


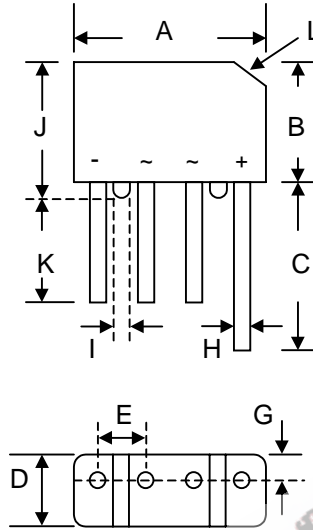
## 1.5A SINGLE-PHASE BRIDGE RECTIFIER

### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
-  Recognized File # E157705

### Mechanical Data

- Case: KBP, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.7 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



KBP		
Dim	Min	Max
A	14.22	15.24
B	10.67	11.68
C	15.20	—
D	4.57	5.08
E	3.60	4.10
G	1.00	1.40
H	0.76	0.86
I	1.52	—
J	11.68	12.70
K	12.7	—
L	3.2 x 45° Typical	
All Dimensions in mm		

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

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

Characteristic	Symbol	KBP 150	KBP 151	KBP 152	KBP 154	KBP 156	KBP 158	KBP 1510	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @T <sub>A</sub> = 50°C	I <sub>O</sub>	1.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50							A
Forward Voltage per leg @I <sub>F</sub> = 1.5A	V <sub>FM</sub>	1.3							V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 125°C	I <sub>RM</sub>	5.0 500							μA
Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	10							A <sup>2</sup> s
Typical Junction Capacitance per leg (Note 1)	C <sub>j</sub>	15							pF
Typical Thermal Resistance per leg (Note 2)	R <sub>θJA</sub> R <sub>θJL</sub>	40 13							°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +150							°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
2. Mounted on PC board with 12mm<sup>2</sup> copper pad.

