

KBPC15, 25, 35P/W SERIES

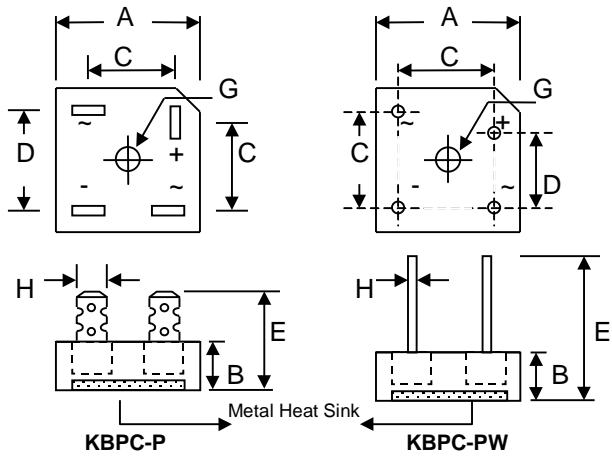
15, 25, 35A HIGH CURRENT BRIDGE RECTIFIER

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



| Dim | KBPC-P | | KBPC-PW | |
|-----|-----------------------------------|-------|-------------|-------|
| | Min | Max | Min | Max |
| A | 28.40 | 28.70 | 28.40 | 28.70 |
| B | 10.97 | 11.23 | 10.97 | 11.23 |
| C | 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 | | | |
| H | 6.35 Typical | | 0.97Ø 1.07Ø | |

All Dimension in mm

"W" Suffix Designates Wire Leads

No Suffix Designates Faston Terminals

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

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

| Characteristics | Symbol | -00P/W | -01P/W | -02P/W | -04P/W | -06P/W | -08P/W | -10P/W | Unit |
|--|--------------|--------|--------|--------|-------------------|--------|--------|--------|----------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Working Peak Reverse Voltage | V_{RWM} | | | | | | | | |
| DC Blocking Voltage | V_R | | | | | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectifier Output Current @ $T_C = 60^\circ\text{C}$ | I_O | | | | 15 25 35 | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method) | I_{FSM} | | | | 300 300 400 | | | | A |
| Forward Voltage Drop (per element) | V_{FM} | | | | 1.1 | | | | V |
| Peak Reverse Current At Rated DC Blocking Voltage | I_{RM} | | | | 10 0.5 | | | | μA mA |
| I^2t Rating for Fusing (t < 8.3ms) (Note 1) | I^2t | | | | 373 373 664 | | | | A^2s |

Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

| | | | | |
|---|----------------------------|-----------------|-------------------|--------------------|
| Typical Junction Capacitance (per element) (Note 2) | KBPC15 KBPC25 KBPC35 | C_j | 200 300 400 | pF |
| Typical Thermal Resistance Junction to Case (per element) (Note 3) | KBPC15 KBPC25 KBPC35 | $R_{\theta JC}$ | 6.3 3.8 3.8 | K/W |
| RMS Isolation Voltage from Case to Lead | | Viso | 2500 | V |
| Operating and Storage Temperature Range | | T_j, T_{STG} | -65 to +125 | $^{\circ}\text{C}$ |

- Note: 1. Measured at non-repetitive, for $t > 1\text{ms}$ and $< 8.3\text{ms}$.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
 3. Thermal resistance junction to case mounted on heatsink.

EEPW 电子產品世界
 .com.cn



Fig. 1 Forward Current Derating Curve



Fig. 2 Typical Forward Characteristics (per element)

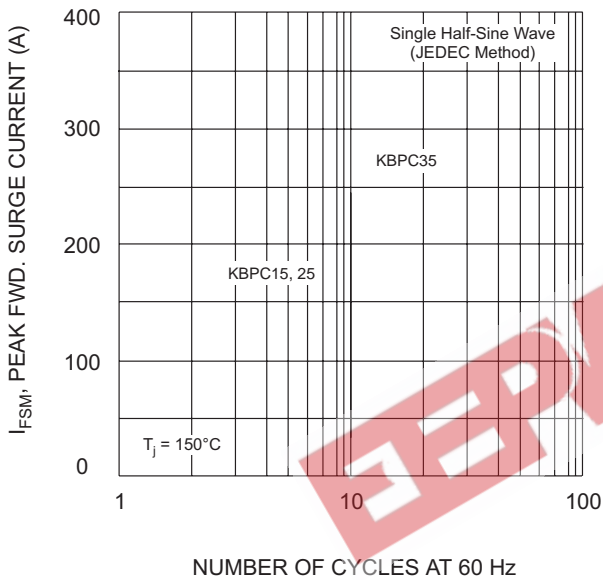


Fig. 3 Max Non-Repetitive Surge Current

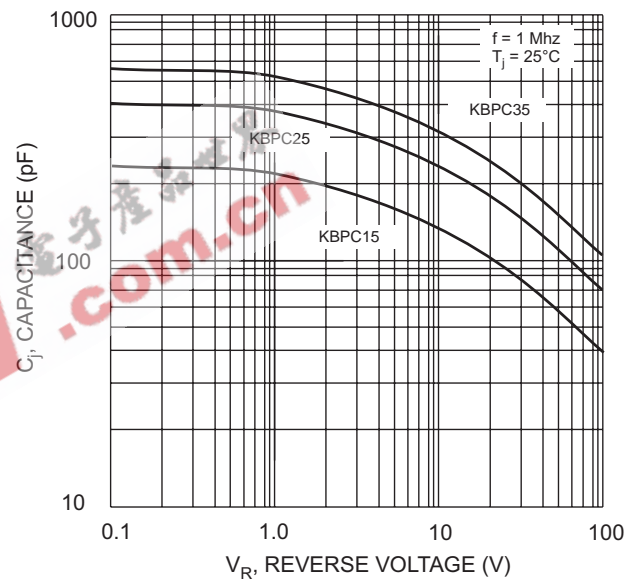


Fig. 4 Typical Junction Capacitance (per element)



Fig. 5 Typical Reverse Characteristics (per element)

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.

EEPW 电子產品世界
.com.cn

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.