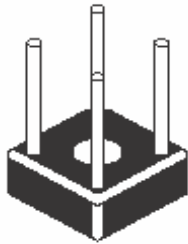


**SINGLE PHASE BRIDGE RECTIFIER**

**KBPC1001 - KBPC10005**



**KBPC-8  
Leaded Plastic Package**

**ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

(Ratings at  $T_a = 25^\circ\text{C}$  unless specified otherwise, single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.)

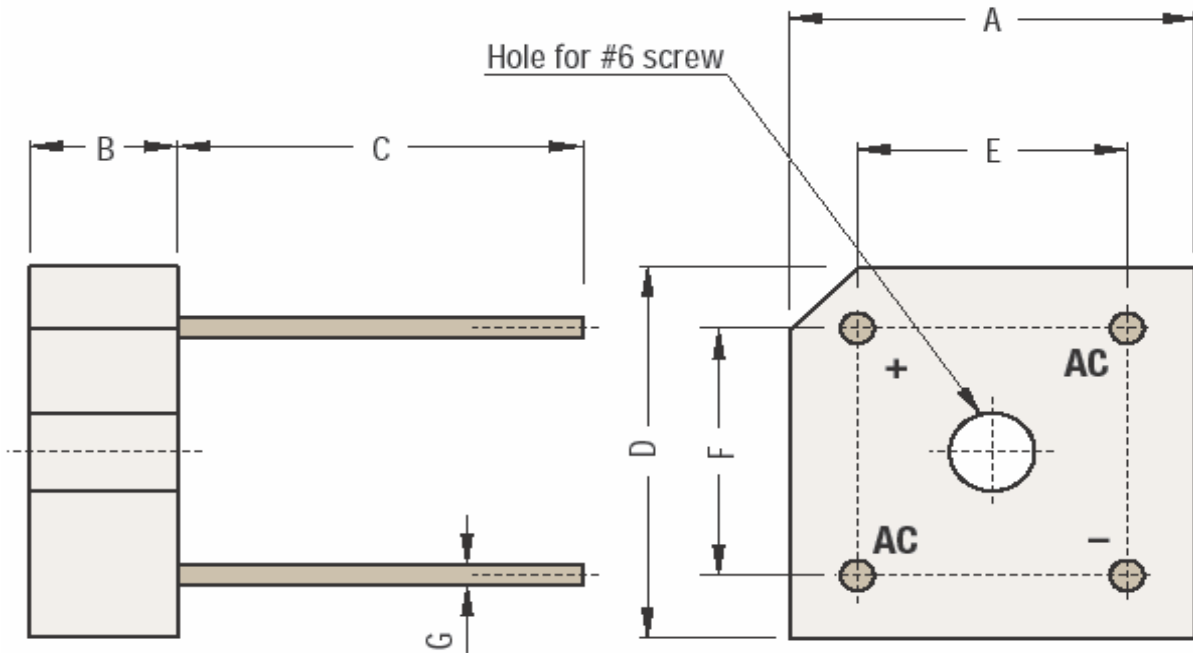
DESCRIPTION	SYMBOLS	VALUE							UNIT
		KBPC 10005	KBPC 1001	KBPC 1002	KBPC 1004	KBPC 1006	KBPC 1008	KBPC 1010	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_c=50^\circ\text{C}$	$I_{(AV)}$	10.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on Rated load (JEDEC method)	$I_{FSM}$	250.0							A
Maximum Forward Voltage at 5.0A DC and $25^\circ\text{C}$	$V_F$	1.1							V
Maximum Reverse Current at Rated DC Blocking Vtg at $T_a = 25^\circ\text{C}$	$I_R$	10.0							$\mu\text{A}$
at $T_a = 100^\circ\text{C}$		500							
Typical Junction Capacitance (Note 1)	$C_j$	200							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	25.0							$^\circ\text{C/W}$
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	5.0							$^\circ\text{C/W}$
Operating Junction Temperature and Storage Temperature Range	$T_j, T_{stg}$	- 55 to +125							$^\circ\text{C}$

**NOTES:**

1. Measured at 1 MHz and applied reverse voltage of  $4.0 V_{DC}$ .
2. Unit mounted on 8.6 x 8.6 x 0.24" thick (22 x 22 x 0.6cm) Al. Plate
3. Unit mounted on P.C.B at 0.375" (9.5mm) lead length with 0.5 x 0.5" (12 x 12mm) copper pads

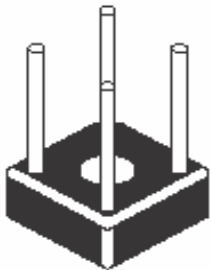
KBPC1001\_005 Rev170206D

KBPC-8 Leaded Plastic Package



DIM	Min	Max	DIM	Min	Max
A	18.5	19.6	E	12.2	13.2
B	6.50	7.5	F	12.20	13.2
C	19.10		G	1.00	1.1
D	18.50	19.6			

All Dimensions are in mm



Packaging Information

Package/	Packaging Type	Std Packing
Case Type		Qty
KBPC-8	Bulk	400

Bulk: Lose in Poly bags

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

**KBPC-8**  
**Leaded Plastic Package****Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s). CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



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