

# **KBPC15, 25, 35P/W SERIES**

### 15, 25, 35A HIGH CURRENT BRIDGE RECTIFIER

#### **Features**

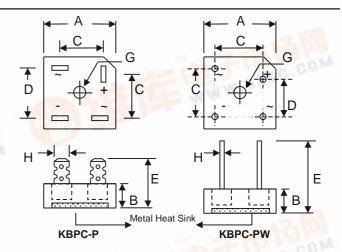
- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V
- UL Recognized File # E157705

#### **Mechanical Data**

- Case: Epoxy Case with Heat Sink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- Weight: KBPC-P 24 grams (approx.)
  - KBPC-PW 21 grams (approx.)
- Marking: Type Number

"W" Suffix Designates Wire Leads No Suffix Designates Faston Terminals

\*All Models are Available on B(Height)=7.9mm Max. Epoxy Case



	KBPC-P		KBPC-PW		
Dim	Min	Max	Min	Max	
Α	28.40	28.70	28.40	28.70	
В	10.97	11.23	10.97	11.23	
С	15.70	16.70	17.10	19.10	
D	17.50	18.50	10.90	11.90	
E	22.86 25.40		30.50	_	
G Hole for #10 screw, 5.08Ø Nominal					
Н	6.35 Typical		0.97Ø	1.07Ø	
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%.

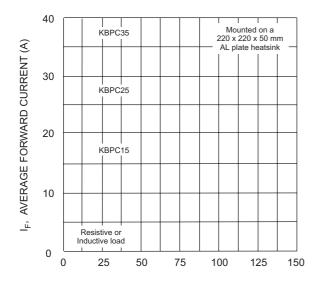
Characteristics  Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage  RMS Reverse Voltage		Symbol	-00P/W	-01P/W	-02P/W	-04P/W	-06P/W	-08P/W	-10P/W	Unit
		VRRM VRWM VR	50	100	200	400	600	800	1000	V
		VR(RMS)	35	70	140	280	420	560	700	V
Average Rectifier Output Current @T <sub>C</sub> = 60°C	KBPC15 KBPC25 KBPC35	lo				15 25 35	电	7-TT	SC.C	A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method)	KBPC15 KBPC25 KBPC35	IFSM	6		E	300 300 400	MA			A
Forward Voltage Drop (per element)  KBPC15 @I <sub>F</sub> = 7.5A  KBPC25 @I <sub>F</sub> = 12.5A  KBPC35 @I <sub>F</sub> = 17.5A		VFM	1.1				V			
Peark Reverse Current At Rated DC Blocking Voltage	@T <sub>C</sub> = 25°C @T <sub>C</sub> = 125°C	lгм				10 0.5				μA mA
l <sup>2</sup> t Rating for Fusing (t < 8.3ms)  (Note 1) DF  (Note 2) KBPC15  KBPC25  KBPC35		l <sup>2</sup> t	373 373 664				A <sup>2</sup> s			

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

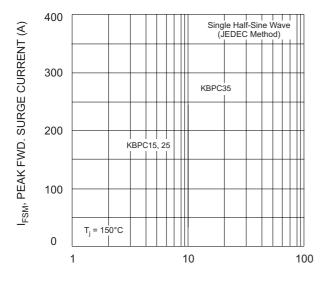
Typical Junction Capacitance (per element) (Note 2)	KBPC15 KBPC25 KBPC35	Cj	200 300 400	pF
Typical Thermal Resistance Junction to Case (per element) (Note 3)	KBPC15 KBPC25 KBPC35	R⊕JC	6.3 3.8 3.8	K/W
RMS Isolation Voltage from Case to Lead		Viso	2500	٧
Operating and Storage Temperature Ra	nge	Тj, Тsтg	-65 to +125	°C

Note: 1. Measured at non-repetitive, for t > 1ms and < 8.3ms.

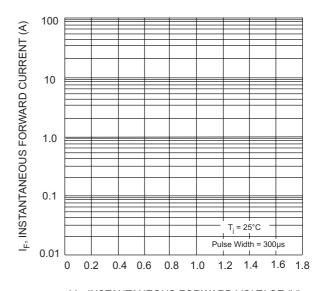
- Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
   Thermal resistance junction to case mounted on heatsink.



 $T_C$ , CASE TEMPERATURE (°C) Fig. 1 Forward. Current Derating Curve



NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Surge Current



 $V_{\rm F}$ , INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics (per element)

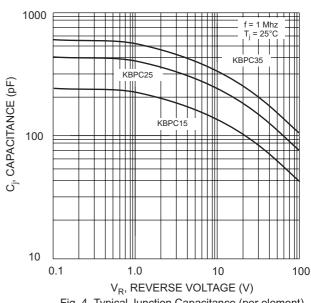
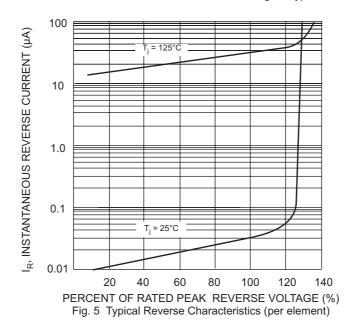


Fig. 4 Typical Junction Capacitance (per element)



#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
KBPCxx00P	Square Bridge	50 Units/Box
KBPCxx00PW	Square Bridge	50 Units/Box
KBPCxx01P	Square Bridge	50 Units/Box
KBPCxx01PW	Square Bridge	50 Units/Box
KBPCxx02P	Square Bridge	50 Units/Box
KBPCxx02PW	Square Bridge	50 Units/Box
KBPCxx04P	Square Bridge	50 Units/Box
KBPCxx04PW	Square Bridge	50 Units/Box
KBPCxx06P	Square Bridge	50 Units/Box
KBPCxx06PW	Square Bridge	50 Units/Box
KBPCxx08P	Square Bridge	50 Units/Box
KBPCxx08PW	Square Bridge	50 Units/Box
KBPCxx10P	Square Bridge	50 Units/Box
KBPCxx10PW	Square Bridge	50 Units/Box

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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.

