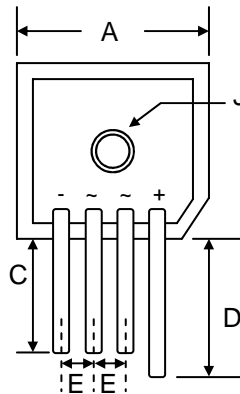


## Features

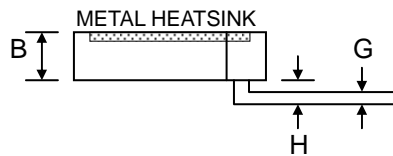
- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Designed for Saving Mounting Space
- Recognized File # E157705

## Mechanical Data

- Case: KBPC-S, Molded Plastic with Heatsink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Mounting: Through Hole with #10 Screw
- Mounting Torque: 23 cm·kg (20 in·lbs) Max.
- Weight: 21 grams (approx.)
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



KBPC-S		
Dim	Min	Max
A	28.40	28.70
B	10.97	11.23
C	—	21.00
D	—	25.00
E	5.10	—
G	1.20 Ø Typical	
H	3.05	3.60
J	5.08 Ø Nominal	
All Dimensions 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	KBPC10										Unit	
		00S	01S	02S	04S	06S	08S	10S	12S	14S	16S		
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>												V
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	100	200	400	600	800	1000	1200	1400	1600		
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> = 50°C	I <sub>O</sub>	10										A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	200										A	
Forward Voltage per leg @ <sub>I<sub>F</sub></sub> = 5.0A	V <sub>FM</sub>	1.1										V	
Peak Reverse Current @ <sub>T<sub>C</sub></sub> = 25°C At Rated DC Blocking Voltage @ <sub>T<sub>C</sub></sub> = 125°C	I <sub>RM</sub>	10 500										μA	
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	166										A <sup>2</sup> s	
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	200										pF	
Typical Thermal Resistance per leg (Note 2)	R <sub>θJC</sub>	3.0										°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.

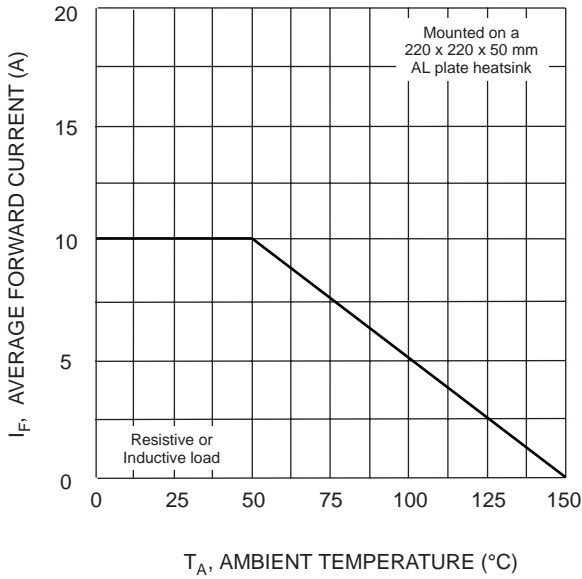


Fig. 1 Forward Current Derating Curve

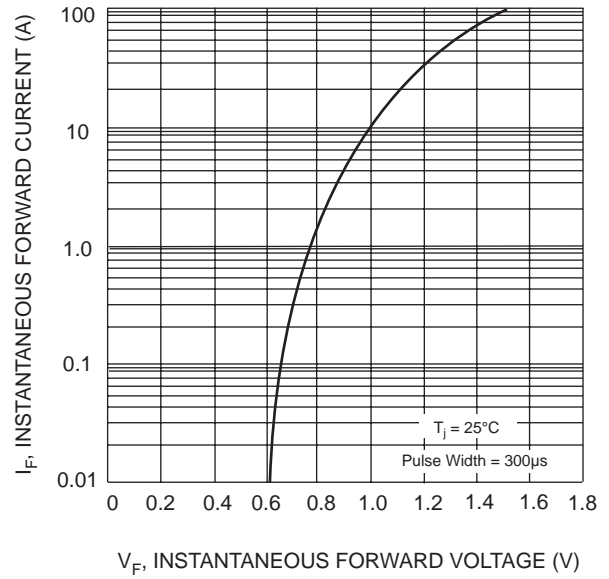


Fig. 2 Typical Forward Characteristics (per element)

