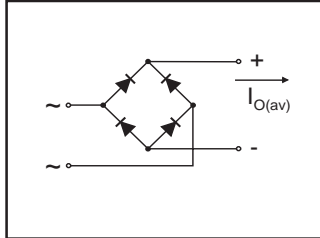


KBPC6PbF SERIES KBPC8PbF SERIES

6A, 8A Single Phase Rectifier Bridge

- Suitable for printed circuit board or chassis mounting
- Compact construction
- High surge current capability
- Fully characterised data
- Wide temperature range
- Lead-Free ("PbF" suffix)



$I_{O(av)} = 6A, 8A$
 V_{RRM} range
50 to 1000V

Description

The KBPC6PbF, KBPC8PbF Series of Single Phase Rectifier Bridges consists of four silicon junctions connected as a full bridge. These devices are intended for general use in industrial and consumer equipment.



Electrical Specification

		KBPC6	KBPC8	Units	Conditions
I_O	Maximum DC output current	6	8.0	A	$T_C = 50^\circ\text{C}$, Resistive or inductive load
		4.7	6.4	A	$T_C = 50^\circ\text{C}$, Capacitive load
I_{FSM}	Maximum peak one cycle, non-repetitive surge current	125	125	A	$t = 10\text{ms}, 20\text{ms}$
		137	137	A	$t = 8.3\text{ms}, 16.7\text{ms}$
I^2t	Maximum I^2t capability for fusing	78	78	A^2s	$t = 10\text{ms}$
		71	71	A^2s	$t = 8.3\text{ms}$
		110	110	A^2s	$t = 10\text{ms}$
		100	100	A^2s	$t = 8.3\text{ms}$
I^2vt	Maximum I^2vt capability for fusing	1105	1105	A^2Vs	$t = 0.1$ to 10ms , no voltage reapplied
V_{FM}	Maximum peak forward voltage per diode	1.2	1.0	V	$I_{FM} = 3.0\text{A}$, $T_J = 25^\circ\text{C}$
I_{RM}	Typical peak reverse leakage per diode	10	10	μA	$T_J = 25^\circ\text{C}$, 100% V_{RRM}
		1.0	1.0	mA	$T_J = 150^\circ\text{C}$, 100% V_{RRM}
V_{RRM}	Maximum repetitive peak reverse voltage range	50 to 1000		V	

Thermal and Mechanical Specifications

		KBPC6	KBPC8	Units	Conditions
T_J	Operating and storage temperature range	-55 to 150		$^\circ\text{C}$	
R_{thJC}	Thermal resistance, junctions to case	6		K/W	
W	Approximate weight	6(0.21)		g(oz)	

KBPC6PbF, KBPC8PbF SERIES

Bulletin U2790 09/05

International
IOR Rectifier

Voltage Ratings

Part Number	V_{RRM} : Maximum repetitive peak reverse voltage	V_{RSM} : Maximum non-repetitive peak reverse voltage
	V	V
KBPC6, KBPC8005	50	80
KBPC6, KBPC801	100	150
KBPC6, KBPC802	200	300
KBPC6, KBPC804	400	500
KBPC6, KBPC806	600	700
KBPC6, KBPC808	800	900
KBPC6, KBPC810	1000	1100

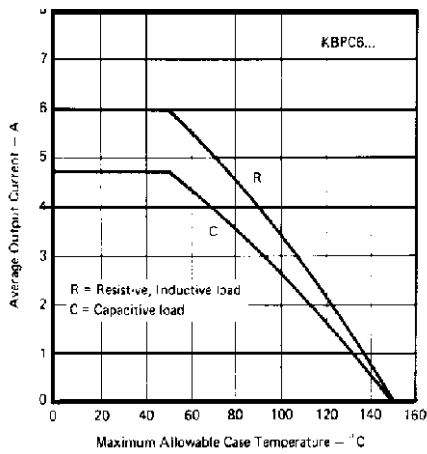


Fig. 1 - Current Ratings (KBPC6PbF)

