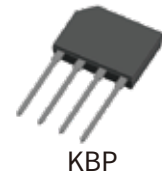
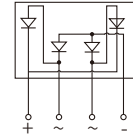


## FEATURES

- | 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

- |             |                                    |
|-------------|------------------------------------|
| <b>RoHS</b> | Compliance with 2011/65/EU         |
| <b>HF</b>   | Compliance with IEC61249-2-21:2003 |

## 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>θJ-A</sub>				45				°C/W
Thermal Resistance Between junction and Case	R <sub>θJ-C</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<sub>o</sub>-T<sub>c</sub> Curve

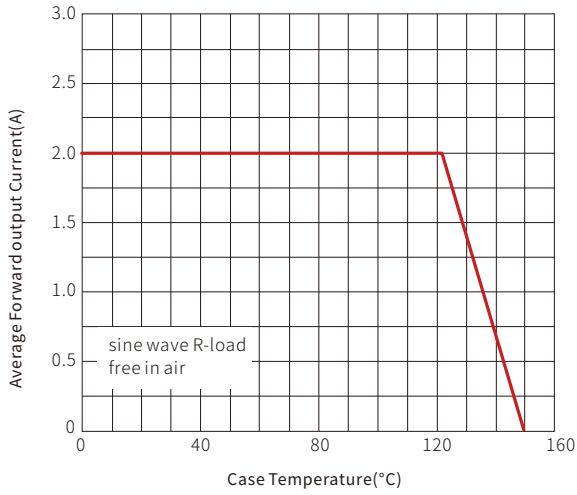


Fig. 2-Surge Forward Current Capability

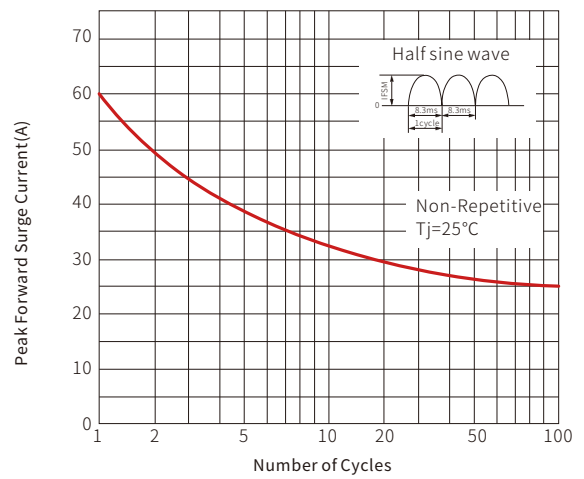


Fig. 3-Typical Forward Voltage

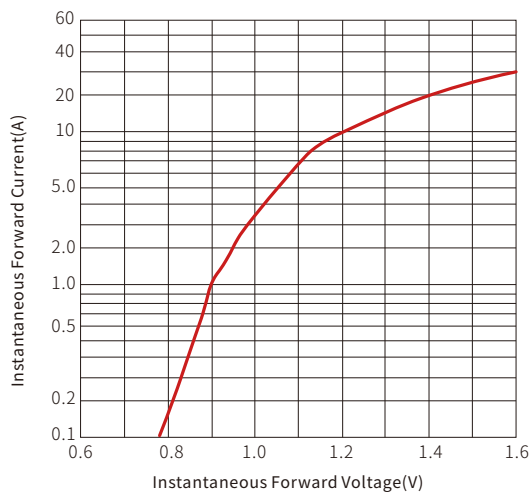
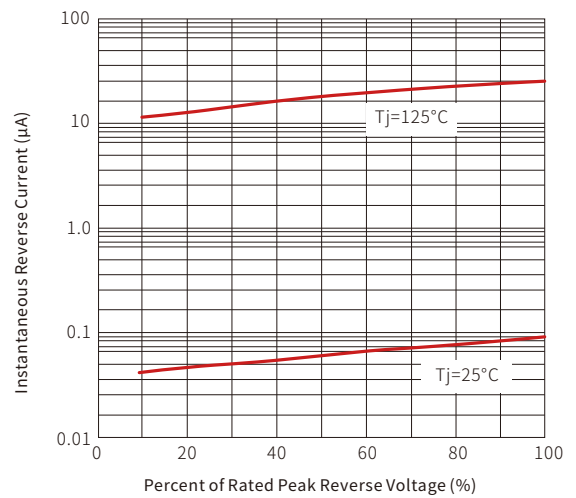
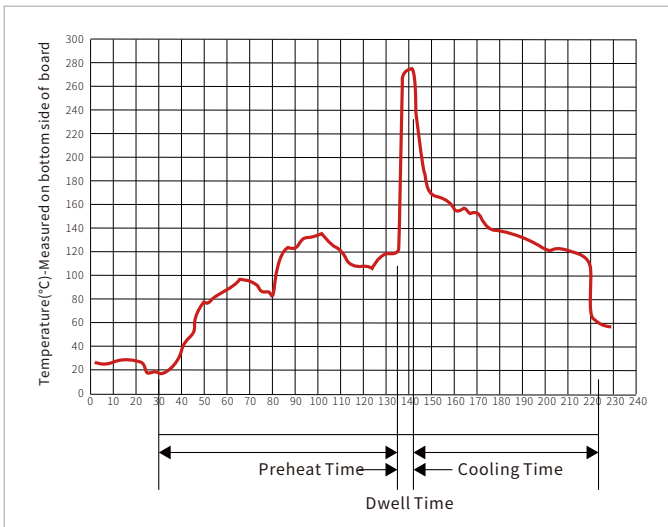


Fig. 4-Typical Reverse Characteristics

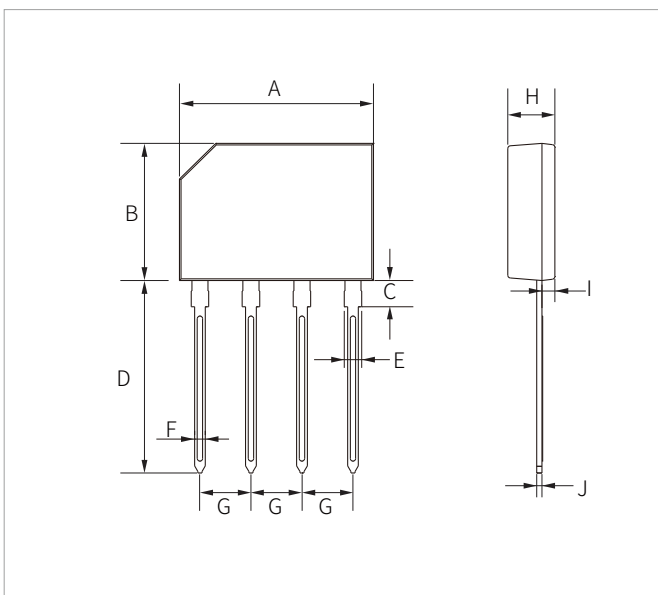


## WAVE SOLDERING



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	14.25	14.75	0.561	0.581
B	10.10	10.60	0.398	0.417
C	1.80	2.20	0.071	0.087
D	14.25	14.73	0.561	0.580
E	1.22	1.42	0.048	0.056
F	0.76	0.86	0.030	0.034
G	3.70	3.90	0.146	0.153
H	3.35	3.65	0.132	0.144
I	0.80	1.10	0.031	0.043
J	0.35	0.55	0.014	0.022

## 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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