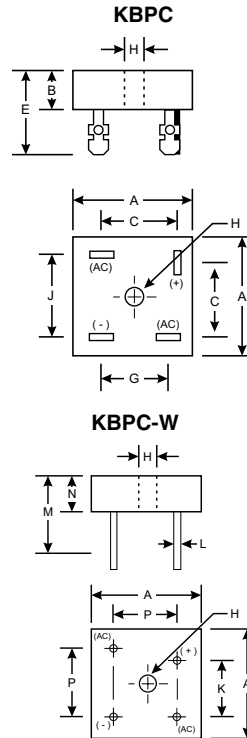


Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Surge Overload Rating to 300A Peak
- Electrically Isolated Metal Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 1500V
- UL Listed: Recognized Component Index, File Number E95060

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 |
| A | 28.40 | 28.70 |
| B | 10.97 | 11.23 |
| C | 15.50 | 17.60 |
| E | 22.86 | 25.40 |
| G | 13.30 | 15.30 |
| H | Hole for #10 screw | |
| | 4.85 \varnothing | 5.59 \varnothing |
| J | 17.10 | 19.10 |
| K | 10.40 | 12.40 |
| L | 0.97 \varnothing | 1.07 \varnothing |
| M | 30.50 | — |
| N | 10.97 | 11.23 |
| P | 17.10 | 19.10 |
| All Dimensions in mm | | |

“W” Suffix Designates Wire Leads
No Suffix Designates Fast-on Terminals

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

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

| Characteristic | Symbol | KBPC15005/W | KBPC1501/W | KBPC1502/W | KBPC1504/W | KBPC1506/W | KBPC1508/W | KBPC1510/W | Unit |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------|------------|------------|------------|------------|------------|------------|------------------|
| Peak Repetitive Reverse Voltage | V _{RRM} | | | | | | | | V |
| Working Peak Reverse Voltage | V _{RWM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| DC Blocking Voltage | V _R | | | | | | | | V |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @ T _C = 55°C | I _O | 15 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 300 | | | | | | | A |
| Forward Voltage (per element) @ I _F = 7.5A | V _{FM} | 1.2 | | | | | | | V |
| Peak Reverse Current @ T _C = 25°C at Rated DC Blocking Voltage @ T _C = 125°C | I _{RM} | 10 1.0 | | | | | | | μA mA |
| I ² t Rating for Fusing (t < 8.3ms) (Note 2) | I ² t | 373 | | | | | | | A ² s |
| Typical Junction Capacitance (Note 3) | C _j | 300 | | | | | | | pF |
| Typical Thermal Resistance Junction to Case | R _{θJC} | 6.3 | | | | | | | K/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -65 to +150 | | | | | | | °C |

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

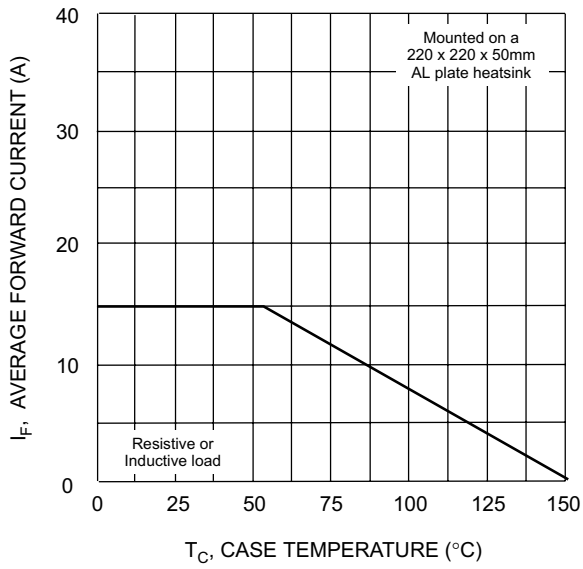


Fig. 1 Forward Current Derating Curve.

