

## Glass Passivated Bridge Rectifiers

**(Pb)** Lead(Pb)-Free

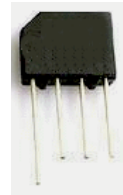
### Features:

- \* Surge overload rating - 60 amperes peak
- \* Ideal for printed circuit board
- \* High case dielectric strength
- \* Reliable low cost construction utilizing molded plastic technique
- \* Plastic package used has Underwriters Laboratory Flammability Classification 94V-0
- \* High temperature soldering guaranteed: 260°C/10 seconds at 5lbs. (2.3kg) tension

### Mechanical Data:

- \* Case: Molded plastic body over passivated junctions
- \* Terminals: Plated lead solderable per MIL-STD-202, method 208
- \* Polarity: Polarity symbols marked on body
- \* Weight: 0.06 ounce, 1.7 grams

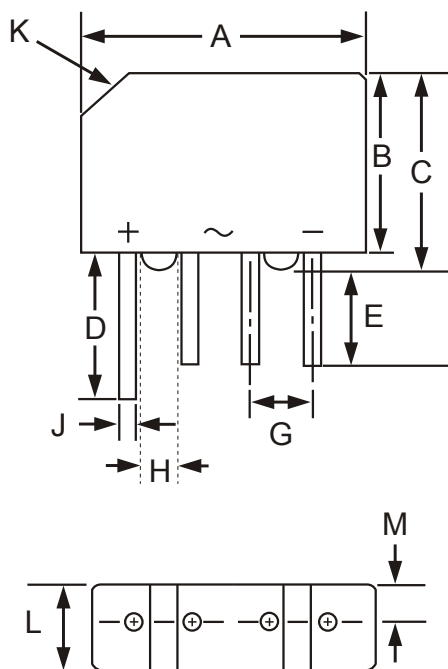
**REVERSE VOLTAGE**  
**50 to 1000 VOLTS**  
**FORWARD CURRENT**  
**2.0 AMPERES**



**KBP**

## KBP Outline Dimensions

Unit:mm



KBP		
Dim	Min	Max
A	14.22	15.24
B	10.67	11.68
C	11.68	12.70
D	15.24	—
E	12.70	—
G	3.56	4.06
H	1.52	—
J	0.71	0.84
K	3.18 X 45° CHAMFER	
L	4.57	5.08
M	2.16	2.67
All Dimensions in mm		

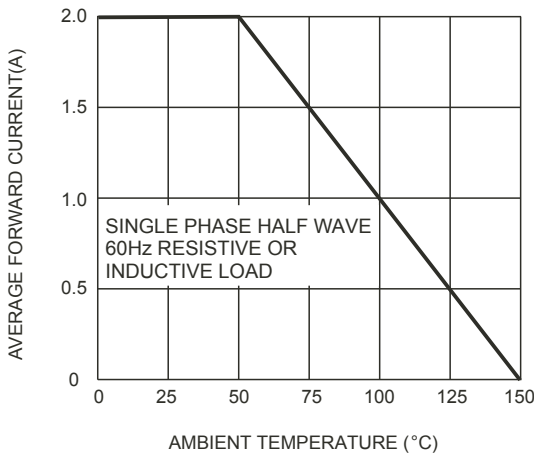
## Maximum Rating

Characteristic	Symbol	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	Units
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 0.375" (9.5mm) lead length at $T_A=50^\circ\text{C}$	$I_{AV}$	2.0							A
Peak forward surge current 8.3mS single half sine-wave super imposed on rated load (MIL-STD-750D 4066 method)	$I_{FSM}$	60							A
Operating junction temperature range	$T_J$	-50 to +150							$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-50 to +150							$^\circ\text{C}$

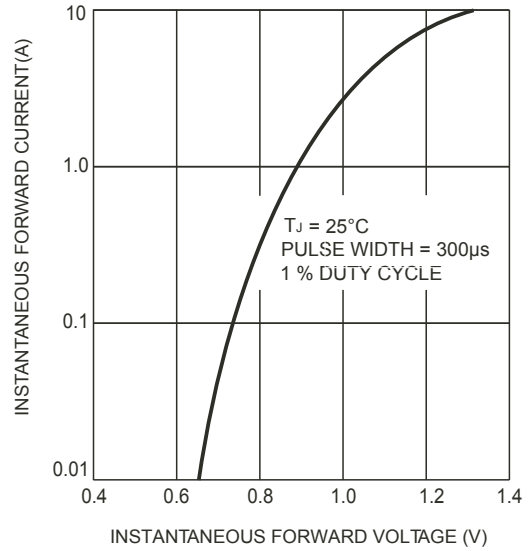
## Electrical Characteristic

Characteristic	Symbol	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	Units
Maximum Forward Voltage Drop per Bridge Element at 1.0A Peak	$V_F$	1.1							V
Maximum Instantaneous Reverse Current Rated DC Voltage, $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	10.0 1000							$\mu\text{A}$

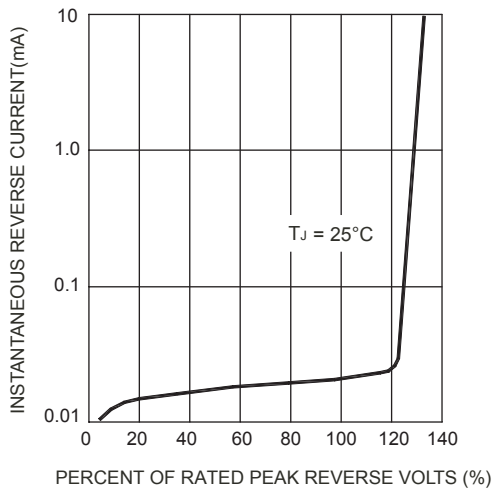
**Ratings and Characteristics Curves**



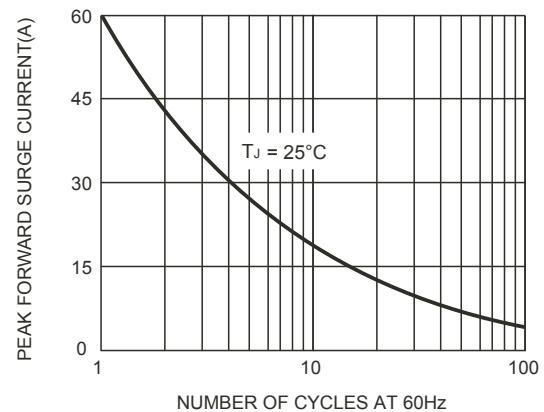
**Fig.1 Typical Forward Current Derating Curve**



**Fig.4 Typical Instantaneous Forward Per Bridge Element**



**Fig.3 Typical Reverse Characteristics**



**Fig.2 Maximum Non-repetitive Peak Forward Surge Current Per Bridge Element**