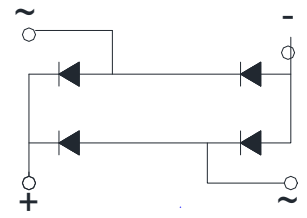
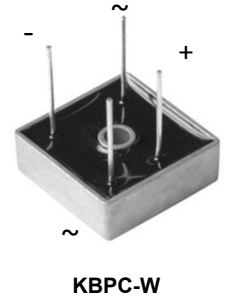
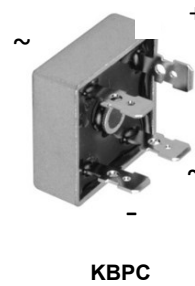


# KBPC50 Series

Glass Passivated Single-Phase Bridge Rectifiers  
 Voltage Range 50 to 1000V Forward Current 50A

## Features

- Surge overload rating - 200~400A peak
- High surge current capability
- Low thermal resistance
- Low forward voltage drop
- Mounting position: Any
- Electrically isolated base - 1800V
- Solderable 0.25" FASTON terminals
- Solder dip 275 °C max. 7 s, per JESD 22-B106
- Terminals: Tin plated leads,  
 Solderable per J-STD-002 and JESD22-B102,  
 Suffix letter "W" added to indicate wire leads(e.g. KBPC5010W)



**Schematic Diagram**

## Maximum Ratings and Electrical Characteristics

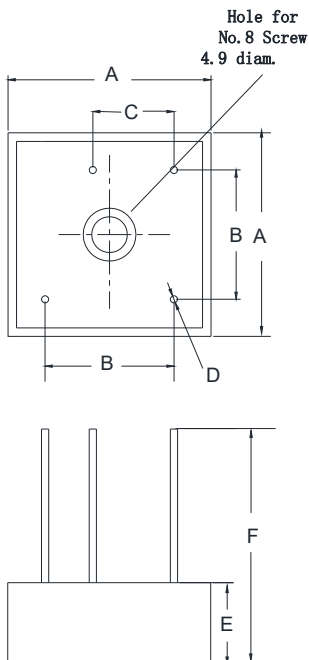
$T_A=25^{\circ}\text{C}$  Unless otherwise specified

Parameter	Symbol	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	Unit
		50005	5001	5002	5004	5006	5008	5010	
		KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	
		50005W	5001W	5002W	5004W	5006W	5008W	5010W	
Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum Instantaneous Forward Voltage Drop per Diode ( $I_{FM}=25\text{A}$ )	$V_{FM}$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode ( $V_{RM}=V_{RRM}$ )	$I_{RRM}$	10							$\mu\text{A}$
Average Rectified Output Current @60Hz Sine Wave, R-load, With Heatsink, $T_c=55^{\circ}\text{C}$	$I_o$	50							A
Surge(Non-repetitive) Forward Current @60Hz Half- sine Wave, 1 cycle, $T_A=25^{\circ}\text{C}$	$I_{FSM}$	500							A
Current Squared Time @ $1\text{ms}\leq t\leq 8.3\text{ms}$ $T_J=25^{\circ}\text{C}$ , Rating of Per Diode	$I^2t$	1040							$\text{A}^2\text{S}$
Storage Temperature	$T_{STG}$	-55 to +150							$^{\circ}\text{C}$
Junction Temperature	$T_J$	-55 to +150							$^{\circ}\text{C}$
Dielectric Strength, Terminals to Case, AC 1 minute	$V_{dis}$	2.5							KV
Thermal Resistance, Between Junction and Case, With Heatsink	$R_{\theta J-C}$	1.3							$^{\circ}\text{C}/\text{W}$



**Package Outline Dimensions**

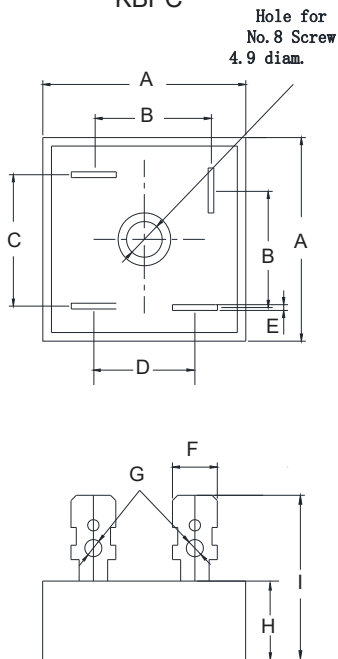
KBPC-W



KBPC-W		
Dim	Min	Max
A	28.2	28.8
B	17.1	19.1
C	10.4	12.4
D	0.95	1.05
E	10.8	11.2
F	30	

Dimensions in millimeters

KBPC



KBPC		
Dim	Min	Max
A	28.2	28.8
B	15.3	17.3
C	17.1	19.1
D	13.2	15.2
E	0.75	0.85
F	6.2	6.4
G	2.3	2.6
H	10.8	11.2
I	19	

Dimensions in millimeters