
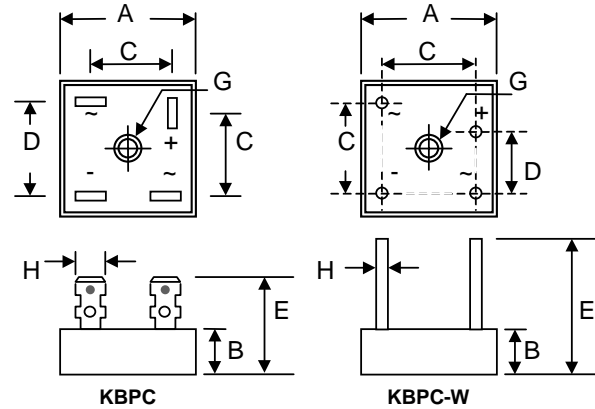


### Features

- 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**



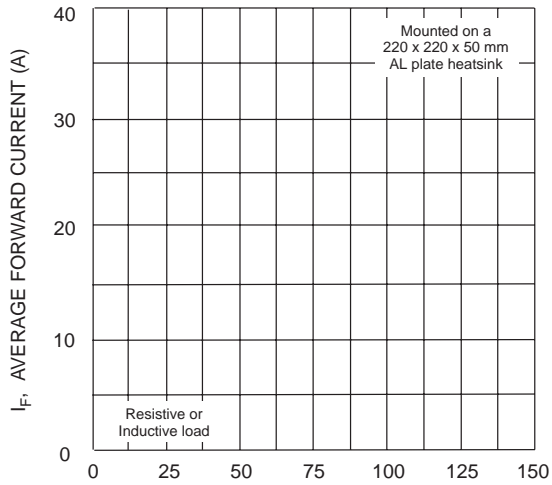
Dim	KBPC		KBPC-W	
	Min	Max	Min	Max
A	27.94	28.96	27.94	28.96
B	10.97	11.23	10.97	11.23
C	15.50	17.60	17.10	19.10
D	17.50	18.50	10.90	11.90
E	22.86	25.40	30.50	—
G	Hole for #10 screw, 5.08Ø Nominal			
H	6.35 Typical		0.97Ø	1.07Ø
All Dimension in mm				

### Maximum Ratings and Electrical Characteristics @<sub>T<sub>A</sub></sub>=25°C unless otherwise specified

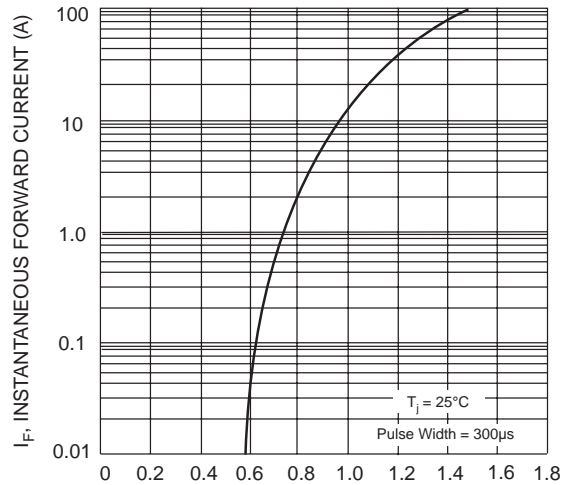
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	KBPC35										Unit
		00	01	02	04	06	08	10	12	14	16	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	1200	1400	1600	V
Working Peak Reverse Voltage	V <sub>RWM</sub>											
DC Blocking Voltage	V <sub>R</sub>											
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	840	980	1120	V
Average Rectified Output Current @ <sub>T<sub>A</sub></sub> = 60°C	I <sub>O</sub>	35										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	400										A
Forward Voltage per leg @ <sub>I<sub>F</sub></sub> = 17.5A	V <sub>FM</sub>	1.2										V
Peak Reverse Current @ <sub>T<sub>C</sub></sub> = 25°C	I <sub>RM</sub>	10										µA
At Rated DC Blocking Voltage @ <sub>T<sub>C</sub></sub> = 125°C		1.0										
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	664										A <sup>2</sup> s
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	300										pF
Typical Thermal Resistance per leg (Note 2)	R <sub>θJC</sub>	2.1										°C/W
RMS Isolation Voltage from Case to Leads	V <sub>ISO</sub>	2500										V
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150										°C

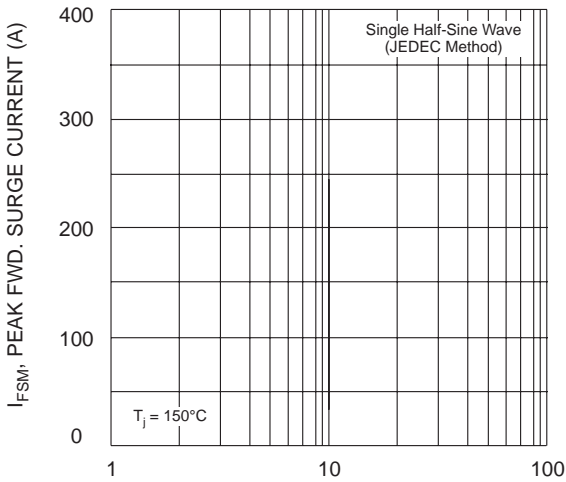
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
2. Thermal resistance junction to case, mounted on heatsink.



