
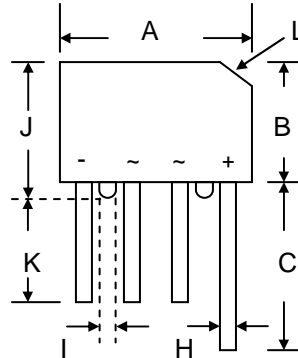


1.5A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
-  Recognized File # E157705



| KBPM | | |
|----------------------|-------------------|-------|
| Dim | Min | Max |
| A | 14.22 | 15.24 |
| B | 10.67 | 11.68 |
| C | 15.20 | — |
| D | 4.30 | 4.70 |
| E | 3.60 | 4.10 |
| G | 2.75 | 3.15 |
| H | 0.76 | 0.86 |
| I | 1.52 | — |
| J | 11.68 | 12.70 |
| K | 12.7 | — |
| L | 3.2 x 45° Typical | |
| All Dimensions in mm | | |

Mechanical Data

- Case: KBPM, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.7 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

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%.

| Characteristic | Symbol | KBP 005M | KBP 01M | KBP 02M | KBP 04M | KBP 06M | KBP 08M | KBP 10M | Unit |
|--|------------------------------------|-------------|---------|---------|---------|---------|---------|---------|----------------------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V_{RRM} V_{RWM} V_R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @ $T_A = 50^\circ\text{C}$ | I_O | 1.5 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 50 | | | | | | | A |
| Forward Voltage per leg @ $I_F = 1.5\text{A}$ | V_{FM} | 1.3 | | | | | | | V |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$ | I_{RM} | 5.0 500 | | | | | | | μA |
| Rating for Fusing ($t < 8.3\text{ms}$) | $I^2 t$ | 10 | | | | | | | A^2s |
| Typical Junction Capacitance per leg (Note 1) | C_j | 15 | | | | | | | pF |
| Typical Thermal Resistance per leg (Note 2) | $R_{\theta JA}$ $R_{\theta JL}$ | 40 13 | | | | | | | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range | T_j, T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Mounted on PC board with 12mm² copper pad.

