
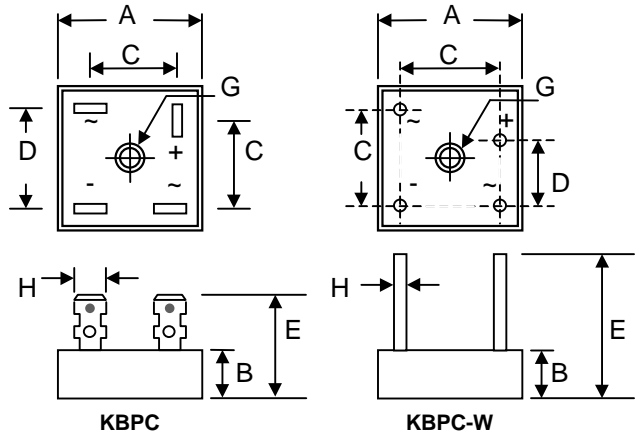


## Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Metal Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V
-  Recognized File # E157705

## Mechanical Data

- Case: KBPC (Metal Case with Faston Lugs) or KBPC-W (Metal Case with Wire Leads)
- Terminals: Plated Faston Lugs or Wire Leads, Add "W" Suffix to Indicate Wire Leads
- Polarity: As Marked on Case
- Mounting: Through Hole with #10 Screw
- Mounting Torque: 23 cm·kg (20 in·lbs) Max.
- Weight: 30 grams (KBPC); 28 grams (KBPC-W)
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



Dim	KBPC		KBPC-W	
	Min	Max	Min	Max
A	27.94	28.96	27.94	28.96
B	10.97	11.23	10.97	11.23
C	15.50	17.60	17.10	19.10
D	17.50	18.50	10.90	11.90
E	22.86	25.40	30.50	—
G	Hole for #10 screw, 5.08Ø Nominal			
H	6.35 Typical		0.97Ø 1.07Ø	

All Dimension in mm

## Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	KBPC10										Unit	
		00	01	02	04	06	08	10	12	14	16		
Peak Repetitive Reverse Voltage	$V_{RRM}$												V
Working Peak Reverse Voltage	$V_{RWV}$	50	100	200	400	600	800	1000	1200	1400	1600		
DC Blocking Voltage	$V_R$												
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	840	980	1120	V	
Average Rectified Output Current @ $T_A = 50^\circ\text{C}$	$I_O$	10										A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	200										A	
Forward Voltage per leg @ $I_F = 5.0\text{A}$	$V_{FM}$	1.2										V	
Peak Reverse Current @ $T_C = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_C = 125^\circ\text{C}$	$I_{RM}$	10 1.0										$\mu\text{A}$ mA	
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	166										$\text{A}^2\text{s}$	
Typical Junction Capacitance (Note 1)	$C_j$	300										pF	
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JC}$	3.0										$^\circ\text{C}/\text{W}$	
RMS Isolation Voltage from Case to Leads	$V_{ISO}$	2500										V	
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150										$^\circ\text{C}$	

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
2. Thermal resistance junction to case, mounted on heatsink.