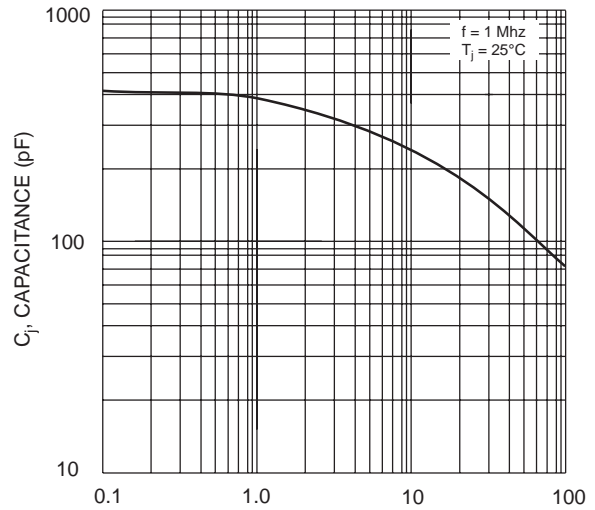
$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz  
Fig. 3 Max Non-Repetitive Surge Current



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typical Junction Capacitance (per element)

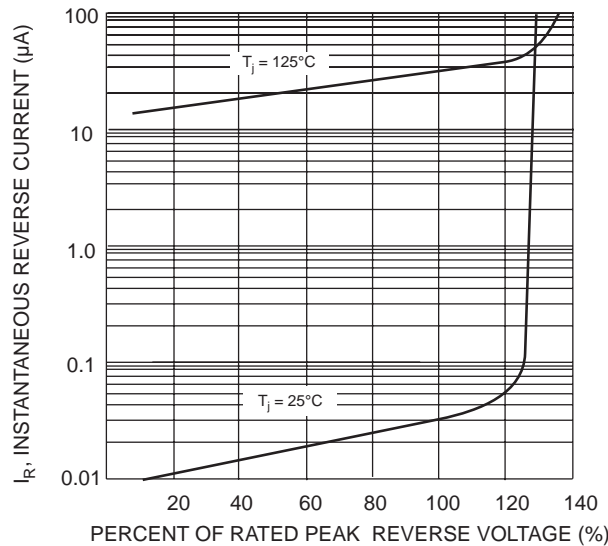
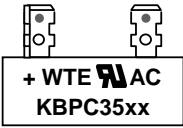
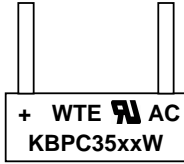


Fig. 5 Typical Reverse Characteristics (per element)

## MARKING INFORMATION

KBPC	KBPC-W
 <p>WTE = Manufacturer's Logo            KBPC35xx = Device Number            xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16            Polarity = As Marked on Body</p>	 <p>WTE = Manufacturer's Logo            KBPC35xxW = Device Number            xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16            Polarity = As Marked on Body</p>

## 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)
KBPC	195 x 195 x 40	50	405 x 205 x 240	500	17.0
KBPC-W	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
KBPC3500	Square Bridge	50 Units/Box
KBPC3500W	Square Bridge	50 Units/Box
KBPC3501	Square Bridge	50 Units/Box
KBPC3501W	Square Bridge	50 Units/Box
KBPC3502	Square Bridge	50 Units/Box
KBPC3502W	Square Bridge	50 Units/Box
KBPC3504	Square Bridge	50 Units/Box
KBPC3504W	Square Bridge	50 Units/Box
KBPC3506	Square Bridge	50 Units/Box
KBPC3506W	Square Bridge	50 Units/Box
KBPC3508	Square Bridge	50 Units/Box
KBPC3508W	Square Bridge	50 Units/Box
KBPC3510	Square Bridge	50 Units/Box
KBPC3510W	Square Bridge	50 Units/Box
KBPC3512	Square Bridge	50 Units/Box
KBPC3512W	Square Bridge	50 Units/Box
KBPC3514	Square Bridge	50 Units/Box
KBPC3514W	Square Bridge	50 Units/Box
KBPC3516	Square Bridge	50 Units/Box
KBPC3516W	Square Bridge	50 Units/Box

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, KBPC3500-LF.**

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