

KBP4005 THRU KBP410



Bridge Rectifiers

Reverse Voltage: 50 to 1000 Volts

Forward Current: 4.0 Ampere

RoHS Device

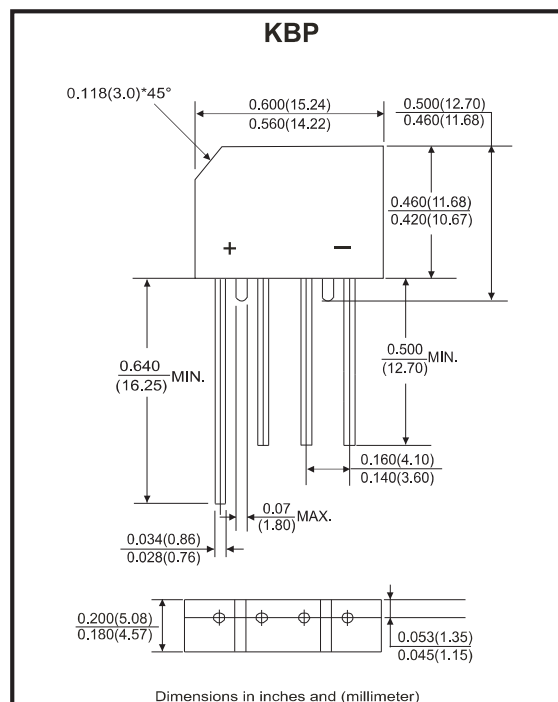


Features

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability

Mechanical Data

- Polarity: Symbol marked on body
- 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 4005	KBP 401	KBP 402	KBP 404	KBP 406	KBP 408	KBP 410	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS 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 Current @ $T_A=100^\circ\text{C}$ (Note 1)	I_{AV}	4.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Super Imposed On Rated Load (JEDEC Method)	I_{FSM}	125							A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	64.8							A^2s
Peak Forward Voltage per Diode at 4.0A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated @ $T_J=25^\circ\text{C}$ DC Blocking Voltage per Diode @ $T_J=150^\circ\text{C}$	I_R	10.0							μA
		1.0							mA
Operating Junction Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

Notes:

1. Mounting conditions, 0.5" lead length maximum.

Company reserves the right to improve product design, functions and reliability without notice.

Rev:1.0

Rating and Characteristics Curves

Fig.1 - Forward Current Derating Curve

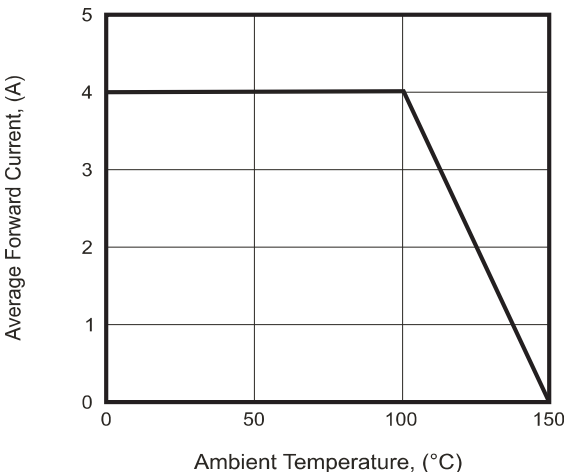


Fig.2 - Maximum Non-Repetitive Surge Current

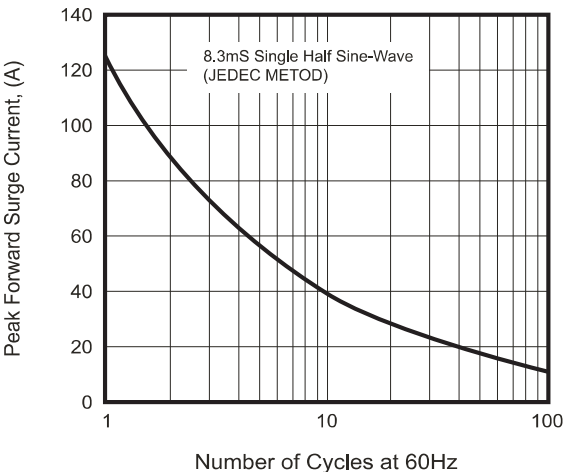


Fig.3 - Typical Reverse Characteristics

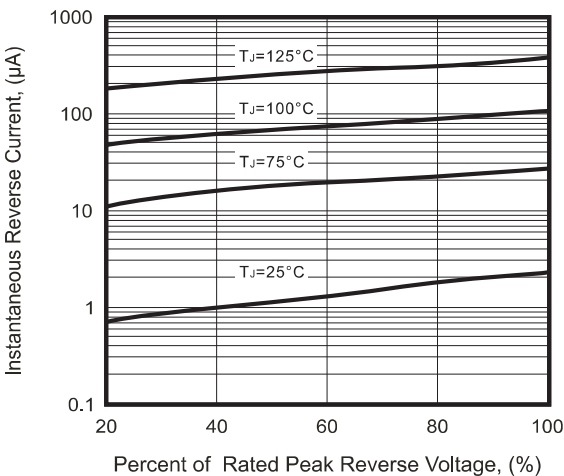
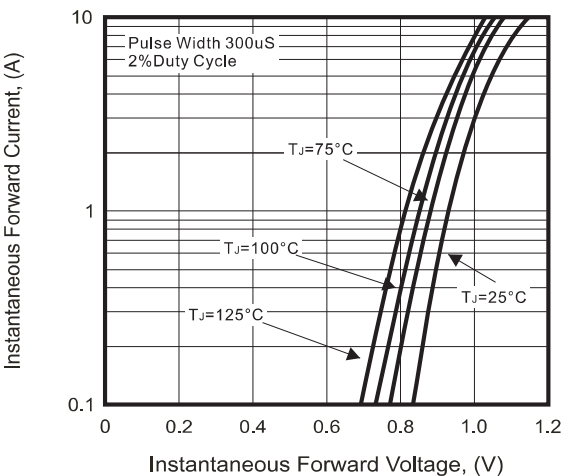
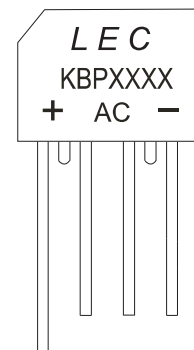


Fig.4 - Typical Forward Characteristics



Marking Code

Part Number	Marking code	Packaging
KBP4005	KBP4005	BULK
KBP401	KBP401	BULK
KBP402	KBP402	BULK
KBP404	KBP404	BULK
KBP406	KBP406	BULK
KBP408	KBP408	BULK
KBP410	KBP410	BULK



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

Standard Packaging

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