

**SINGLE PHASE SILICON BRIDGE RECTIFIER**

**KBPC8005-KBPC810**

**KBPC-8  
 PLASTIC PACKAGE**



Maximum Ratings (Ratings at  $T_a=25^{\circ}\text{C}$  Ambient Temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

DESCRIPTION	SYMBOL	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	UNIT
		8005	801	802	804	806	808	810	
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 $T_c=50^{\circ}\text{C}$	$I_{F(AV)}$	8.0							A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	250							A
Maximum Forward Voltage Drop Per Element at 4A DC and $25^{\circ}\text{C}$	$V_F$	1.0							V
Maximum Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_a=25^{\circ}\text{C}$							$\mu\text{A}$
		$T_a=100^{\circ}\text{C}$							$\mu\text{A}$
Typical Junction Capacitance	$*C_J$	200							pF
Typical Thermal Resistance	$**R_{th(j-a)}$	21							$^{\circ}\text{C/W}$
Typical Thermal Resistance	$***R_{th(j-c)}$	6.0							$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{stg}$	- 55 to +125							$^{\circ}\text{C}$

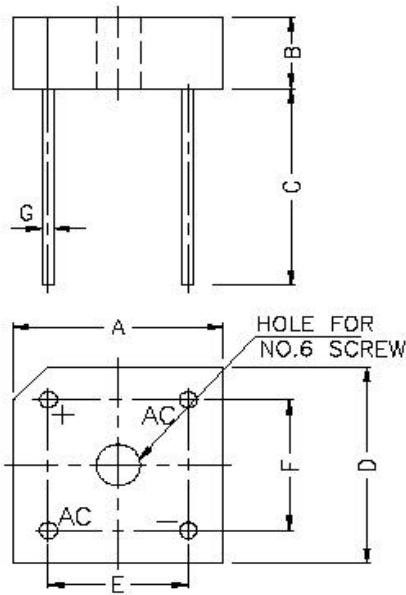
\*Measured at 1MHz and applied reverse voltage of 4.0 VDC

\*\*Unit mounted on 8.6 x 8.6 x 0.24" thick (22 x 22 x 0.6cm) Ai.Plate

\*\*\*Unit mounted on PCB at 0.375" (9.5mm) lead length with 0.5 x 0.5" (12 x 12mm) copper pads

KBPC8005-810Rev280506E

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DIM	MIN.	MAX.
A	18.5	19.6
B	6.5	7.5
C	19.1	—
D	18.5	19.6
E	12.2	13.2
F	12.2	13.2
G	1.0	1.1

ALL DIMENSIONS ARE mm  
50 Pcs/BOX

**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).

**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).

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**Continental Device India Limited**

C-120 Naraina Industrial Area, New Delhi 110 028, India.  
Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119  
email@cdil.com www.cdilsemi.com