

# KBP150 − KBP1510 Rohs



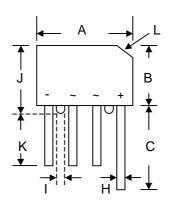
## 1.5A SINGLE-PHASE BRIDGE RECTIFIER

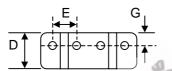
## **Features**

- 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		
Α	14.22	15.24		
В	10.67	11.68		
С	15.20	_		
D	4.57	5.08		
E	3.60	4.10		
G	1.00	1.40		
Н	0.76	0.86		
ı	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	1	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		VRRM VRWM VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current	@T <sub>A</sub> = 50°C	lo				1.5				Α
Non-Repetitive Peak Forward Surge C 8.3ms Single half sine-wave superimp rated load (JEDEC Method)		İFSM				50				А
Forward Voltage per leg	@I <sub>F</sub> = 1.5A	VFM				1.3				V
Peak Reverse Current At Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C @T <sub>A</sub> = 125°C	lкм				5.0 500				μΑ
Rating for Fusing (t<8.3ms)		l <sup>2</sup> t				10				A <sup>2</sup> s
Typical Junction Capacitance per leg (	Note 1)	Cj				15				pF
Typical Thermal Resistance per leg (N	ote 2)	RθJA RθJL				40 13				°C/W
Operating and Storage Temperature Range		Тj, Tsтg		•	-:	55 to +15	0		•	°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.

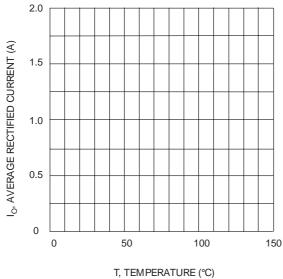
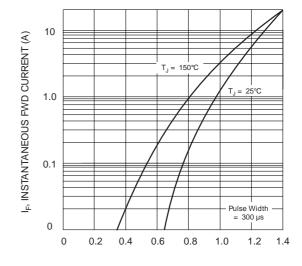


Fig. 1 Forward Current Derating Curve



 $\rm V_{\rm F},$  INSTANTANEOUS FWD VOLTAGE (V)

Fig. 2 Typical Fwd Characteristics

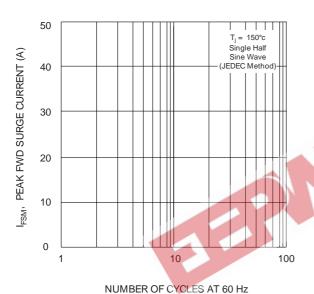
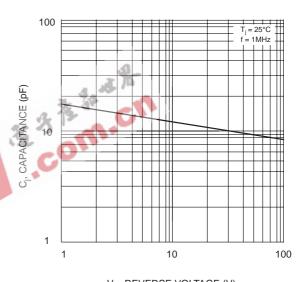
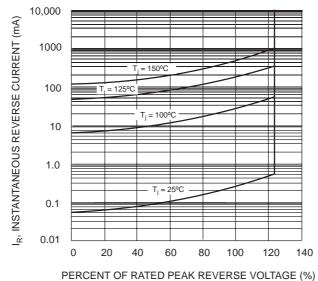


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

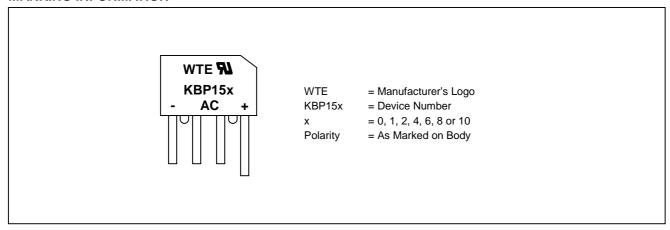


 ${\rm V_R}, {\rm REVERSE\ VOLTAGE\ (V)}$  Fig. 4 Typical Junction Capacitance



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## **MARKING INFORMATION**



## **PACKAGING INFORMATION**

## **BULK**

Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight (KG)
L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	
200 x 160 x 42	600	425 x 215 x 280	7,200	17.0

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

#### **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

- 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, KBP150-LF.



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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

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