

Glass Passivated Bridge Rectifier

Voltage

1000 V

Current

15A

Features



- Glass passivated chip junction
- UL recognition file number E526209
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard

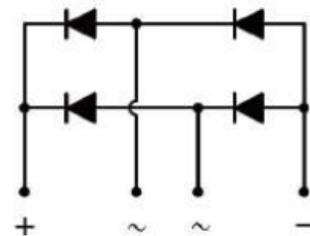
Mechanical Data

- Case : KBJ-2 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 4.1442 grams

Application

- Computing Power / Desktop Power
- Game Console Power
- Server Power
- Air Conditioner out door power board
- High Power/High Efficiency Power
- Home Appliances Power Board

KBJ-2



| Key Parameters | |
|----------------|-------|
| Parameter | Value |
| V_{RRM} | 1000V |
| $I_F(AV)$ | 15A |
| I_{FSM} | 180A |
| I_R | 5uA |
| Package | KBJ-2 |

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 | With heatsink | $I_{F(AV)}$ | 15 | A |
| | Without heatsink | | 2.5 | |
| Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load | @ $T_A = 25\text{ }^{\circ}\text{C}$ | I_{FSM} | 180 | A |
| | @ $T_A = 125\text{ }^{\circ}\text{C}$ | | 144 | |
| Peak Forward Surge Current : 1.0 ms Single Half Square -Wave Superimposed On Rated Load | @ $T_A = 25\text{ }^{\circ}\text{C}$ | I_{FSM} | 330 | A |
| | @ $T_A = 125\text{ }^{\circ}\text{C}$ | | 280 | |
| $I^2 t$ rating for fusing ($t = 8.3\text{ms}$) | | $I^2 t$ | 134.4 | A^2S |
| Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$ | | C_J | 60 | pF |
| Typical Thermal Resistance (Note 1) (with heatsink) | | $R_{\theta JA}$ | 12 | $^{\circ}\text{C/W}$ |
| | | $R_{\theta JL}$ | 4 | |
| | | $R_{\theta JC}$ | 5 | |
| Operating junction and storage temperature range | | T_J, T_{STG} | -55~150 | $^{\circ}\text{C}$ |
| Mounting torque @ Recommend torque:5Kg.cm | | Tor | 8 | Kg.cm |

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

| PARAMETER | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNITS |
|-----------------|--------|--|------|------|------|-------|
| Forward Voltage | V_F | $I_F = 7.5\text{ A}, T_J = 25\text{ }^{\circ}\text{C}$ | - | - | 1.05 | 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. Device mounted on 10 cm * 9.4 cm * 2.6 cm Fin type heat sink .

