

KBPC15, 25, 35P/W SERIES

15, 25, 35A HIGH CURRENT BRIDGE RECTIFIER

Features

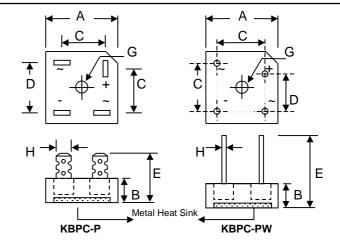
- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V
- UL Recognized File # E157705

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



| | KBF | PC-P | KBPC-PW | | | | |
|---------------------|-----------------------------------|-------------|---------|-------------------|--|-------|--|
| Dim | Min | Max | Min | Max | | | |
| Α | 28.40 | 28.70 | 28.40 | 28.70 | | | |
| В | 10.97 | 10.97 11.23 | | 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 | | | |
| Έ | 22.86 | 25.40 | 30.50 | | | | |
| G | Hole for #10 screw, 5.08Ø Nominal | | | | | | |
| H | 6.35 T | ypical | 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 | | Symbol | -00P/W | -01P/W | -02P/W | -04P/W | -06P/W | -08P/W | -10P/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 | RMS Reverse Voltage | | 35 | 70 | 140 | 280 | 420 | 560 | 700 | ٧ |
| Average Rectifier Output Current KBPC15 KBPC25 KBPC35 | | lo | 15 25 35 | | | | | А | | |
| Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method) KBPC15 KBPC25 KBPC35 | | IFSM | 300 300 400 | | | | | А | | |
| Forward Voltage Drop (per element) $ \begin{array}{ll} \text{KBPC15 @I_F = 7.5A} \\ \text{KBPC25 @I_F = 12.5A} \\ \text{KBPC35 @I_F = 17.5A} \\ \end{array} $ | | VFM | 1.1 | | | | | V | | |
| | @T _C = 25°C @T _C = 125°C | lгм | | | | 10 0.5 | | | | μA mA |
| I ² t Rating for Fusing (t < 8.3ms) (Note 1) | KBPC15 KBPC25 KBPC35 | l ² t | | | | 373 373 664 | | | | A ² s |

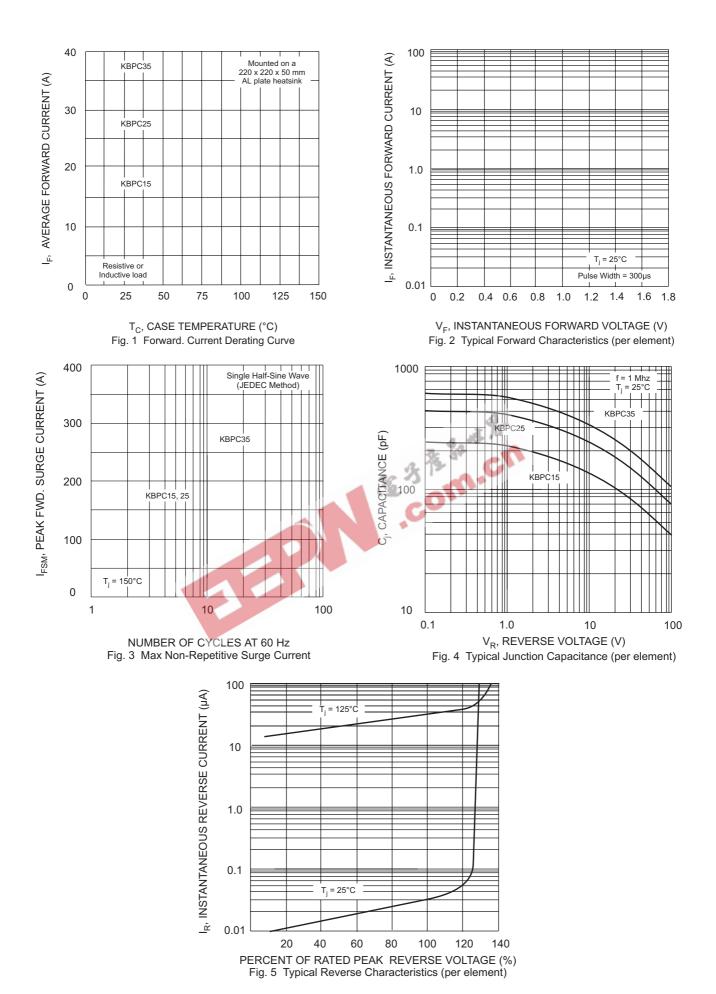
Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

| 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 | $R_{	heta}$ JC | 6.3 3.8 3.8 | K/W |
| RMS Isolation Voltage from Case to Lead | | Viso | 2500 | ٧ |
| Operating and Storage Temperature Range | | Тj, Тsтg | -65 to +125 | °C |

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

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





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



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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.

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