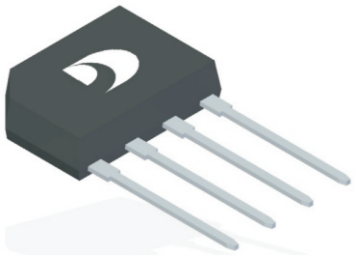
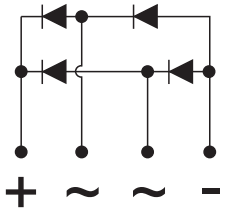
2A Plug In Super Fast Recovery Rectifier Bridge

KBP





FEATURES:

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 2.0 A
- Super Fast reverse recovery time

MECHANICAL DATA

- Polarity : As marked on body
- Weight : 0.05 ounces, 1.35 grams
- Mounting position : Any

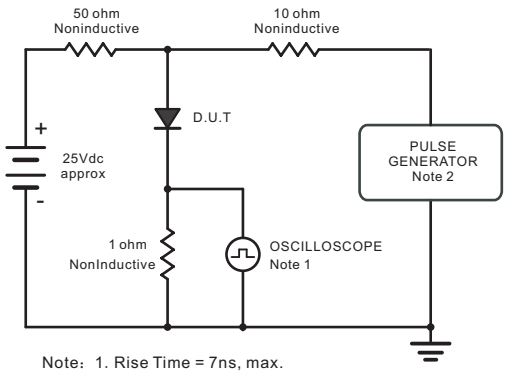
Absolute Maximum Ratings and Characteristics

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%.

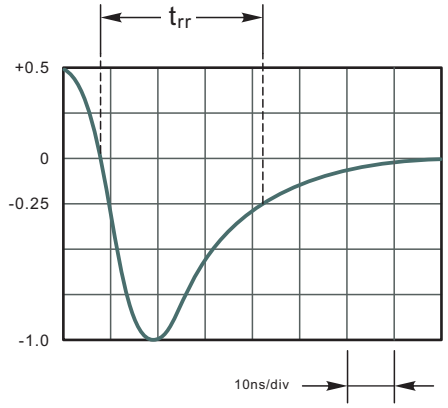
Parameter	Symbols	KBPE201G	KBPE202G	KBPE204G	KBPE206G	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2				A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	50				A
Maximum Forward Voltage at 2 A	V_F	1.0		1.25	1.68	V
Maximum DC Reverse Current T_a = 25 °C at Rated DC Blocking Voltage T_a =125 °C	I_R	5 100				μA
Typical Junction Capacitance (Note: 1)	C_j	40				pF
Maximum Reverse Recovery Time (Note: 2)	t_{rr}	35				ns
Typical Thermal Resistance (Note: 3)	$R_{\theta JA}$	60				°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150				°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Measured with I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A.
3. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram



Note: 1. Rise Time = 7ns, max.
Input Impedance = 1megohm,22pF.
2. Ries Time =10ns, max.
Source Impedance = 50 ohms.