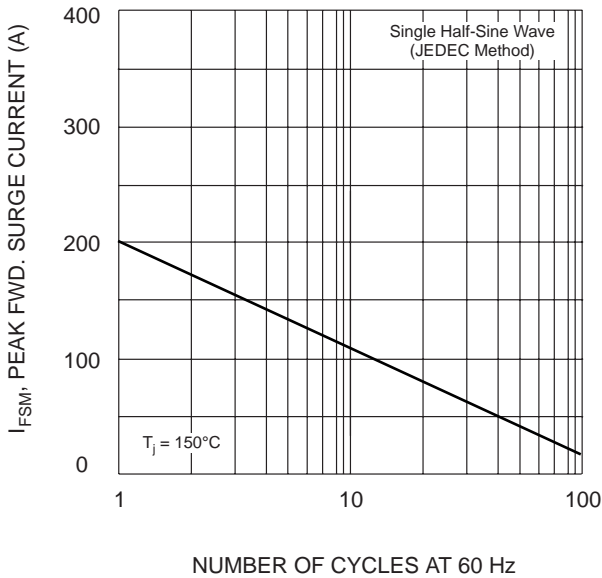


Fig. 3 Max Non-Repetitive Surge Current

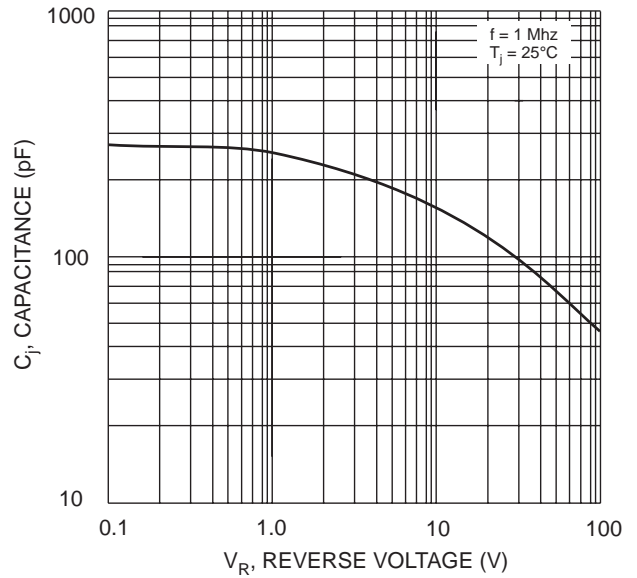


Fig. 4 Typical Junction Capacitance (per element)



Fig. 5 Typical Reverse Characteristics (per element)

## MARKING INFORMATION



WTE = Manufacturer's Logo  
 KBPC10xxS = Device Number  
 xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16  
 Polarity = As Marked on Body

## PACKAGING INFORMATION

### BULK

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)
195 x 195 x 40	80	405 x 205 x 240	800	17.0

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

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBPC1000S	SIL Bridge	80 Units/Box
KBPC1001S	SIL Bridge	80 Units/Box
KBPC1002S	SIL Bridge	80 Units/Box
KBPC1004S	SIL Bridge	80 Units/Box
KBPC1006S	SIL Bridge	80 Units/Box
KBPC1008S	SIL Bridge	80 Units/Box
KBPC1010S	SIL Bridge	80 Units/Box
KBPC1012S	SIL Bridge	80 Units/Box
KBPC1014S	SIL Bridge	80 Units/Box
KBPC1016S	SIL Bridge	80 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, KBPC1000S-LF.**

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**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.

**Won-Top Electronics Co., Ltd.**

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

**Phone:** 886-7-822-5408 or 886-7-822-5410

**Fax:** 886-7-822-5417

**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

*We power your everyday.*