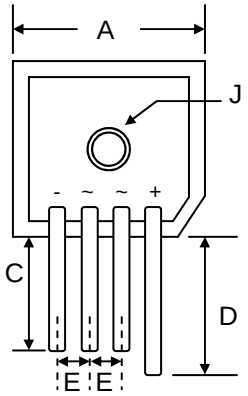
KBPC15S SERIES

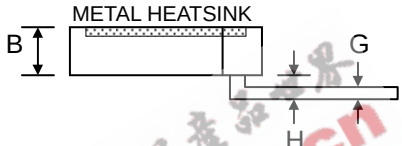
15A SINGLE-PHASE BRIDGE RECTIFIER

Features

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



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		



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**

Maximum Ratings and Electrical Characteristics @T_A=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
		00S	01S	02S	04S	06S	08S	10S	12S	14S	16S	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	1200	1400	1600	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	840	980	1120	V
Average Rectified Output Current @T_A = 60°C	I_O	15										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300										A
Forward Voltage per leg @I_F = 7.5A	V_{FM}	1.1										V
Peak Reverse Current @T_C = 25°C At Rated DC Blocking Voltage @T_C = 125°C	I_{RM}	10 500										μA
I^2t Rating for Fusing (t < 8.3ms)	I^2t	373										A^2s
Typical Junction Capacitance (Note 1)	C_j	200										pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JC}$	2.6										°C/W
RMS Isolation Voltage from Case to Leads	V_{ISO}	2500										V
Operating and Storage Temperature Range	T_j, T_{STG}	-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.

© 2006 Won-Top Electronics

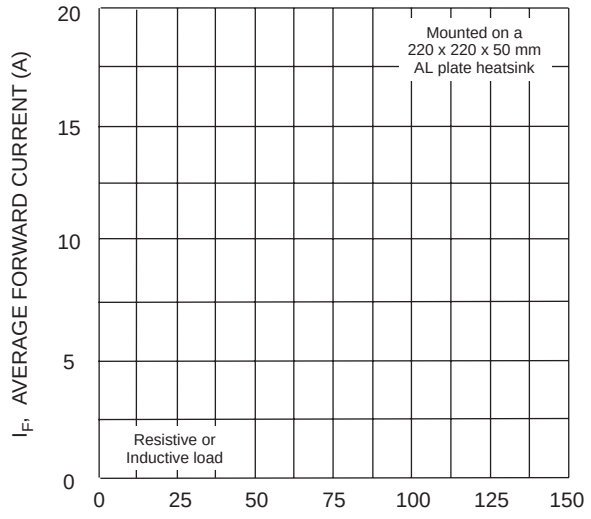


Fig. 1 Forward. Current Derating Curve

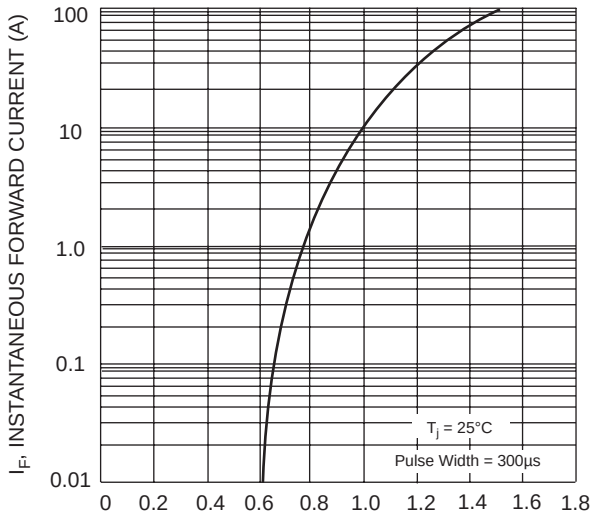


Fig. 2 Typical Forward Characteristics (per element)

