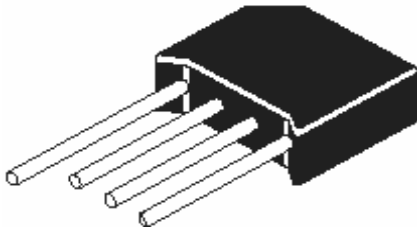


**SINGLE PHASE BRIDGE RECTIFIERS**

**KBL4005 - KBL410**



**KBL  
PLASTIC PACKAGE**

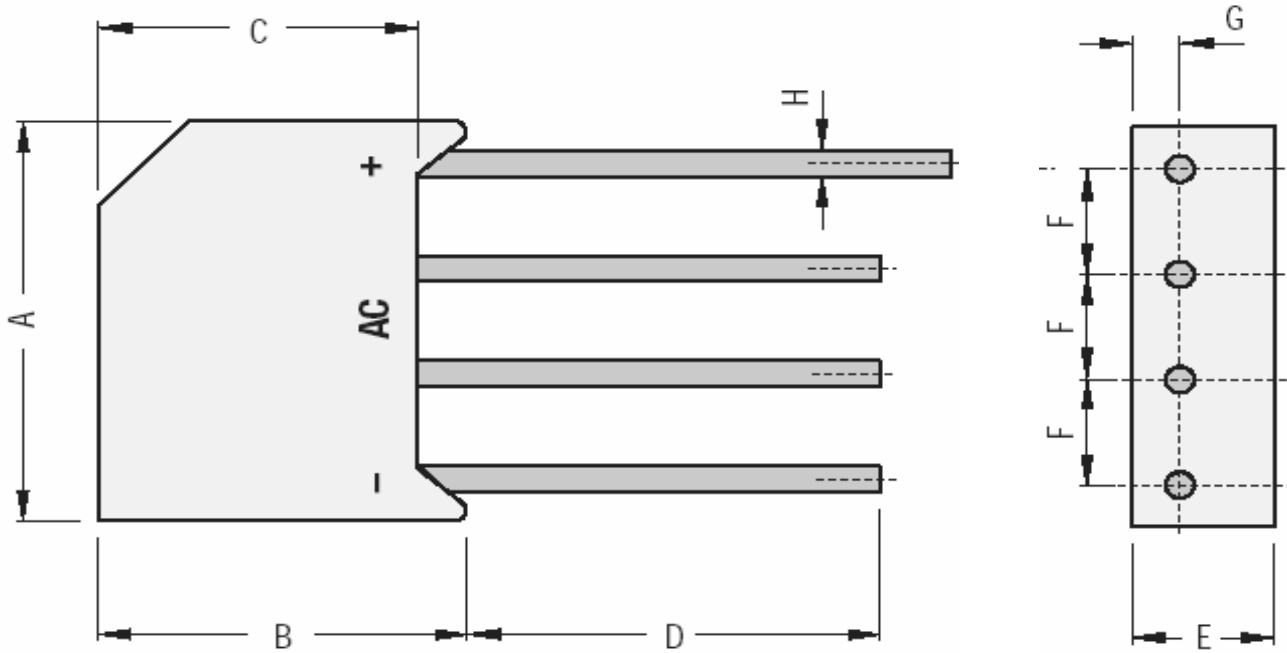
Ratings at 25°C Ambient Temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

DESCRIPTION	SYMBOL	KBL4005	KBL401	KBL402	KBL404	KBL406	KBL408	KBL410	UNIT
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 0.375" (9.5mm) Lead Length at $T_A=50^\circ\text{C}$	$I_{(AV)}$	4.0							A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200							A
Maximum Forward Voltage at 4A DC and 25°C	$V_F$	1.1							V
Maximum Reverse Current at $T_a=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	$I_R$	10.0							$\mu\text{A}$
		500							
Typical Junction Capacitance (Note1)	$C_j$	40							pF
Typical Thermal Resistance (Note 2)	$R_{qJL}$	2.4							$^\circ\text{C/W}$
Typical Thermal Resistance (Note 2)	$R_{qJA}$	19.0							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 to +125							$^\circ\text{C}$

Notes

1. Measured at 1MHz and applied reverse voltage of 4.0 VDC
2. Thermal resistance from junction to ambient with units mounted on 3.0 x 0.11" thick (7.5 x 7.5 x 0.3cm) I. plate
3. Thermal resistance from junction to lead with units mounted on P.C.B at 0.375" (9.5mm) lead length and 0.5 x 0.5" (12 x 12mm) Copper pads

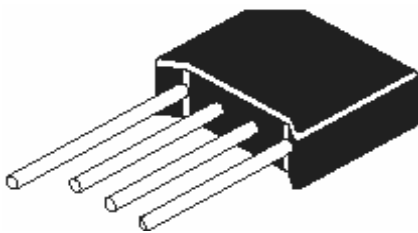
KBL Leaded Plastic Package



DIM	Min	Max
A	18.5	19.5
B	15.20	16.30
C	13.70	14.70
D	19.00	

DIM	Min	Max
E	6.0	6.50
F	4.60	5.60
G		2.10
H	1.20	1.30

All Dimensions are in mm



## Packaging Information

Package/ Case Type	Packaging Type	Std. Packing Qty	Inner Carton			Outer Carton		
			Qty	Size L x W x H (cm)	Gross Weight (Kg)	Qty	Size L x W x H (cm)	Gross Weight (Kg)
KBP	Bulk	400						

Bulk: Lose in Poly bags

## Component Disposal Instructions

1. CDIL Semiconductor Devices are non-recyclable RoHS compliant material, 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).

## Customer Notes

### 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 Discrete 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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