

KBPC1000/W - KBPC1010/W

10A HIGH CURRENT BRIDGE RECTIFIER

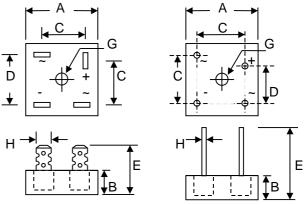
Features

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

Mechanical Data

- Case: Metal Case with Electrically Isolated Epoxy
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- 31.6 grams (approx.) **KBPC** Weight: KBPC-W 28.5 grams (approx.)
- Marking: Type Number

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



| | | KB | PC | KBPC-W | | | | | |
|----|----------|-----------------------------------|--------|--------|-------|--|--|--|--|
| | Dim | Min | Max | Min | Max | | | | |
| | Α | 28.40 | 28.70 | 28.40 | 28.70 | | | | |
| | В | 10.97 | 11.23 | 10.97 | 11.23 | | | | |
| ĺ | C | 15.70 | 16.70 | 17.10 | 19.10 | | | | |
| 72 | D | 17.50 | 18.50 | 10.90 | 11.90 | | | | |
| 7 | Ē | 22.86 | 25.40 | 30.50 | _ | | | | |
| 1 | G | Hole for #10 screw, 5.08Ø Nominal | | | | | | | |
| | H | 6.35 T | ypical | 0.97Ø | 1.07Ø | | | | |
| N | 3 | All Dimension in mm | | | | | | | |

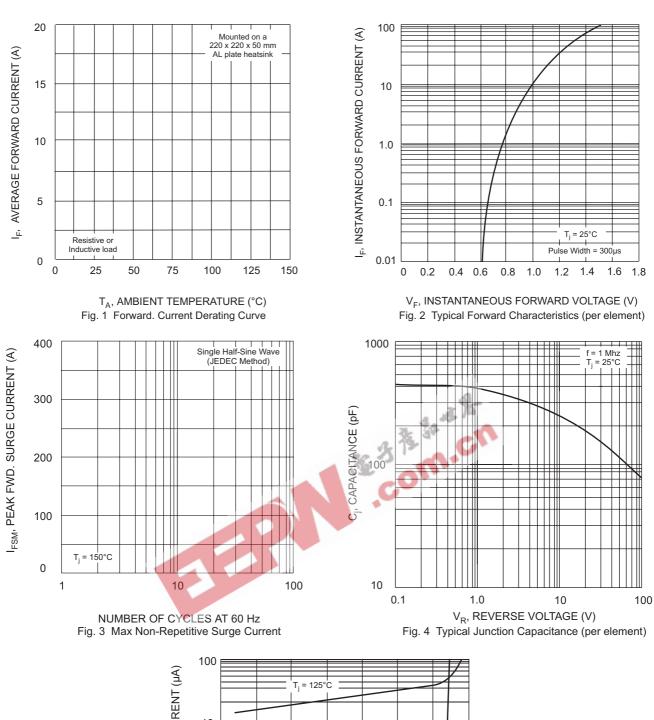
Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

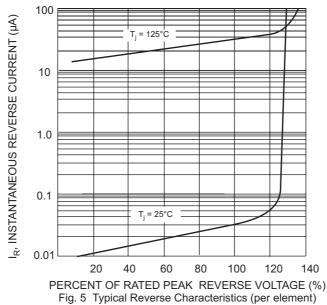
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

| Characteristic | Symbol | KBPC 1000/W | KBPC 1001/W | KBPC 1002/W | KBPC 1004/W | KBPC 1006/W | KBPC 1008/W | KBPC 1010/W | 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 _A = 50°C | lo | 10 | | | | | | Α | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 200 | | | | | Α | | |
| Forward Voltage (per element) @I _F = 5.0A | VFM | 1.2 | | | | | | V | |
| Peak Reverse Current $@T_C = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_C = 125^{\circ}C$ | IRM | 10 1.0 | | | | | μA mA | | |
| Typical Junction Capacitance (Note 1) | Cj | 300 | | | | | | pF | |
| Typical Thermal Resistance (Note 2) | R _θ JC | 6.3 | | | | | K/W | | |
| RMS Isolation Voltage from Case to Lead | Viso | 2500 | | | | | | V | |
| Operating and Storage Temperature Range | Тj, Tsтg | -65 to +150 | | | | | | °C | |

^{*} Glass passivated forms are available upon request.

- Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
 - 2. Thermal resistance junction to case per element mounted on heatsink.





ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|---------------|-------------------|
| KBPC1000 | Square Bridge | 50 Units/Box |
| KBPC1000W | Square Bridge | 50 Units/Box |
| KBPC1001 | Square Bridge | 50 Units/Box |
| KBPC1001W | Square Bridge | 50 Units/Box |
| KBPC1002 | Square Bridge | 50 Units/Box |
| KBPC1002W | Square Bridge | 50 Units/Box |
| KBPC1004 | Square Bridge | 50 Units/Box |
| KBPC1004W | Square Bridge | 50 Units/Box |
| KBPC1006 | Square Bridge | 50 Units/Box |
| KBPC1006W | Square Bridge | 50 Units/Box |
| KBPC1008 | Square Bridge | 50 Units/Box |
| KBPC1008W | Square Bridge | 50 Units/Box |
| KBPC1010 | Square Bridge | 50 Units/Box |
| KBPC1010W | 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.