

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

KBP3005-MS THRU KBP310-MS

Product specification

VOLTAGE RANGE: 50 - 1000V
CURRENT: 3.0 A

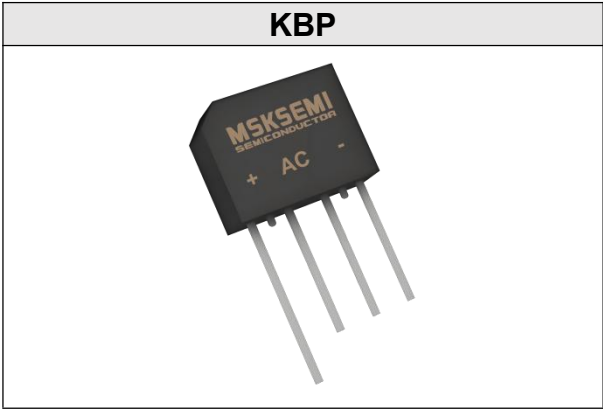
FEATURES

- Surge overload rating-80 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Labooratory
- Flammability Classification 94V-O
- Mounting position: Any
- Lead: Silver Plated Cooper Lead.

MECHANICAL DATA

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.7 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

REFERENCE NEWS



Marking

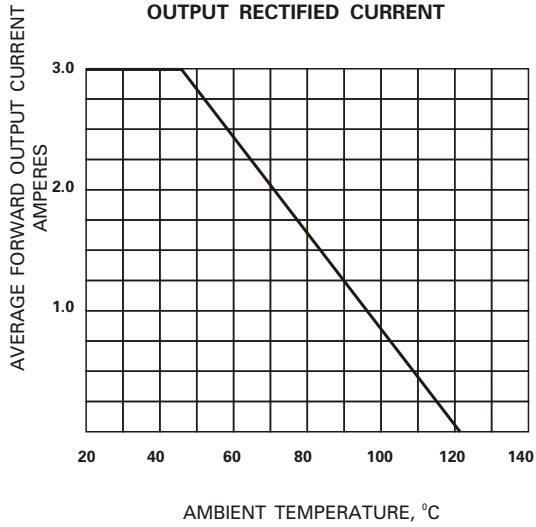
KBP3005-MS	KBP301-MS	KBP302-MS	KBP304-MS
<div>MSKSEMI KBP3005 + AC -</div>	<div>MSKSEMI KBP301 + AC -</div>	<div>MSKSEMI KBP302 + AC -</div>	<div>MSKSEMI KBP304 + AC -</div>
KBP306-MS	KBP308-MS	KBP310-MS	
<div>MSKSEMI KBP306 + AC -</div>	<div>MSKSEMI KBP308 + AC -</div>	<div>MSKSEMI KBP210 + AC -</div>	

Maximum Ratings @ $T_A = 25^{\circ}\text{C}$ unless otherwise specified

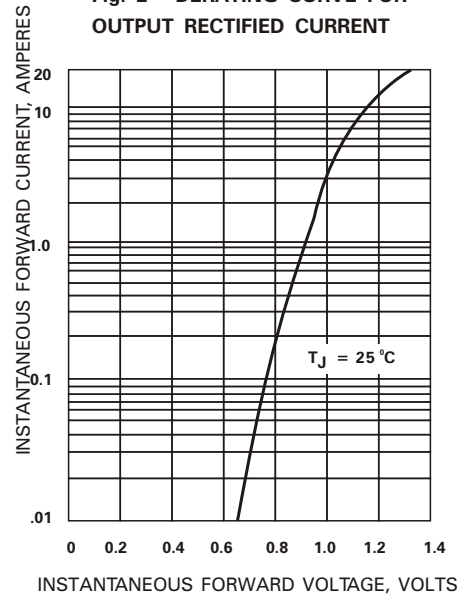
Characteristic	Symbol	KBP 3005-MS	KBP 301-MS	KBP 302-MS	KBP 304-MS	KBP 306-MS	KBP 308-MS	KBP 310-MS	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	60	100	200	400	600	800	1000	V
Maximum Average Forward Output Current @ $T_A=25^{\circ}\text{C}$	$I_{(AV)}$	3.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	80							A
Maximum DC Forward Voltage drop per element at 1.0A DC	V_F	1.1							V
Maximum DC Reverse Current at rated @ $T_A=25^{\circ}\text{C}$ DC Blocking Voltage Per Element @ $T_A=100^{\circ}\text{C}$	I_R	10 1							μA mA
I^2t Rating for fusing($t<8.3\text{ms}$)	I^2t	10							A^2S
Operating Temperature Range	T_J	-55 to +125							$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}\text{C}$

