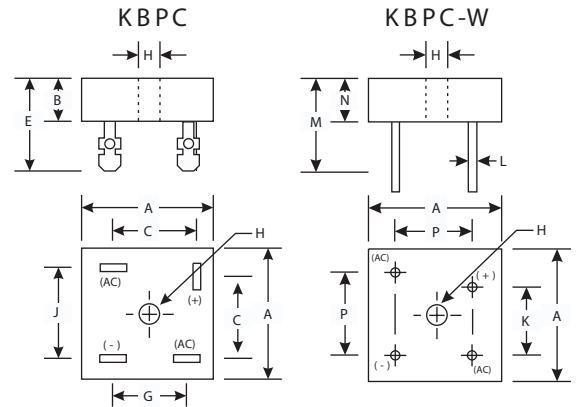


Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Surge Overload Rating to 400A Peak
- Electrically Isolated Metal Case for Maximum Heat Dissipation
- High Case Dielectric Strength of 1500V_{RMS}

Mechanical Data

- Case : High Conductivity Metal
- Terminals : Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity : Symbols Marked on Case
- Mounting : Through Hole for #10 Screw
- Mounting Torque : 8.0 Inch-pounds Maximum
- Weight : KBPC 31.6 grams (approx.)
KBPC-W 28.5 grams (approx.)
- Mounting Position : Any
- Marking : Type Number



| KBPC / KBPC-W | | | | | |
|---------------|--------------------|-------------|-----|-------------|-------------|
| Dim | Min | Max | Dim | Min | Max |
| A | 28.40 | 28.70 | J | 17.10 | 19.10 |
| B | 10.97 | 11.23 | K | 10.40 | 12.40 |
| C | 15.50 | 17.60 | L | 0.97 ϕ | 1.07 ϕ |
| E | 22.86 | 25.40 | M | 30.50 | — |
| G | 13.30 | 15.30 | N | 10.97 | 11.23 |
| H | Hole for #10 screw | | P | 17.10 | 19.10 |
| | 4.85 ϕ | 5.59 ϕ | | | |

All Dimensions in mm
"W" Suffix Designates Wire Leads
No Suffix Designates Fast-on Terminals

Maximum Ratings And Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

| | Symbols | KBPC35005/W | KBPC3501/W | KBPC3502/W | KBPC3504/W | KBPC3506/W | KBPC3508/W | KBPC3510/W | Units |
|--|--|-------------|------------|------------|------------|------------|------------|------------|------------------|
| Peak Repetitive Reverse voltage Working Peak Reverse voltage DC Blocking voltage | V _{RMM} V _{RRM} V _R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| RMS Reverse voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Average Rectified Output Current @ T _c =55 °C | I _o | 35 | | | | | | | Amps |
| Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 400 | | | | | | | Amps |
| Forward voltage (per element) @ I _F =17.5 A | V _{FM} | 1.2 | | | | | | | Volts |
| Peak Reverse Current at Rated DC Blocking voltage | @ T _c =25 °C | 10 | | | | | | | μ A |
| | @ T _c =125 °C | 1.0 | | | | | | | mA |
| I ² t Rating for Fusing (t<8.3ms) (Note 2) | I ² t | 664 | | | | | | | A ² s |
| Typical Junction Capacitance (Note 3) | C _j | 300 | | | | | | | pF |
| Typical Thermal Resistance Junction to Case | R θ JA | 2.7 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _j T _{STG} | -65 to +150 | | | | | | | °C |

Notes:

- (1) Thermal resistance junction to case mounted on heat sink.
- (2) Measured at non-repetitive, for t > 1.0ms and < 8.3ms.
- (3) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

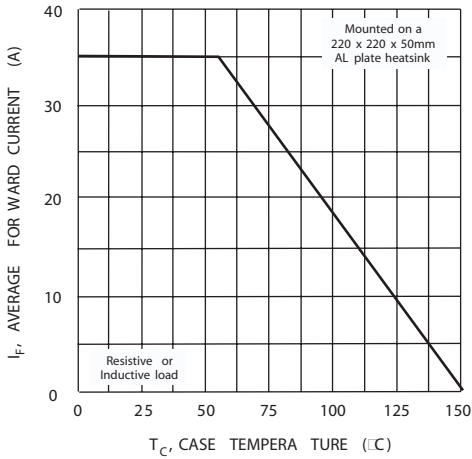


Fig. 1 Forward Current Derating Curve.

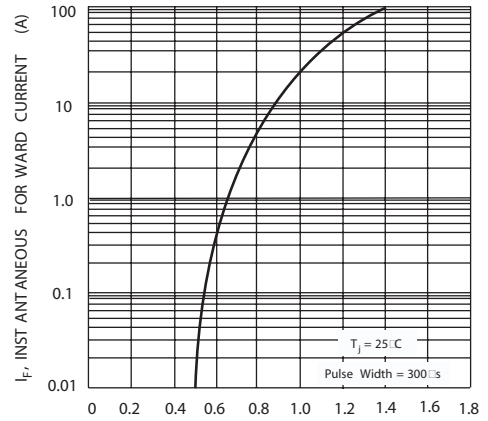


Fig. 2 Typical Forward Characteristics (per element)

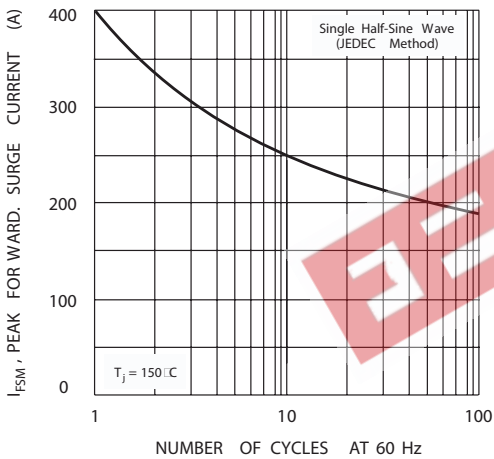


Fig. 3 Maximum Non-Repetitive Surge Current

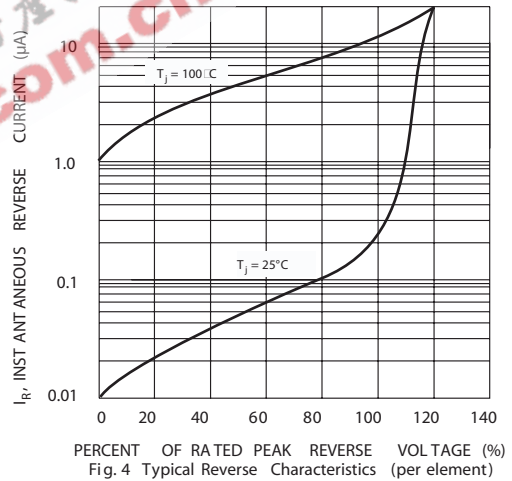


Fig. 4 Typical Reverse Characteristics (per element)