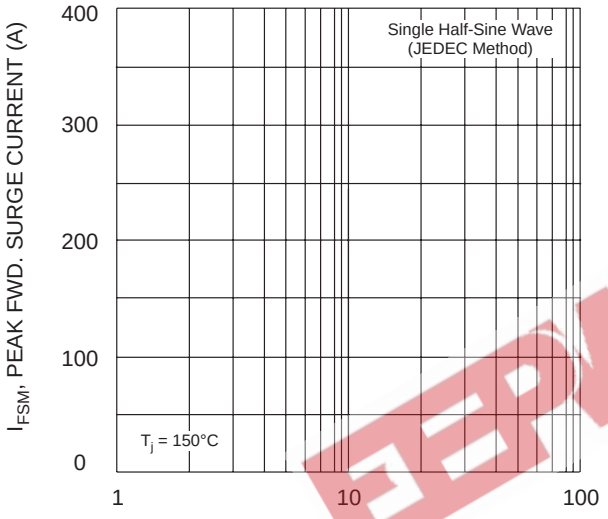


Fig. 3 Max Non-Repetitive Surge Current

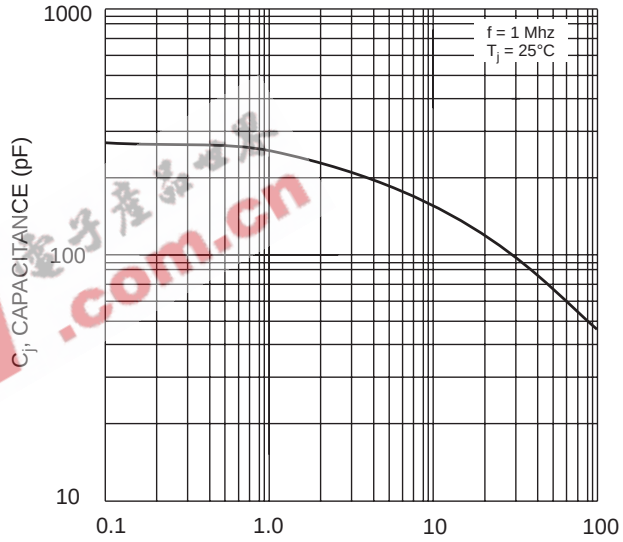


Fig. 4 Typical Junction Capacitance (per element)

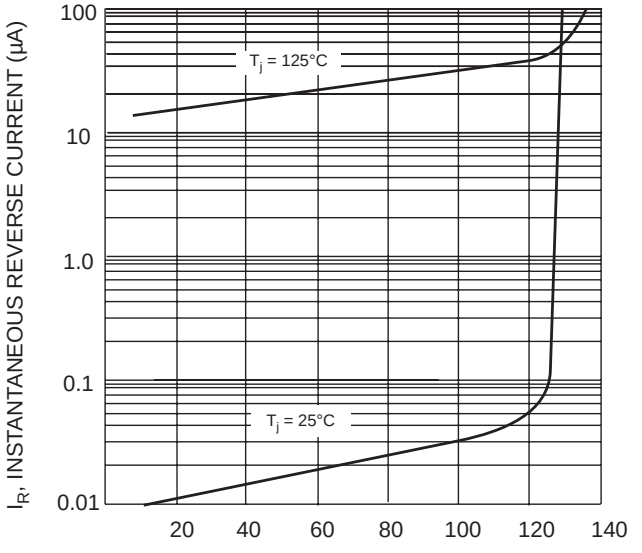


Fig. 5 Typical Reverse Characteristics (per element)

 © 2006 Won-Top Electronics

MARKING INFORMATION

WTE = Manufacturer's Logo
KBPC15xxS = 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.

EEPW .com.cn

 © 2006 Won-Top Electronics

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBPC1500S	SIL Bridge	80 Units/Box
KBPC1501S	SIL Bridge	80 Units/Box
KBPC1502S	SIL Bridge	80 Units/Box
KBPC1504S	SIL Bridge	80 Units/Box
KBPC1506S	SIL Bridge	80 Units/Box
KBPC1508S	SIL Bridge	80 Units/Box
KBPC1510S	SIL Bridge	80 Units/Box
KBPC1512S	SIL Bridge	80 Units/Box
KBPC1514S	SIL Bridge	80 Units/Box
KBPC1516S	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, KBPC1500S-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.

 © 2006 Won-Top Electronics