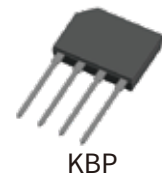
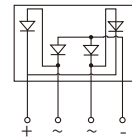


## FEATURES

- Low Profile Package
- Idea For Printed Circuit Board
- Glass Passivated Junction Chip
- High Forward Surge Current Capability
- Low Reverse Leakage



KBP



Schematic Symbol

## MECHANICAL DATA

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 Per J-STD-020

## APPROVALS

**RoHS** Compliance with 2011/65/EU

## MAXIMUM RATINGS AND CHARACTERISTICS (T<sub>A</sub>=25°C)

Parameter	Symbol	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	Unit
Marking		KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	v
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Average rectified output current @60Hz sine wave, R-load, T <sub>c</sub> =122°C	I <sub>O</sub>	2.0							A
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T <sub>j</sub> =25°C	I <sub>FSM</sub>	60							A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T <sub>j</sub> =25°C		120							A
Current squared time @1ms≤t≤8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	15							A <sup>2</sup> s
Dielectric strength @ terminals to case, AC 1 minut	V <sub>dis</sub>	2							KV
Maximum instantaneous forward voltage drop per diode I <sub>FM</sub> =1.0A	V <sub>F</sub>	1.0							V
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	5							μA
		100							μA
Typical junction capacitance Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C <sub>j</sub>	26							pF
Thermal Resistance Between junction and ambient	R <sub>θJA</sub>	45							°C/W
Thermal Resistance Between junction and Case	R <sub>θJC</sub>	7							°C/W
Operating junction and storage temperature rang	T <sub>J</sub> , T <sub>STG</sub>	-55 ~ +150							°C

