

# **KBPC15PS SERIES**

## 15A SINGLE PHASE BRIDGE RECTIFIER

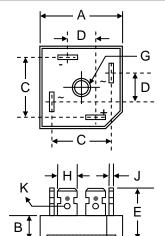


## **Features**

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Heatsink Integrated Epoxy Case for Maximum Heat Dissipation
- Low Thermal Resistance
- High Surge Current Capability
- Recognized File # E157705

## **Mechanical Data**

- Case: Epoxy Case with Heatsink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Faston Lugs
- Polarity: As Marked on Case
- Mounting: Through Hole with #10 Screw
- Mounting Torque: 2.0 N.m Max.
- Weight: 20 grams (approx.)
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4



KBPC-PS						
Dim	Min Max					
Α	28.40	28.70				
В	— 10.16					
С	21.00 22.50					
D	9.00	10.00				
Е	— 25.40					
G	5.08Ø Nominal					
Н	6.35 Typical					
J	0.71	0.91				
К	2.5Ø Typical					
All Dimension in mm						

## Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

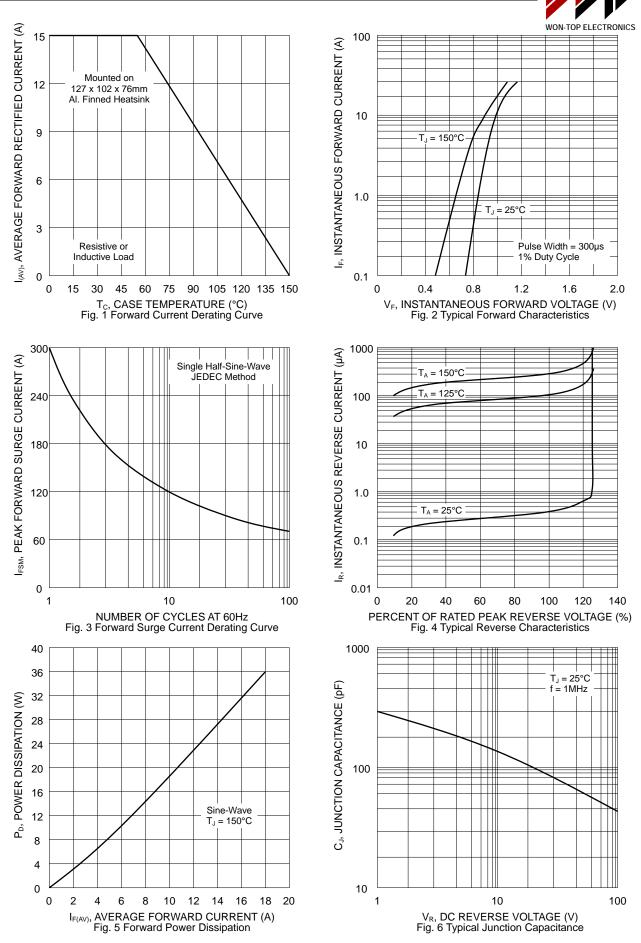
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	KBPC15						Unit		
Characteristic	Symbol	00PS	01PS	02PS	04PS	06PS	08PS	10PS	12PS	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	1200	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	840	V
Average Rectified Output Current $@T_c = 55^{\circ}C$	lo	15				А				
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	300						A		
Forward Voltage per leg $@I_F = 7.5A$	Vfm	1.1					V			
Peak Reverse Current $@T_c = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_c = 125^{\circ}C$	Irm	10 500				μA				
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t	l <sup>2</sup> t 375			A <sup>2</sup> s					
Typical Junction Capacitance (Note 1)	Сл	200				pF				
Typical Thermal Resistance (Note 2)	R JC	1.9						°C/W		
RMS Isolation Voltage, t = 1min	Viso	2500						V		
Operating and Storage Temperature Range	Tj, Tsтg	Tsrg -55 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 127 x 102 x 76mm Al. heatsink.

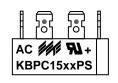
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#### MARKING INFORMATION



KBPC15xxPS xx Polarity = Device Number = 00, 01, 02, 04, 06, 08, 10 or 12 = As Marked on Body

### 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-PS	195 x 195 x 40	50	405 x 205 x 240	500	12.0

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



#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
KBPC15xxPS	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 RoHS / Lead Free version (with Lead Free finish), add "-LF"

To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, KBPC1500PS-LF.

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Won-Top Electronics Co., Ltd. No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung 806, 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

