

Glass Passivated Bridge Rectifier

Voltage

1000 V

Current

2A

Features

- UL recognition file number E228882
- Ideal for printed circuit boards
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

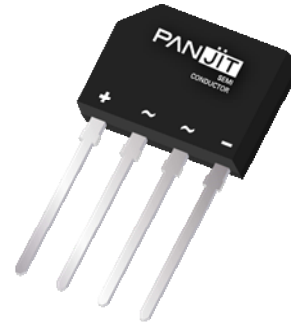
Mechanical Data

- Case : KBP Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0536 ounces, 1.52 grams

Application

- USB PD & NB Adapter(<45W)
- Monitor power adapter (<100W)
- General Adapter (<100W)

KBP



Maximum Ratings and Thermal Characteristics ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

| PARAMETER | SYMBOL | LIMIT | UNITS |
|---|--|------------|--------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 1000 | V |
| Maximum Average Forward Current | $I_{F(AV)}$ | 2 | A |
| Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load | @ $T_A = 25\text{ }^\circ\text{C}$ @ $T_A = 125\text{ }^\circ\text{C}$ I_{FSM} | 75 60 | A |
| Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load | @ $T_A = 25\text{ }^\circ\text{C}$ @ $T_A = 125\text{ }^\circ\text{C}$ I_{FSM} | 150 120 | A |
| $I^2 t$ rating for fusing ($t = 8.3\text{ms}$) | $I^2 t$ | 23.3 | A ² S |
| Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$ | C_J | 50 | pF |
| Typical Thermal Resistance (Note 1) | $R_{\theta JA}$ | 40 | $^\circ\text{C/W}$ |
| (Note 2) | $R_{\theta JC}$ | 12 | |
| Operating Junction Temperature Range | T_J | -55~150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55~150 | $^\circ\text{C}$ |

Electrical Characteristics ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

| PARAMETER | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNITS |
|-----------------|--------|--|------|------|------|-------|
| Forward Voltage | V_F | $I_F = 2\text{ A}, T_J = 25\text{ }^\circ\text{C}$ | - | - | 1.1 | V |
| Reverse Current | I_R | $V_R = 1000\text{ V}, T_J = 25\text{ }^\circ\text{C}$ | - | - | 5 | uA |
| | | $V_R = 1000\text{ V}, T_J = 125\text{ }^\circ\text{C}$ | - | - | 100 | |

NOTES :