RATING AND CHARACTERISTIC CURVES (KBP3005-MS THRU KBP310-MS)

**Fig. 1 - DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT**



**Fig. 2 - DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT**



**Fig. 3 - TYPICAL FORWARD
CHARACTERISTICS**

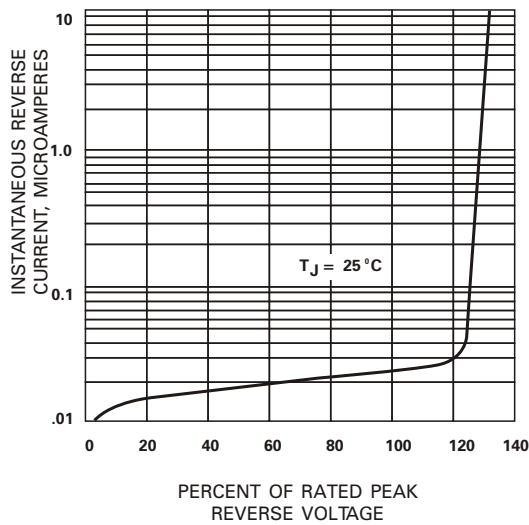
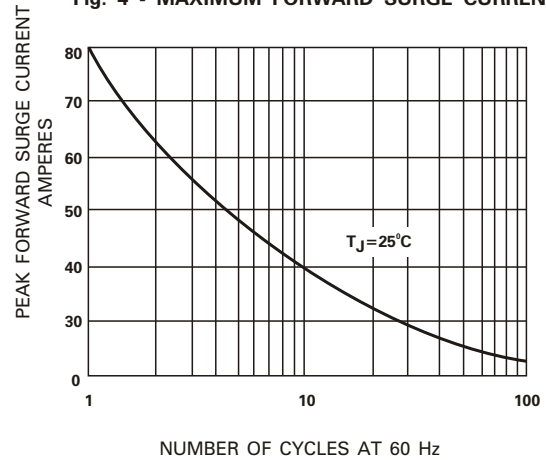
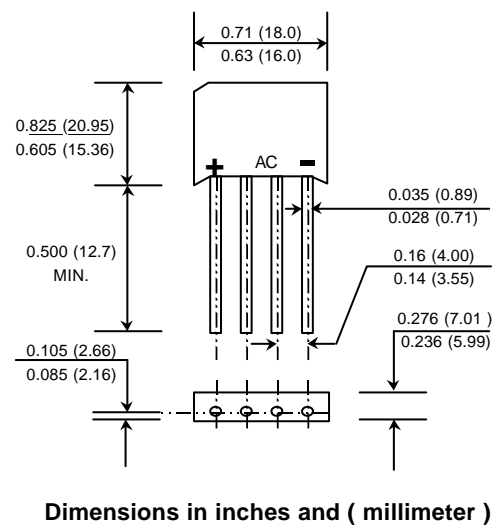


Fig. 4 - MAXIMUM FORWARD SURGE CURRENT



PACKAGE MECHANICAL DATA



REELSPECIFICATION

P/N	PKG	QTY
KBP3005-MS THRU KBP310-MS	KBP	500

Attention

■ Any and all MSKSEMI Semiconductor products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your MSKSEMI Semiconductor representative nearest you before using any MSKSEMI Semiconductor products described or contained herein in such applications.

■ MSKSEMI Semiconductor assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specification of any and all MSKSEMI Semiconductor products described or contained herein.

■ Specifications of any and all MSKSEMI Semiconductor products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer's products or equipment.

■ MSKSEMI Semiconductor strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with some probability. It is possible that these probabilistic failures could give rise to accidents or events that could endanger human lives, that could give rise to smoke or fire, or that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents or events cannot occur. Such measures include but are not limited to protective circuits and error prevention circuits for safe design, redundant design, and structural design.

■ In the event that any or all MSKSEMI Semiconductor products (including technical data, services) described or contained herein are controlled under any of applicable local export control laws and regulations, such products must not be exported without obtaining the export license from the authorities concerned in accordance with the above law.

■ No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of MSKSEMI Semiconductor.

■ Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. MSKSEMI Semiconductor believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringement of intellectual property rights or other rights of third parties.

■ Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the MSKSEMI Semiconductor product that you intend to use.