TYPICAL CHARACTERISTIC CURVES

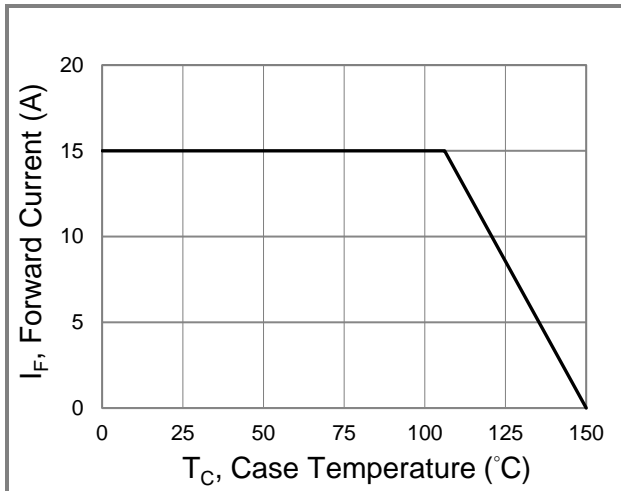


Fig.1 Forward Current Derating Curve

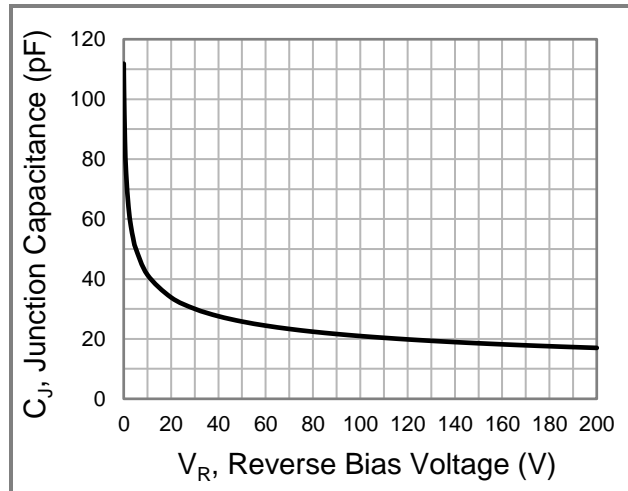


Fig.2 Typical Junction Capacitance

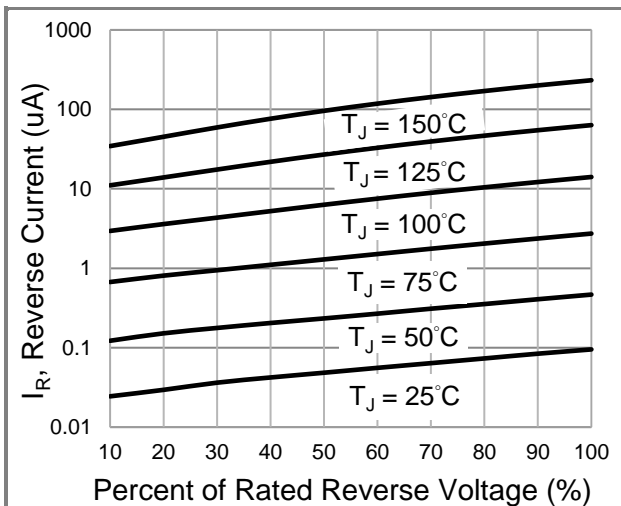


Fig.3 Typical Reverse Characteristics

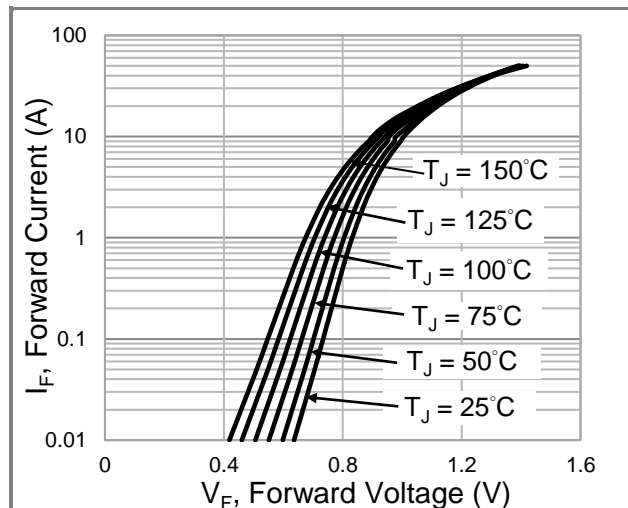
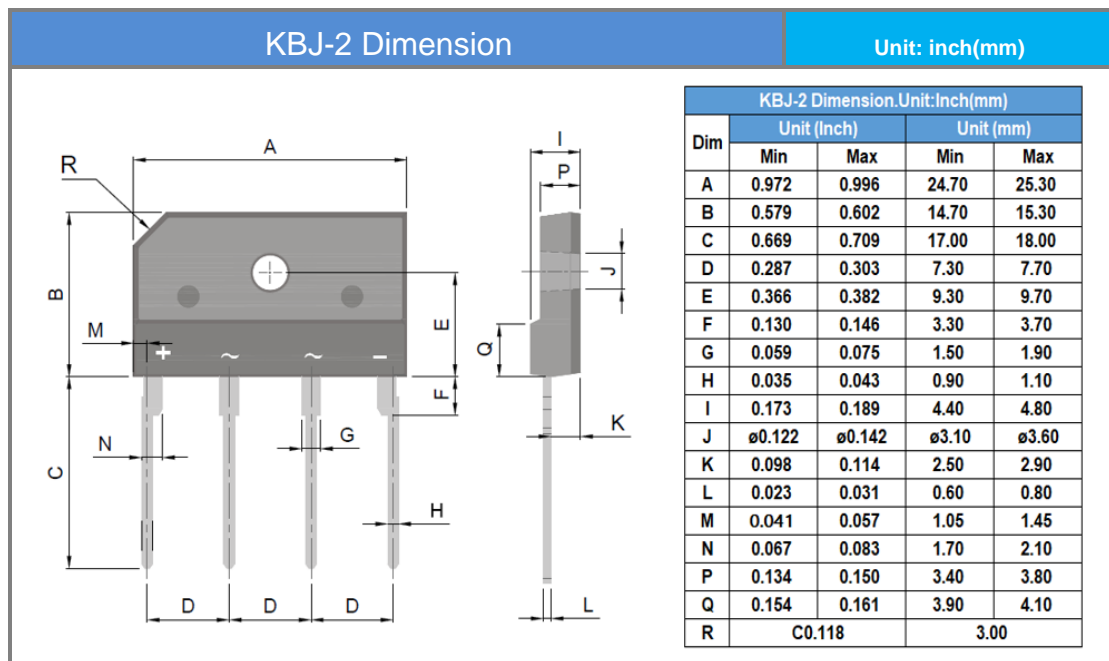


Fig.4 Typical Forward Characteristics

Product and Packing Information

| Part No. | Package Type | Packing Type | Marking |
|----------|--------------|---------------|---------|
| KBJ1510 | KBJ-2 | 20 pcs / tube | KBJ1510 |

Packaging Information



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