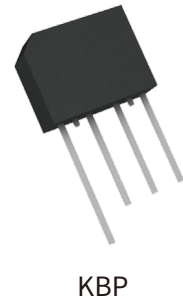


FEATURES

- | Ideal For Printed Circuit Board Mounting
- | Built-in Printed Circuit Board Stand-offs
- | The Plastic Material Used Carries Underwriters Laboratory Flammability Recognition 94V-0
- | High Case Dielectric Strength



MECHANICAL DATA

- | Case: Reliable Low Cost Construction Utilizing Molded Plastic Technique
- | Mounting Position: Any

APPROVALS

RoHS Compliance with 2011/65/EU

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

Parameter	Symbol	KBP 3005	KBP 301	KBP 302	KBP 304	KBP 306	KBP 308	KBP 310	Unit
Marking		KBP 3005	KBP 301	KBP 302	KBP 304	KBP 306	KBP 308	KBP 310	
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 At TA=40°C	I _{F(AV)}	3.0							A
Peak Forward Surge Current Single Sine-wave Superimposed On Rated Load (JEDEC Method)	I _{FSM}	80							A
Maximum Instantaneous Forward Voltage Drop Per Leg at 3.0A	V _F	1.1							V
Maximum DC Reverse Current At Rated DC Blocking Voltage Per Diode	T _A =25°C	10							μA
	T _A =125°C	500							μA
Operating Junction And Storage Temperature Range	T _J , T _{STG}	-55 ~ +150							°C

