltage: 50 to 1000 Volts

Forward Current: 3.0 Ampere

RoHS Device

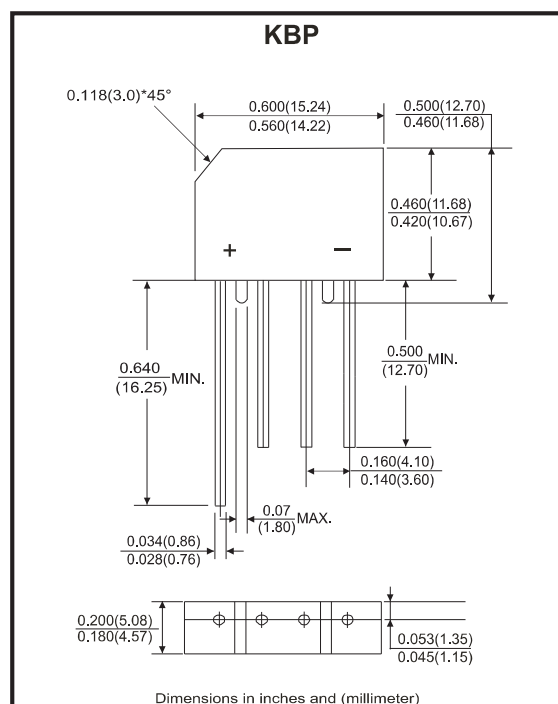


Features

- Surge overload rating -60 amperes peak.
- Ideal for printed circuit board.

Mechanical Data

- Case: Molded plastic body over passivated junctions.
- Epoxy: UL 94V-0 rate flame retardant.
- Polarity: Polarity symbols marked on case.
- Mounting position: Any



Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave ,60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Parameter	Symbol	KBP 3005	KBP 301	KBP 302	KBP 304	KBP 306	KBP 308	KBP 310	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current @ $T_A=50^{\circ}C$	I_{AV}	3.0							A
Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load	I_{FSM}	80							A
Maximum Forward Voltage Drop Per Bridge Element at 2.0A Peak	V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage Per Element	I_R	10.0							μA
Maximum Reverse Current at Rated DC Blocking Voltage Per Element @ $T_J=100^{\circ}C$	I_R	1.0							mA
Operating Temperature Range	T_J	-55 to +150							$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}C$

Rating and Characteristics Curves

Fig.1 - Derating Curve Output Rectified Current

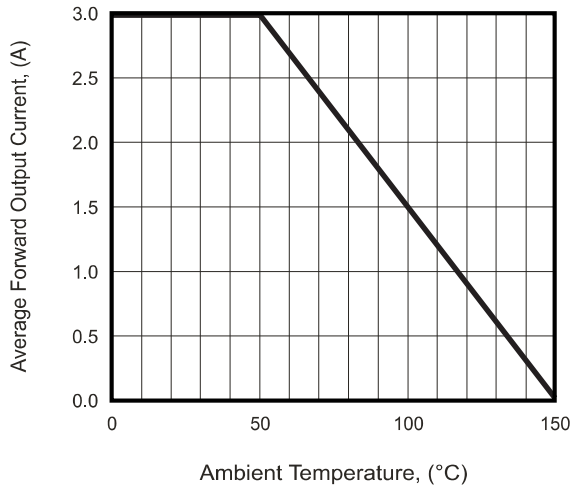


Fig.2 - Max. Forward Surge Current

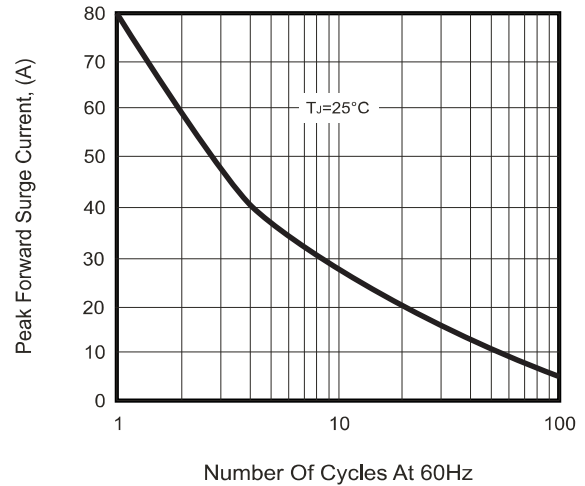


Fig.3 - Typical Forward Characteristics

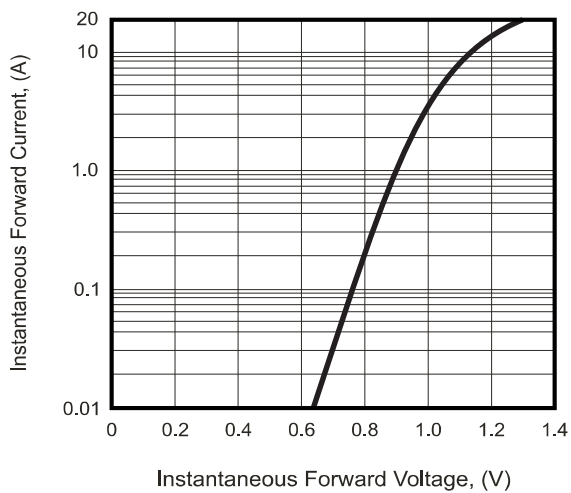
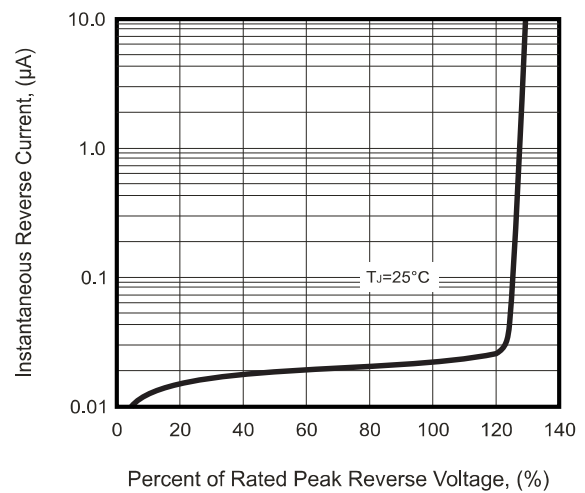
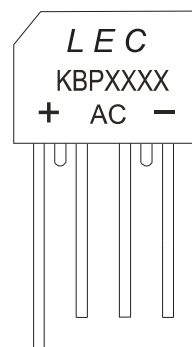


Fig.4 - Typical Reverse Characteristics



Marking Code

Part Number	Marking code	Packaging
KBP3005B	KBP3005	BULK
KBP301B	KBP301	BULK
KBP302B	KBP302	BULK
KBP304B	KBP304	BULK
KBP306B	KBP306	BULK
KBP308B	KBP308	BULK
KBP310B	KBP310	BULK
KBP3005P	KBP3005	TUBE
KBP301P	KBP301	TUBE
KBP302P	KBP302	TUBE
KBP304P	KBP304	TUBE
KBP306P	KBP306	TUBE
KBP308P	KBP308	TUBE
KBP310P	KBP310	TUBE



XXX / XXXX = Product type marking code
LEC = Longmacro Logo

Note:

1) Suffix code after part number to specify packaging item .

Packaging	Code
BULK PACK	B
TUBE PACK	P

Standard Packaging

Case Type	BULK PACK	
	BOX (pcs)	CARTON (pcs)
KBP	500	5,000

Case Type	TUBE PACK	
	TUBE (pcs)	BOX (pcs)
KBP	30	1,200