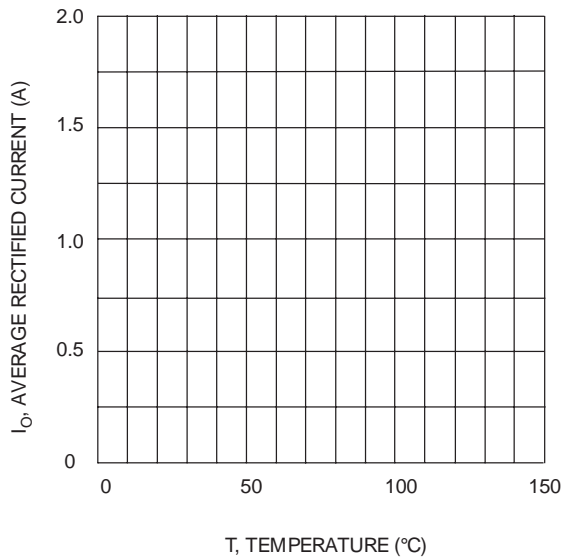


Fig. 1 Forward Current Derating Curve

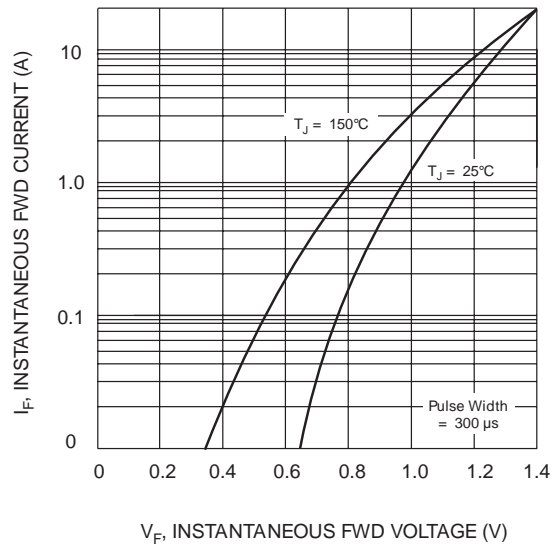


Fig. 2 Typical Fwd Characteristics

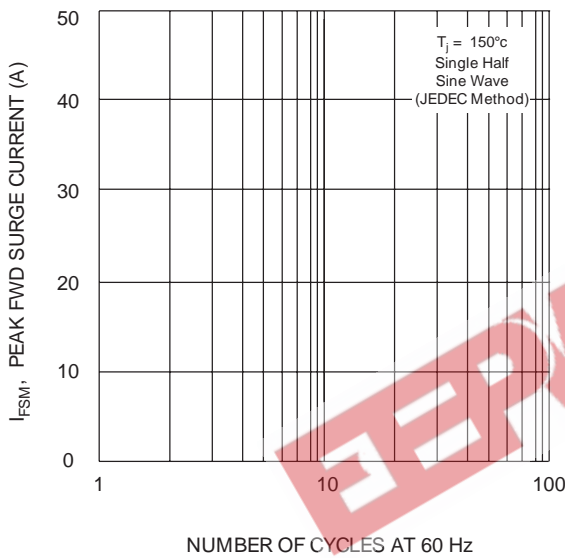


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

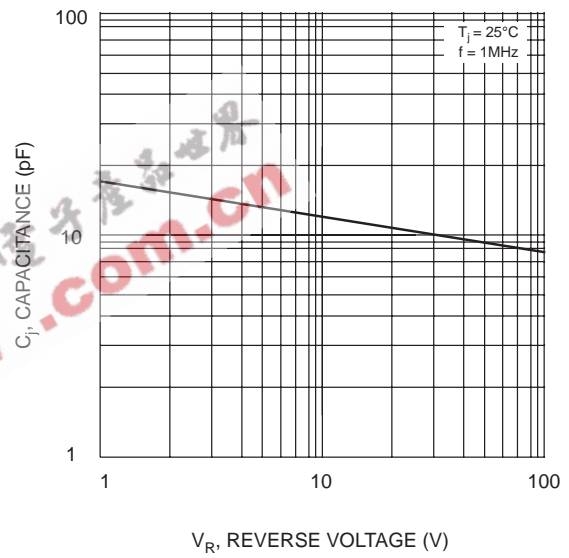


Fig. 4 Typical Junction Capacitance

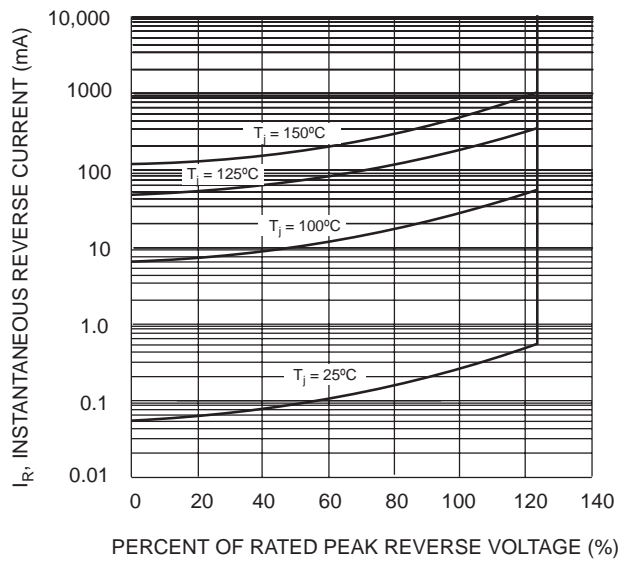
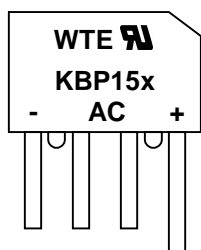


Fig. 5 Typical Reverse Characteristics

## MARKING INFORMATION



WTE = Manufacturer's Logo  
 KBP15x = Device Number  
 x = 0, 1, 2, 4, 6, 8 or 10  
 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)
200 x 160 x 42	600	425 x 215 x 280	7,200	17.0

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

EEPW.com.cn

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBP150	SIL Bridge	600 Units/Box
KBP151	SIL Bridge	600 Units/Box
KBP152	SIL Bridge	600 Units/Box
KBP154	SIL Bridge	600 Units/Box
KBP156	SIL Bridge	600 Units/Box
KBP158	SIL Bridge	600 Units/Box
KBP1510	SIL Bridge	600 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, KBP150-LF.**

**EEPW** 电子產品世界  
.com.cn

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.*