# CHARACTERISTIC CURVES

Fig. 1-  $I_o$ - $T_c$  Curve

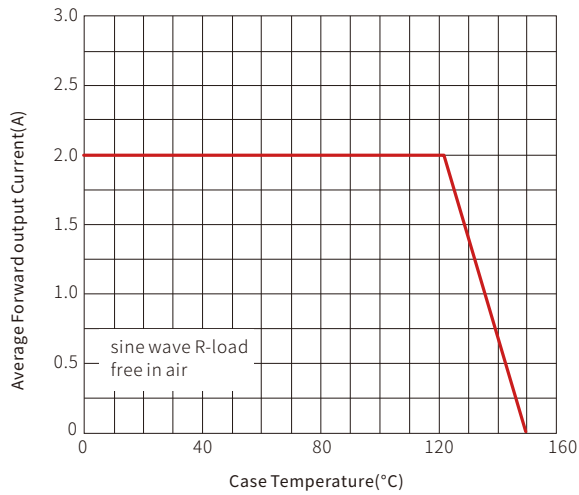


Fig. 2-Surge Forward Current Capability

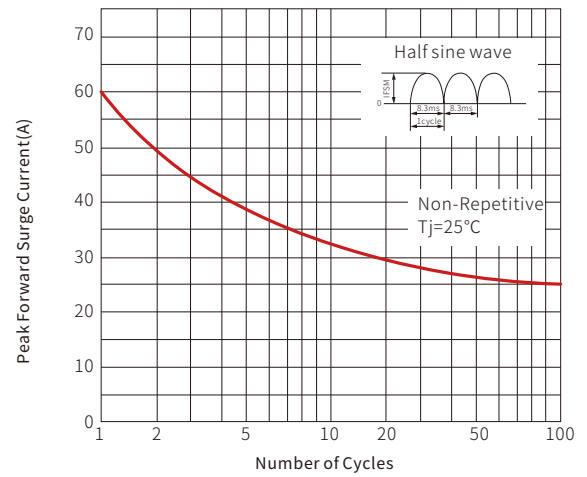


Fig. 3-Typical Forward Voltage

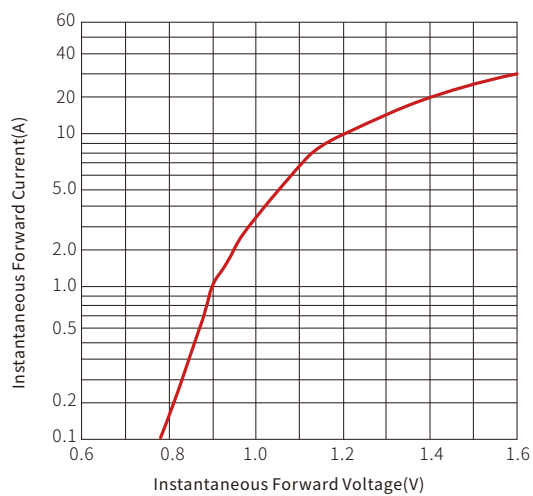
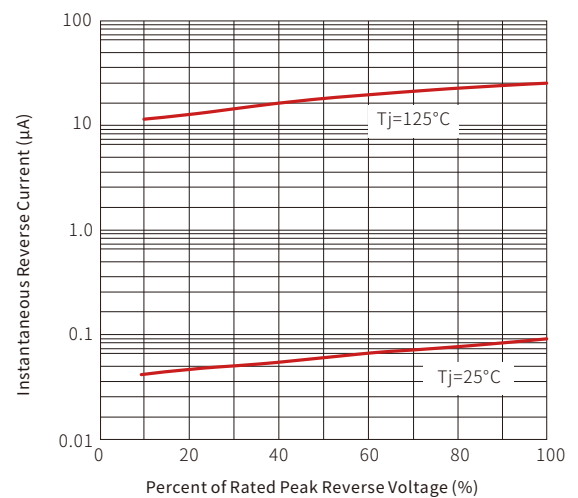
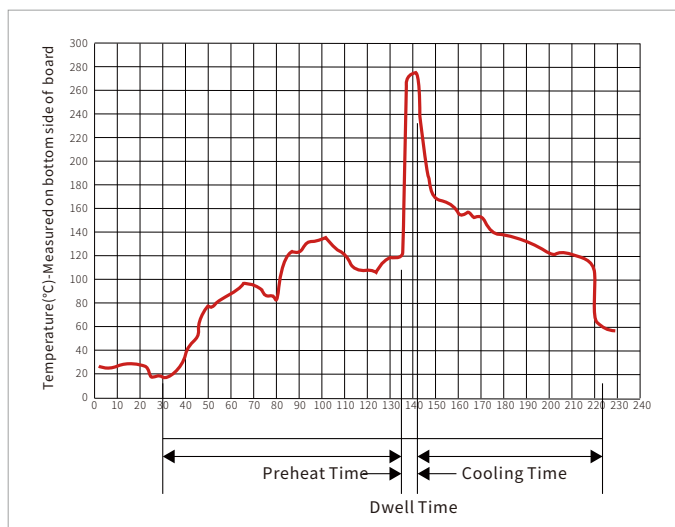


Fig. 4-Typical Reverse Characteristics

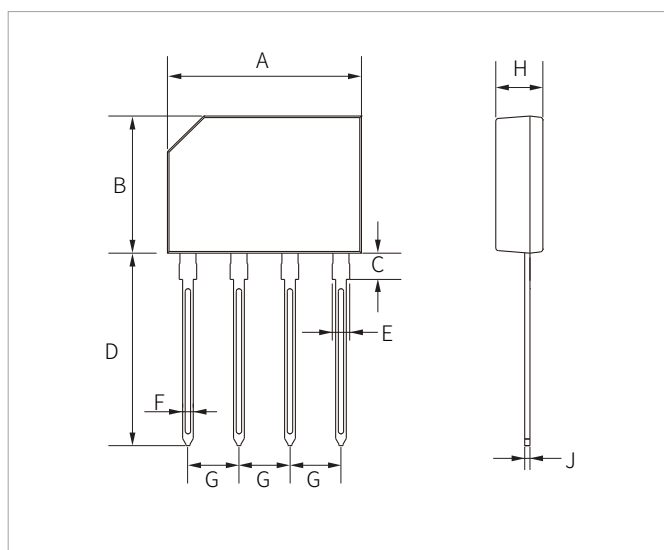


## WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

## KBP PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	13.80	14.20	0.543	0.559
B	10.40	10.80	0.409	0.425
C	1.80	2.20	0.071	0.087
D	12.70	13.70	0.500	0.539
E	1.30	1.50	0.051	0.059
F	0.68	0.88	0.027	0.035
G	3.60	4.00	0.141	0.157
H	3.00	3.40	0.118	0.134
J	0.25	0.45	0.010	0.018

## ORDERING INFORMATION

Part Number	Component Package	Per Box	Description
KBP2005-KBP210	KBP	500PCS	Box

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**By QR Code**

Website



Wechat

To find your local partner within Semiware's global website: [www.semiware.com](http://www.semiware.com)

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