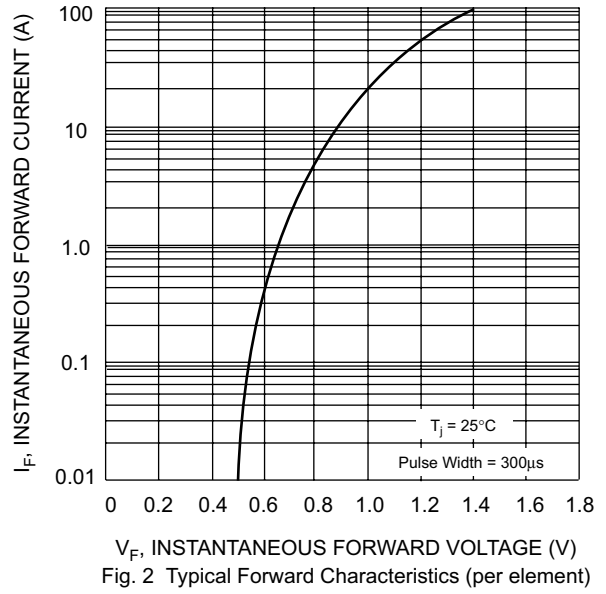


Fig. 2 Typical Forward Characteristics (per element)

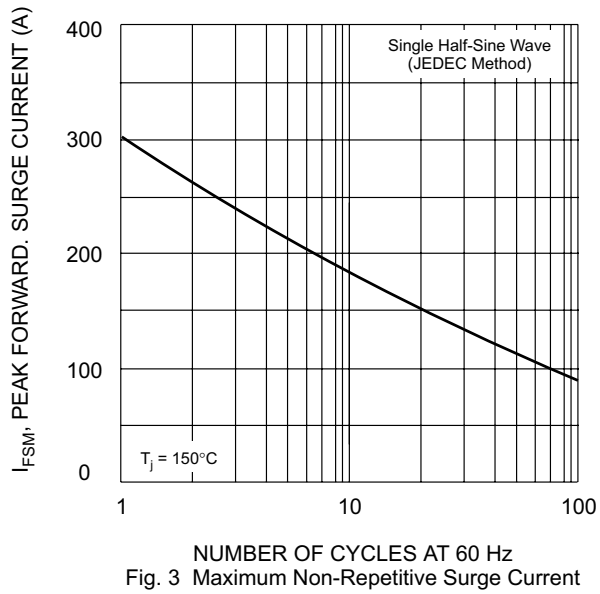


Fig. 3 Maximum Non-Repetitive Surge Current

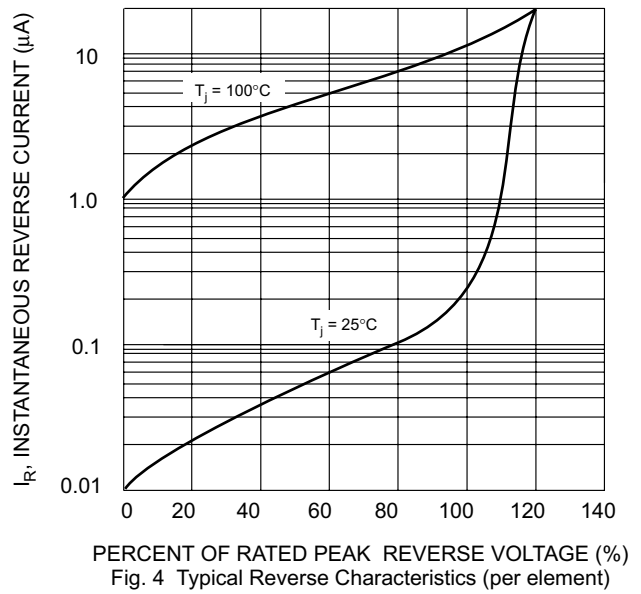


Fig. 4 Typical Reverse Characteristics (per element)