

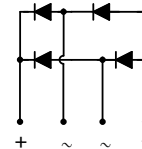
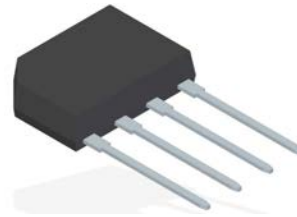


KBP2005-KBP210

Features:

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V#0

KBP

**Absolute Maximum Ratings** ($T_a=25^\circ\text{C}$ unless otherwise noted)

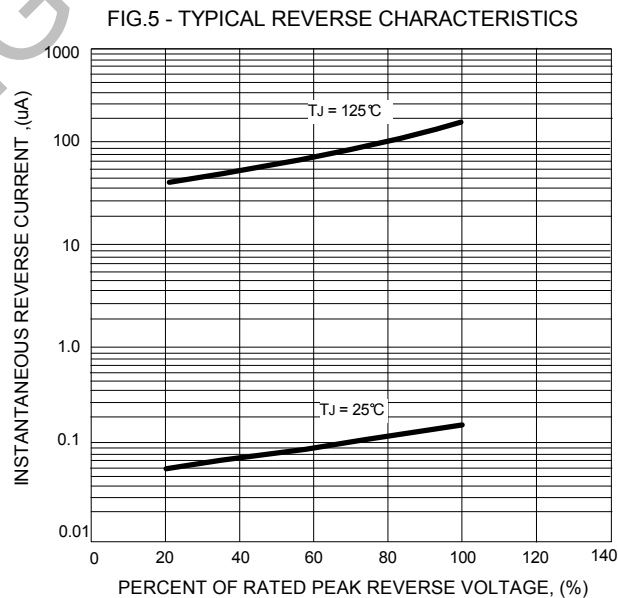
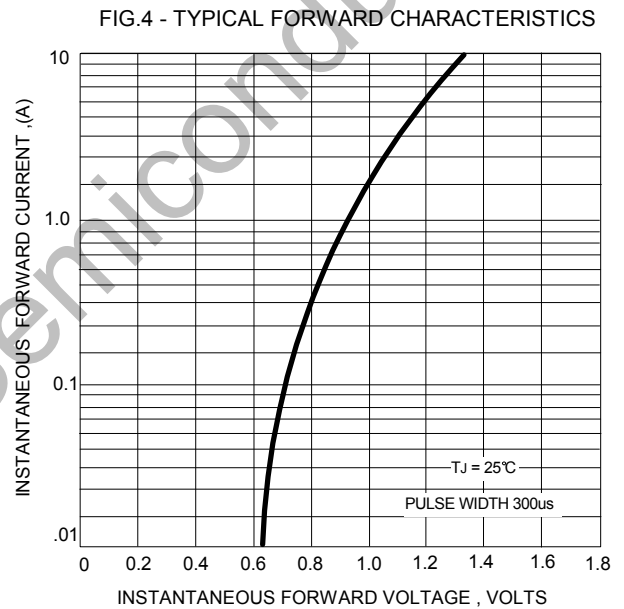
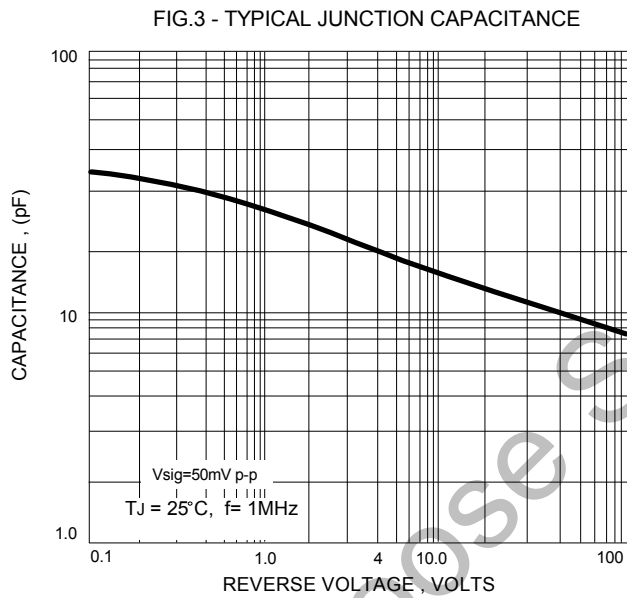
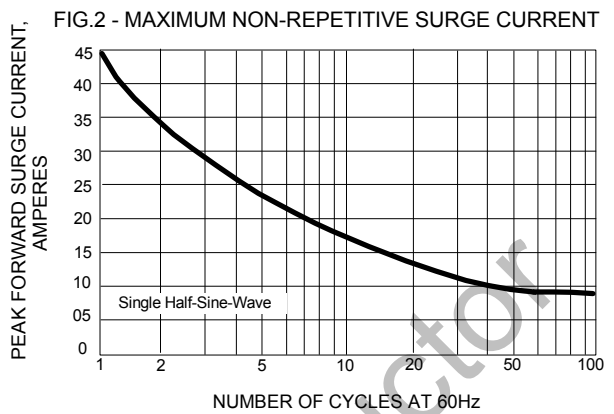
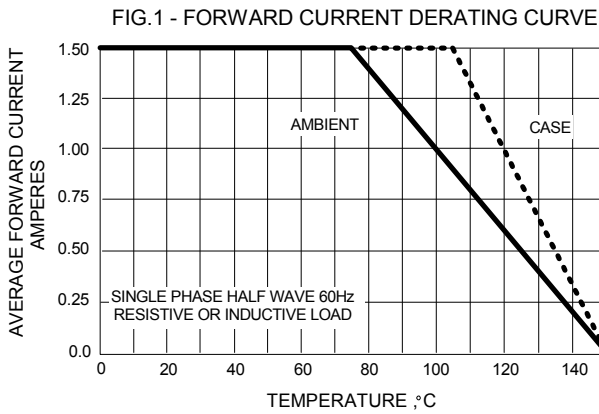
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