Notes: (1) Device mounted on 300mm*300mm*1.6mm cu plate heatsink

CHARACTERISTIC CURVES

Fig. 1-Derating Curve for Output Rectified Current

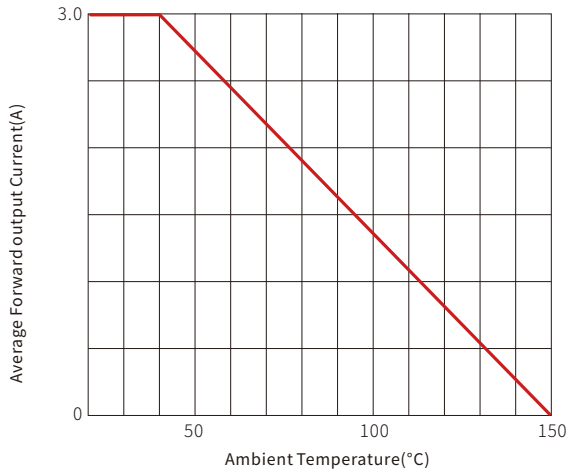


Fig. 2-Maximum Non-Repetitive Peak Forward Surge Current

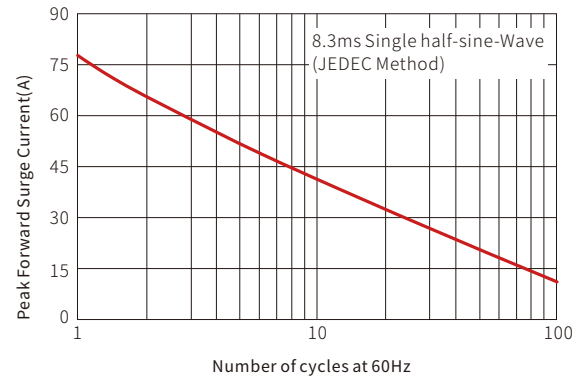


Fig. 3-Typical Reverse Characteristics

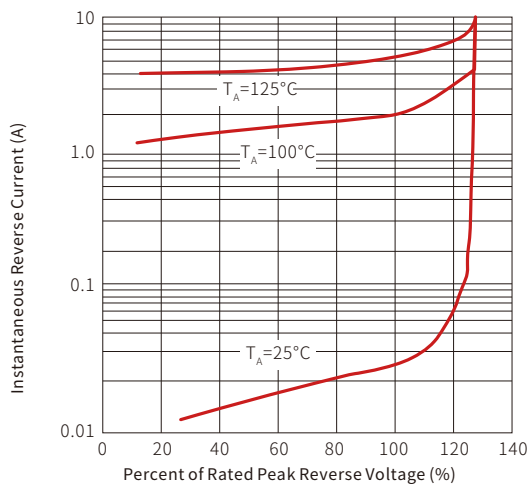


Fig. 4-Typical Instantaneous Forward Characteristics

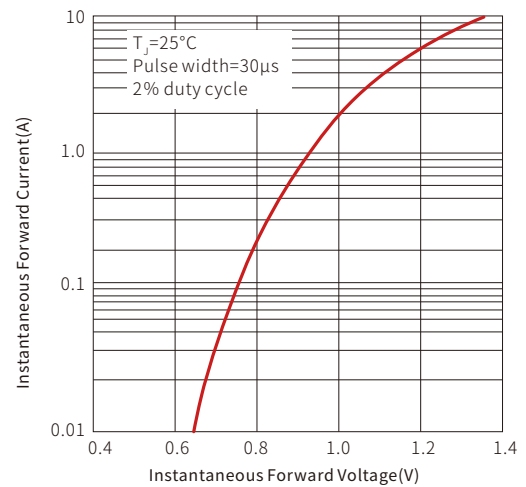
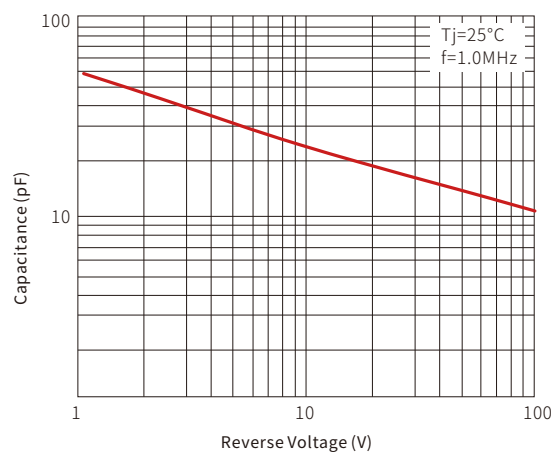
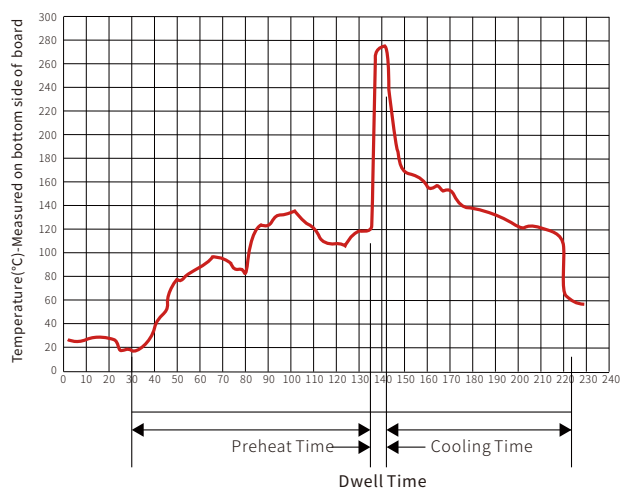


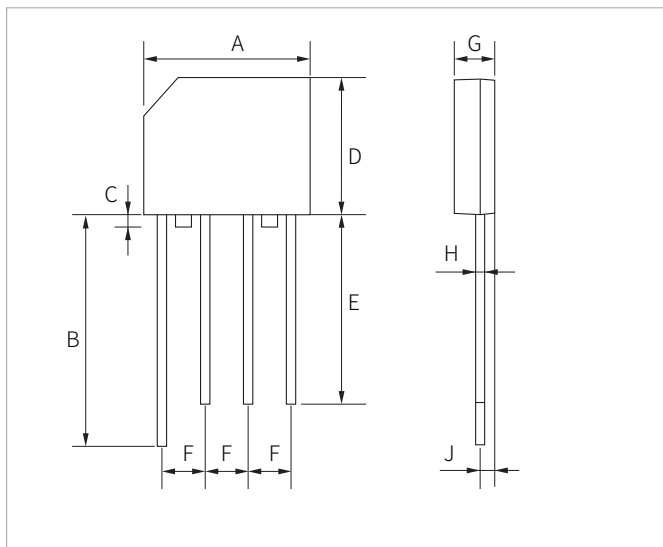
Fig. 5-Typical Junction Capacitance


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	14.20	14.80	0.559	0.583
B	18.00	19.20	0.709	0.756
C	0.80	1.20	0.031	0.047
D	10.70	11.30	0.421	0.445
E	14.50	15.70	0.571	0.618
F	3.71	3.91	0.146	0.154
G	3.40	3.80	0.134	0.150
H	0.70	0.90	0.028	0.035
J	1.15	1.35	0.045	0.053

ORDERING INFORMATION

Part Number	Component Package	Per Box	Description
KBP3005-KBP310	KBP	500PCS	Box

Headquarters

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

Hotline

400-021-5756

Web

<https://www.semiware.com>

Sales Center

Tel: 86-21-3463-7458
Email: sales18@semiware.com

Customer Service

Tel: 86-21-5484-1001
Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654
Email: fae01@semiware.com

Complaint & Suggestions

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

By QR Code

Website



Wechat

To find your local partner within Semiware's global website: www.semiware.com

© 2022 Semiware Semiconductor Inc.

The content of this document has been carefully checked and understood. However, neither Semiware nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Semiware does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Chinese law and resulting disputes shall be settled by the courts at the place of business of Semiware. Latest publications and a complete disclaimer can be downloaded from the Semiware website. All trademarks recognized.