Set time Base for 10ns/div

Fig.2 Maximum Average Forward Current Rating

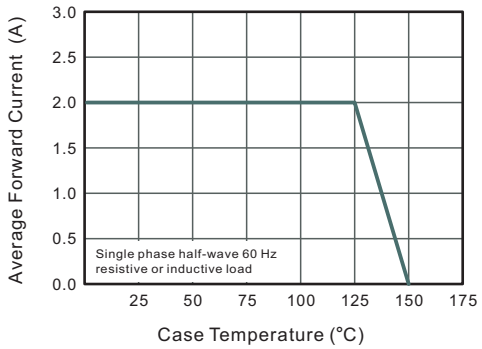


Fig.3 Typical Reverse Characteristics

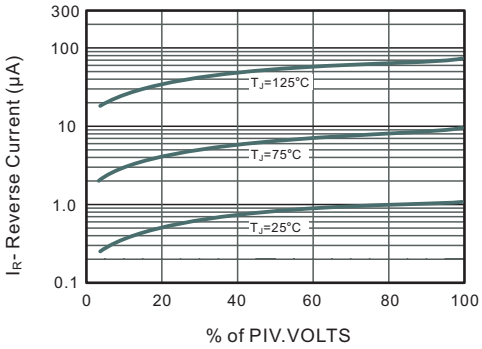


Fig.4 Typical Forward Characteristics

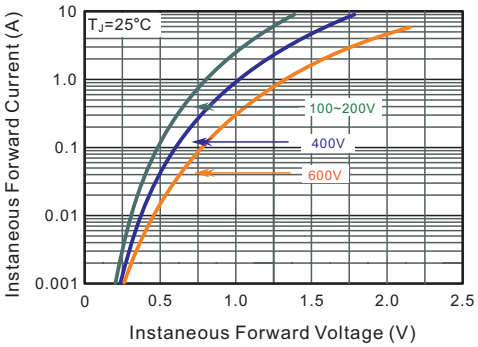


Fig.5 Typical Junction Capacitance

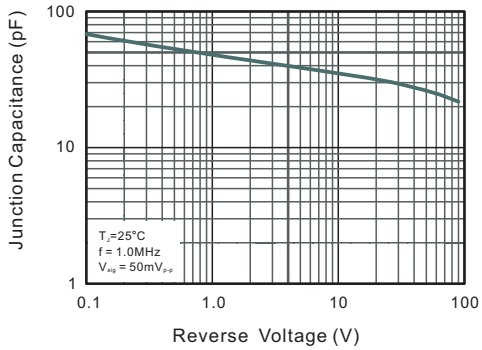


Fig.6 Maximum Non-Repetitive Peak Forward Surage Current

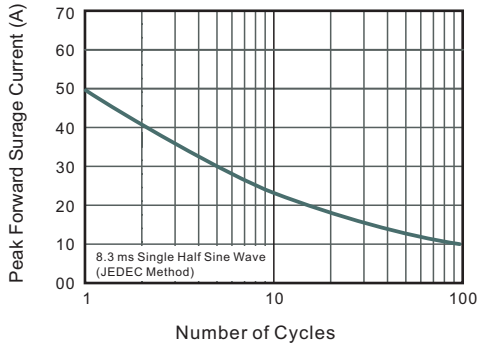
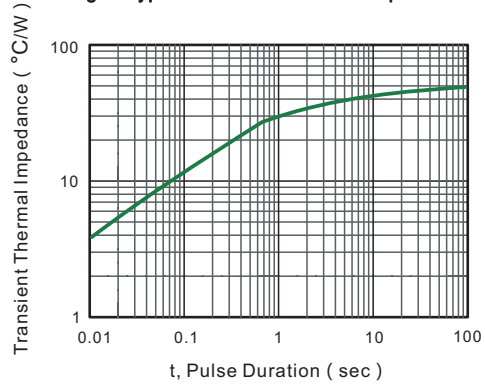
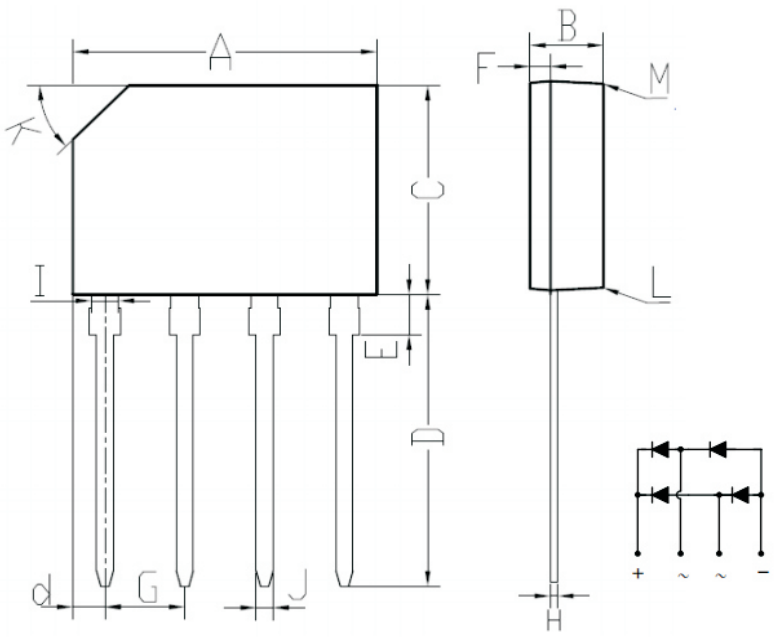


Fig.7- Typical Transient Thermal Impedance



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		

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