CHARACTERISTICS	SYMBOL	KBP 2005	KBP 201	KBP 202	KBP 204	KBP 206	KBP 208	KBP 210	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 @ $T_C=100^\circ\text{C}$	$I_{(AV)}$	2.0							A
Peak Forward Surge Current 8.3ms single half sine-wave @ $T_J = 25^\circ\text{C}$	I_{FSM}	45							A
Peak Forward Surge Current 1.0ms single half sine-wave @ $T_J = 25^\circ\text{C}$ @ $T_J = 125^\circ\text{C}$	I_{FSM}	80 100							A
Maximum Forward Voltage at 2.0A DC	V_F	1.1							V
Maximum DC Reverse Current at rated Blocking Voltage @ $T_J=25^\circ\text{C}$ @ $T_J=125^\circ\text{C}$	I_R	5.0 500							μA
I^2t Rating for fusing ($3\text{ms} \leq t \leq 8.3\text{ms}$)	I^2t	17.5							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	25							pF
Typical thermal resistance (Note 2)	$R_{\theta JC}$	10							$^\circ\text{C/W}$
	$R_{\theta JL}$	18							
	$R_{\theta JA}$	40							
Operation Temperature Range	T_J	-55 to 150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to 150							$^\circ\text{C}$

Note: (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

(2) Thermal Resistance Junction to Case, Lead and Ambient.

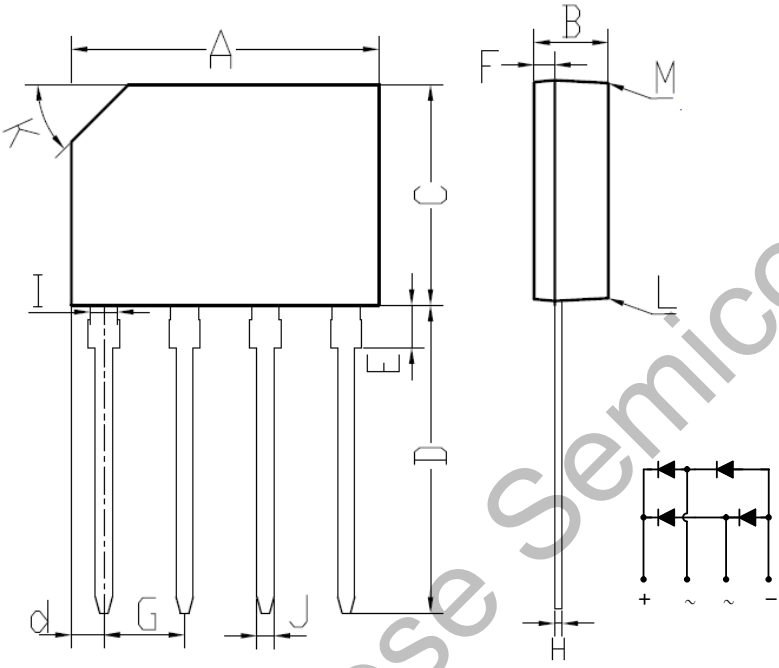
Typical Characteristics



Package Dimension

KBP

KBP Package Outline Dimensions



KBP		
DIM.	MIN.	MAX.
A	14.25	14.75
B	3.35	3.65
C	10.20	10.60
D	14.25	14.73
d	1.40	1.70
E	1.80	2.20
F	0.80	1.10
G	3.56	4.06
H	0.35	0.55
I	1.22	1.42
J	0.76	0.86
K	2.7 x 45° (Typ)	
L	#	3°
M	#	2°
All Dimensions in millimeter		