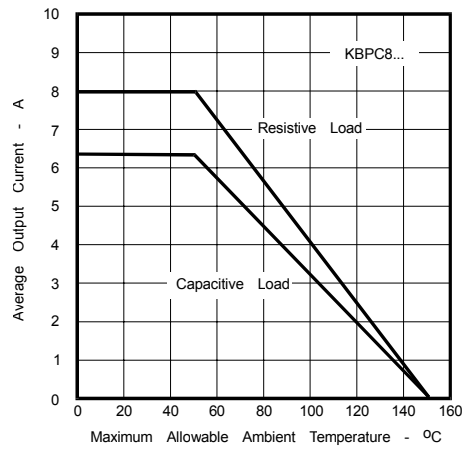


Fig. 2 - Current Ratings (KBPC8PbF)

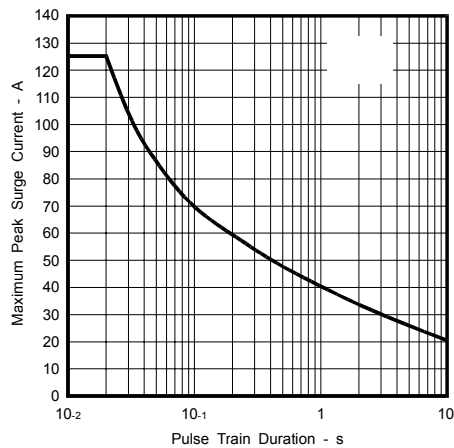
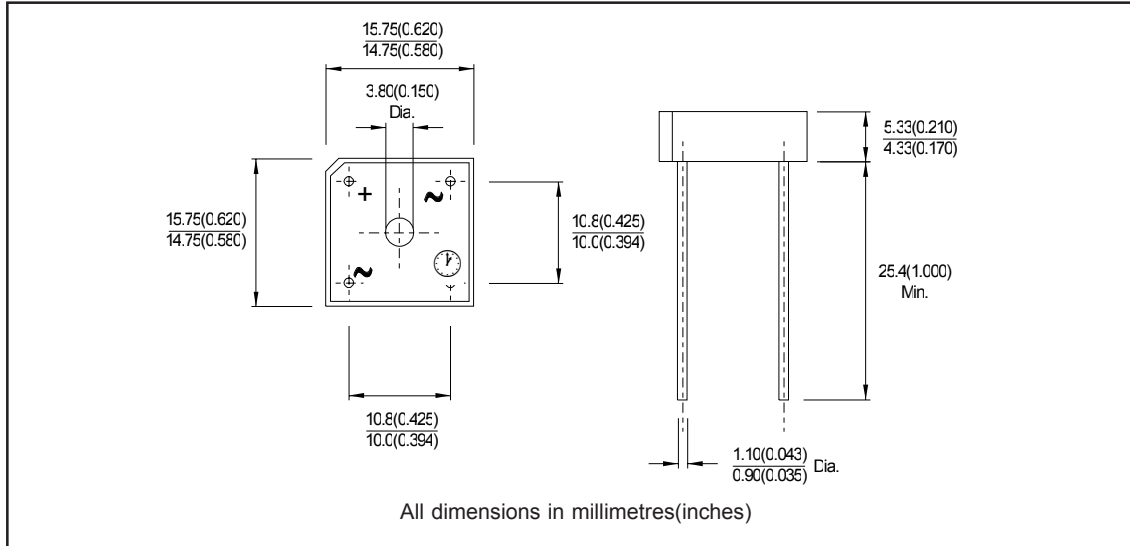


Fig. 2 - Non-Repetitive Surge Ratings (KBPC6PbF, KBPC8PbF)

Outline (D-72 package)



Ordering Information Table

Device Code			
KBPC	8	10	PbF
①	②	③	④
1	-	Single Phase Rectifier Plastic Bridge	
2	-	Current Ratings	8 = 8A 6 = 6A
3	-	Voltage Ratings (see Voltage Ratings table)	
4	-	Lead-Free	

Data and specifications subject to change without notice.
This product has been designed and qualified for Industrial Level and Lead-Free.
Qualification Standards can be found on IR's Web site.



Notice

The products described herein were acquired by Vishay Intertechnology, Inc., as part of its acquisition of International Rectifier's Power Control Systems (PCS) business, which closed in April 2007. Specifications of the products displayed herein are pending review by Vishay and are subject to the terms and conditions shown below.

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.

International Rectifier®, IR®, the IR logo, HEXFET®, HEXSense®, HEXDIP®, DOL®, INTERO®, and POWIRTRAIN® are registered trademarks of International Rectifier Corporation in the U.S. and other countries. All other product names noted herein may be trademarks of their respective owners.