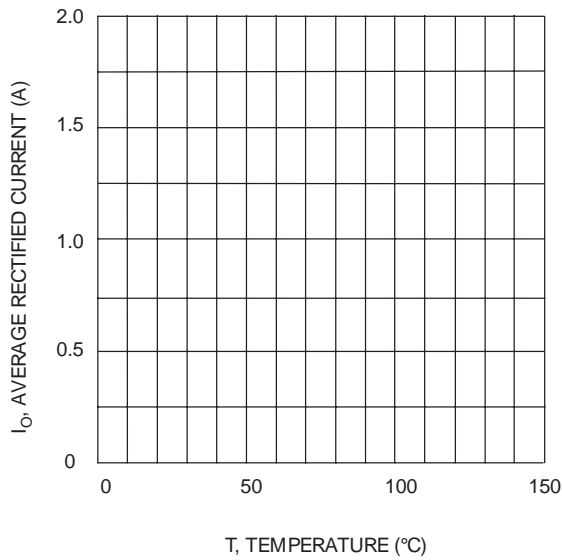


Fig. 1 Forward Current Derating Curve

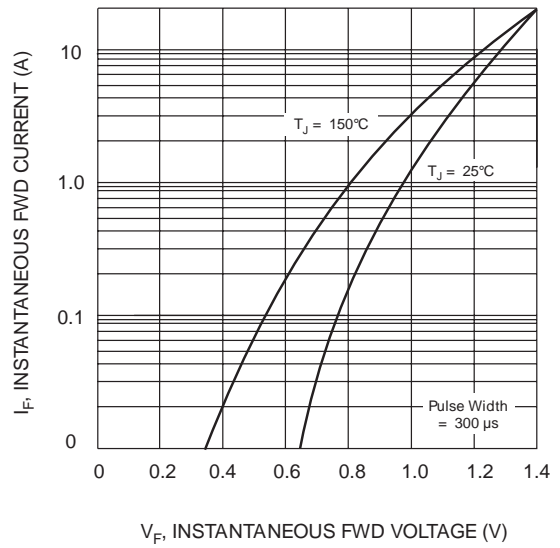


Fig. 2 Typical Fwd Characteristics

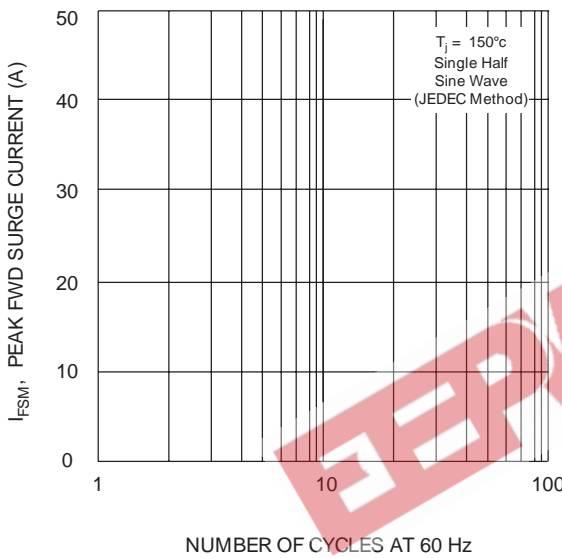


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

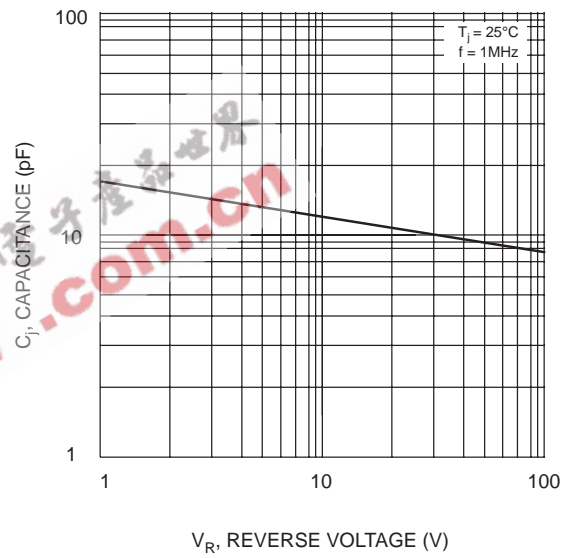


Fig. 4 Typical Junction Capacitance

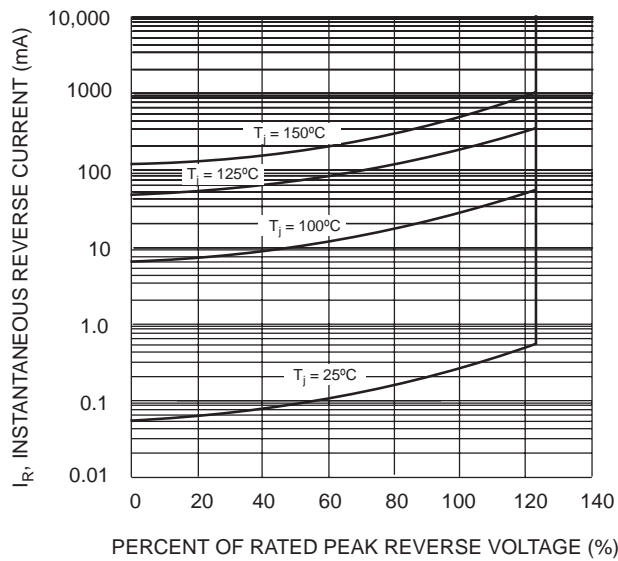
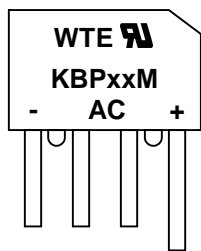


Fig. 5 Typical Reverse Characteristics

MARKING INFORMATION



WTE = Manufacturer's Logo
 KBPxxM = Device Number
 xx = 005, 01, 02, 04, 06, 08 or 10
 Polarity = As Marked on Body

PACKAGING INFORMATION

BULK

| Inner Box Size L x W x H (mm) | Quantity (PCS) | Carton Size L x W x H (mm) | Quantity (PCS) | Approx. Gross Weight (KG) |
|----------------------------------|-------------------|-------------------------------|-------------------|------------------------------|
| 200 x 160 x 42 | 600 | 425 x 215 x 280 | 7,200 | 17.0 |

Note: 1. Paper box, white or brown color.

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ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| KBP005M | SIL Bridge | 600 Units/Box |
| KBP01M | SIL Bridge | 600 Units/Box |
| KBP02M | SIL Bridge | 600 Units/Box |
| KBP04M | SIL Bridge | 600 Units/Box |
| KBP06M | SIL Bridge | 600 Units/Box |
| KBP08M | SIL Bridge | 600 Units/Box |
| KBP10M | SIL Bridge | 600 Units/Box |

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, KBP005M-LF.**

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