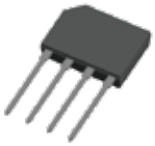
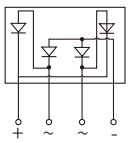
FEATURES

- 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_A=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_{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
Average rectified output current @60Hz sine wave, R-load, Tc =122°C		I_O	2.0							A
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25°C		I_{FSM}	60							A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			120							A
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode		I^2t	15							A^2s
Dielectric strength @ terminals to case, AC 1 minut		Vdis	2							KV
Maximum instantaneous forward voltage drop per diode I_{FM}=1.0A		V_F	1.0							V
Maximum DC reverse current at rated DC blocking voltage per diode	T_j=25°C	I_R	5							μA
	T_j=125°C		100							μA
Typical junction capacitance Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C		C_j	26							pF
Thermal Resistance Between junction and ambient		$R_{\theta J-A}$	45							°C/W
Thermal Resistance Between junction and Case		$R_{\theta J-C}$	7							°C/W
Operating junction and storage temperature rang		T_J, T_{STG}	-55 ~ +150							°C

CHARACTERISTIC CURVES

Fig. 1- Io-Tc Curve

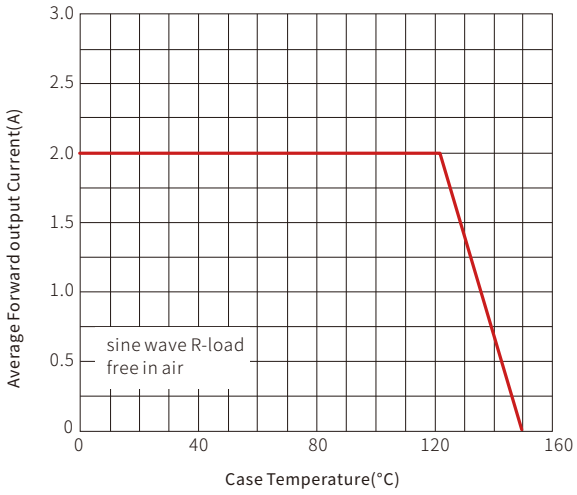


Fig. 2-Surge Forward Current Capability

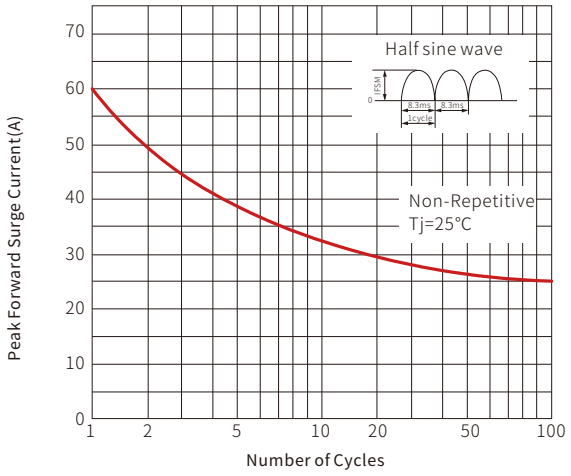


Fig. 3-Typical Forward Voltage

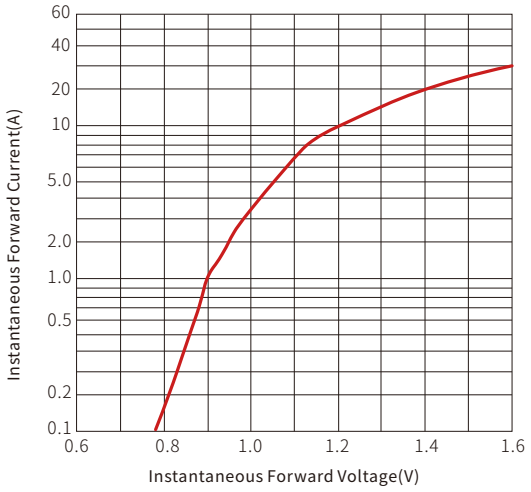
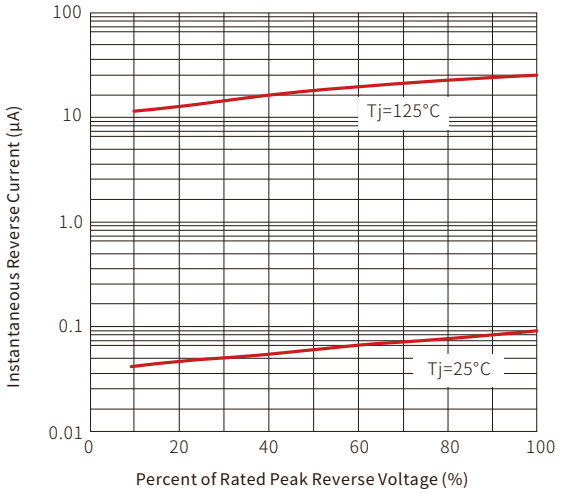
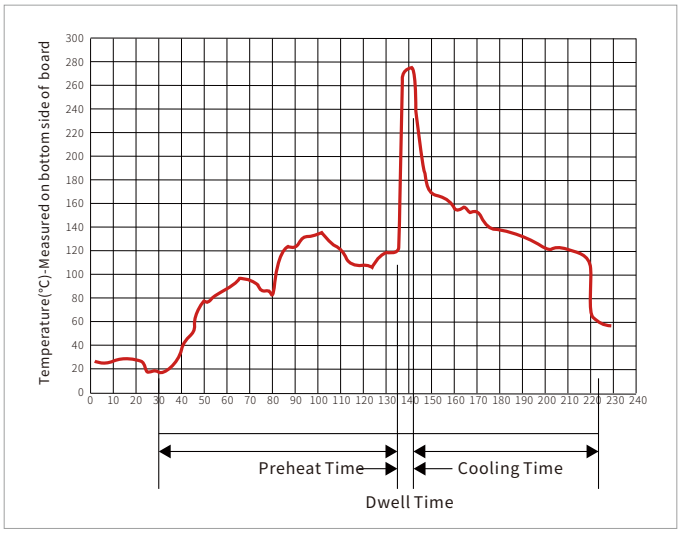


Fig. 4-Typical Reverse Characteristics

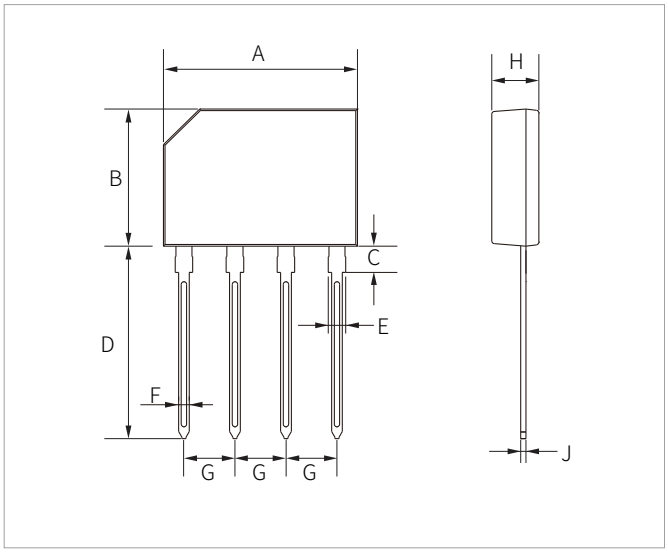


WAVE SOLDERING



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

Headquarters
No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

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Technical Support
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Email: fae01@semiware.com

Complaint & Suggestions
Tel: 86-21-3463-7172
Ext: 8868
Email: cs03@semiware.com

By QR Code
Website
Wechat

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