1. Mounted on a FR4 PCB standard pad
2. Thermal Resistance Junction to Case, Lead and Ambient

TYPICAL CHARACTERISTIC CURVES

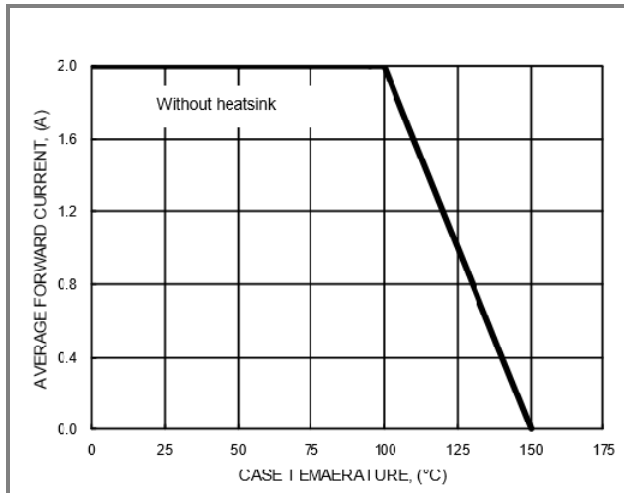


Fig.1 Forward Current Derating Curve

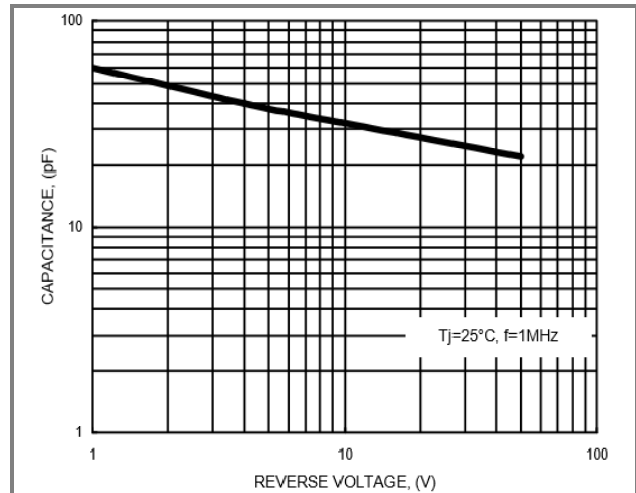


Fig.2 Typical Junction Capacitance

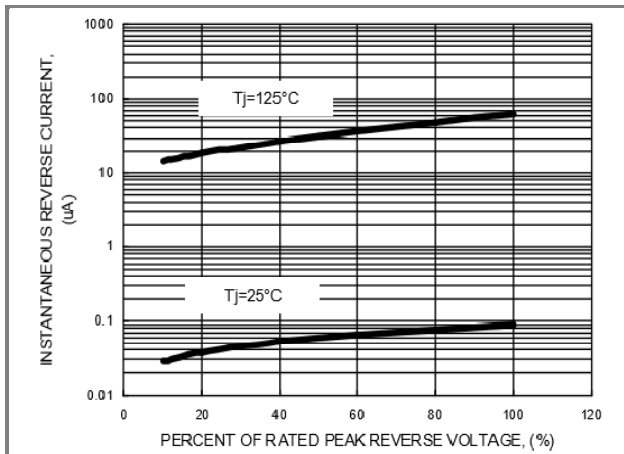


Fig.3 Typical Reverse Characteristics

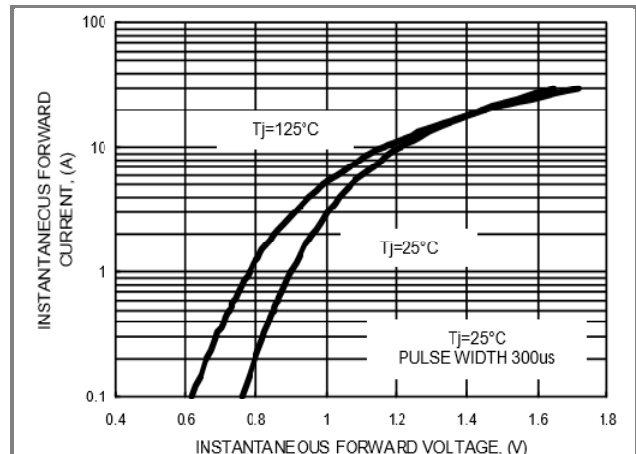
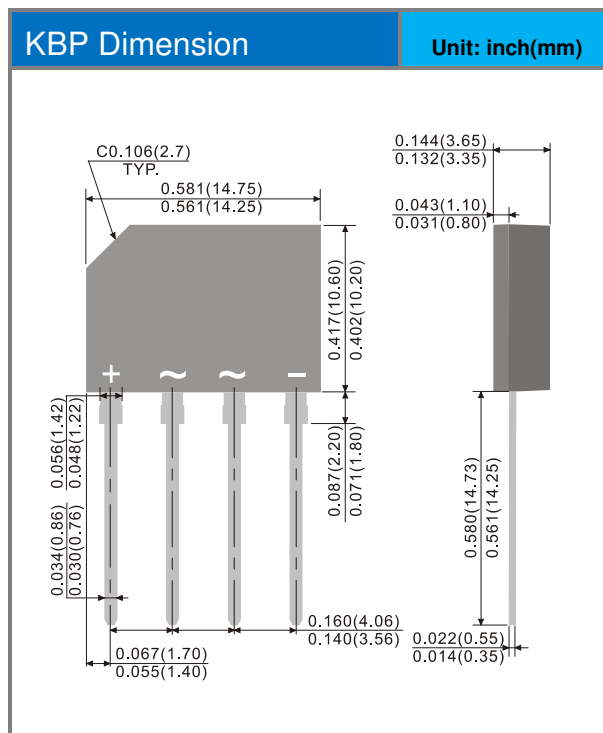


Fig.4 Typical Forward Characteristics

Part No. Packing Code Version

| Part No. Packing Code | Package Type | Packing Type | Marking |
|-----------------------|--------------|---------------|---------|
| KBP2MI_B0_00101 | KBP | 500 pcs / Box | KBP2MI |

Packaging Information



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