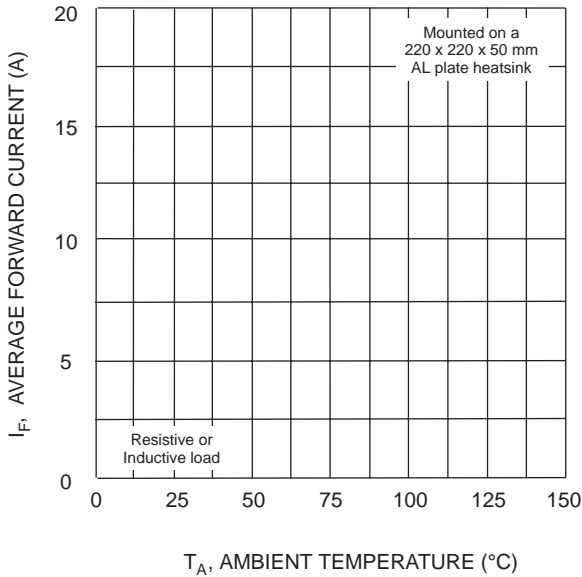


Fig. 1 Forward Current Derating Curve

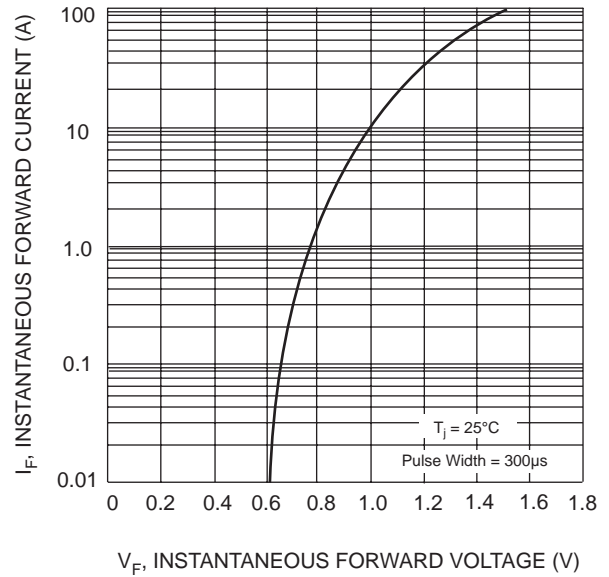


Fig. 2 Typical Forward Characteristics (per element)



Fig. 3 Max Non-Repetitive Surge Current

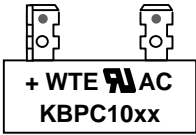
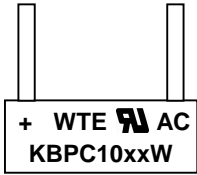


Fig. 4 Typical Junction Capacitance (per element)



Fig. 5 Typical Reverse Characteristics (per element)

## MARKING INFORMATION

<p><b>KBPC</b></p>  <p>WTE = Manufacturer's Logo          KBPC10xx = Device Number          xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16          Polarity = As Marked on Body</p>	<p><b>KBPC-W</b></p>  <p>WTE = Manufacturer's Logo          KBPC10xxW = Device Number          xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16          Polarity = As Marked on Body</p>
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## PACKAGING INFORMATION

**BULK**

Case Style	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
<b>KBPC</b>	195 x 195 x 40	50	405 x 205 x 240	500	17.0
<b>KBPC-W</b>	195 x 195 x 40	50	405 x 205 x 240	500	16.0

**Note:** 1. Paper box, white or brown color.

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBPC1000	Square Bridge	50 Units/Box
KBPC1000W	Square Bridge	50 Units/Box
KBPC1001	Square Bridge	50 Units/Box
KBPC1001W	Square Bridge	50 Units/Box
KBPC1002	Square Bridge	50 Units/Box
KBPC1002W	Square Bridge	50 Units/Box
KBPC1004	Square Bridge	50 Units/Box
KBPC1004W	Square Bridge	50 Units/Box
KBPC1006	Square Bridge	50 Units/Box
KBPC1006W	Square Bridge	50 Units/Box
KBPC1008	Square Bridge	50 Units/Box
KBPC1008W	Square Bridge	50 Units/Box
KBPC1010	Square Bridge	50 Units/Box
KBPC1010W	Square Bridge	50 Units/Box
KBPC1012	Square Bridge	50 Units/Box
KBPC1012W	Square Bridge	50 Units/Box
KBPC1014	Square Bridge	50 Units/Box
KBPC1014W	Square Bridge	50 Units/Box
KBPC1016	Square Bridge	50 Units/Box
KBPC1016W	Square Bridge	50 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, KBPC1000-LF.

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**WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT.** WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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