



KBJ1004~KBJ1010

Glass Passivated Bridge Rectifiers

VOLTAGE 400 to 1000 Volt **CURRENT** 10 Ampere

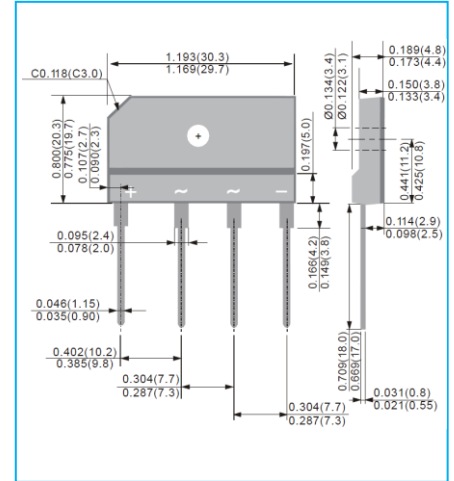
KBJ Unit: Inch(mm)

FEATURES

- UL Recognized File #E228882
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique.
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Glass passivated chip junction

MECHANICAL DATA

- Case: KBJ
- Terminals: Leads solderable per MIL-STD-750, Method 2026
- Polarity: As marked on body
- Mounting torque: 8.5 inch-lbs. Max.
- Weight: 6.96g



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

| PARAMETER | SYMBOL | KBJ 1004 | KBJ 1006 | KBJ 1008 | KBJ 1010 | UNIT |
|--|------------------------------------|--------------|----------|----------|----------|------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current | $I_{F(AV)}$ | 10 | | | | A |
| Peak forward surge current, 8.3 ms single half sine-wave | I_{FSM} | 200 | | | | A |
| Rating of fusing ($t < 8.3ms$)(Note 1) | I^2t | 166 | | | | A ² s |
| Maximum instantaneous forward voltage per diode $I_F = 5 A$ $I_F = 10A$ | V_F | 1 1.1 | | | | V |
| Maximum reverse current @ rated V_R $T_J = 25^\circ C$ $T_J = 125^\circ C$ | I_R | 5 500 | | | | μA |
| Typical junction capacitance (Note 2) | C_J | 66 | | | | pF |
| Typical thermal resistance (Note 3) (Note 4) | $R_{\theta JA}$ $R_{\theta JC}$ | 22 1.6 | | | | $^\circ C/W$ |
| Operating junction temperature range | T_J | - 55 to +150 | | | | $^\circ C$ |
| Storage temperature range | T_{STG} | - 55 to +150 | | | | $^\circ C$ |

Note 1: Non-repetitive, for $t > 1ms$ and $< 8.3ms$

Note 2: Measured at 1MHz and applied Reverse bias of 4V DC

Note 3: Products installed on the PCB, Without heatsink

Note 4: Products installed on aluminum plate heatsink



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TYPICAL CHARACTERISTIC CURVES

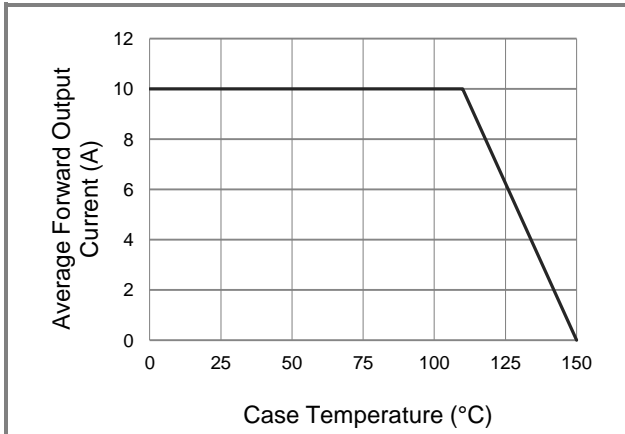


Fig.1 Forward Current Derating Curve

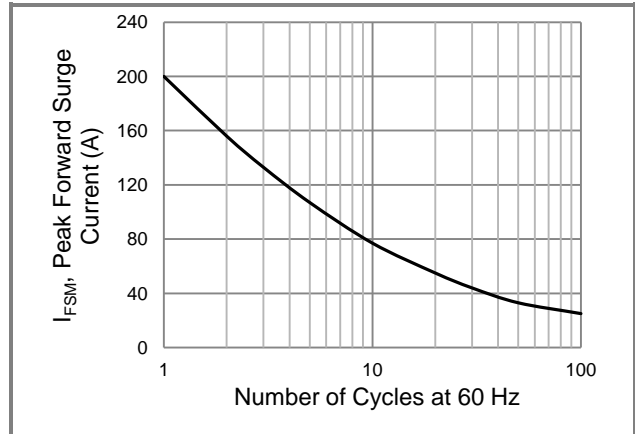


Fig.2 Maximum Forward Surge Current

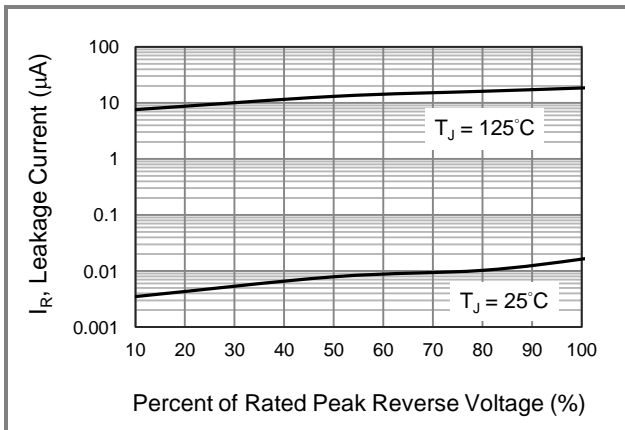


Fig.3 Typical Reverse Characteristics

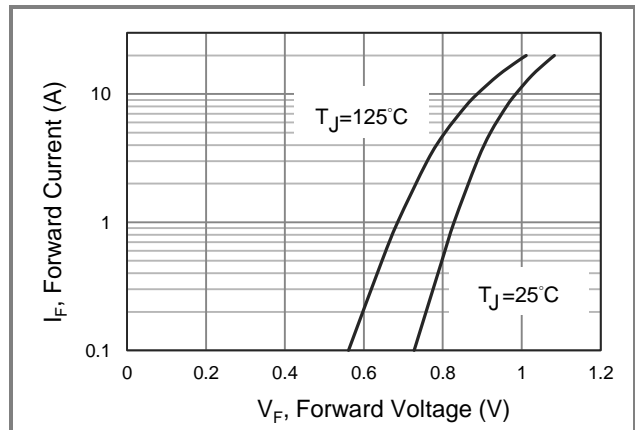


Fig.4 Typical Forward Characteristics

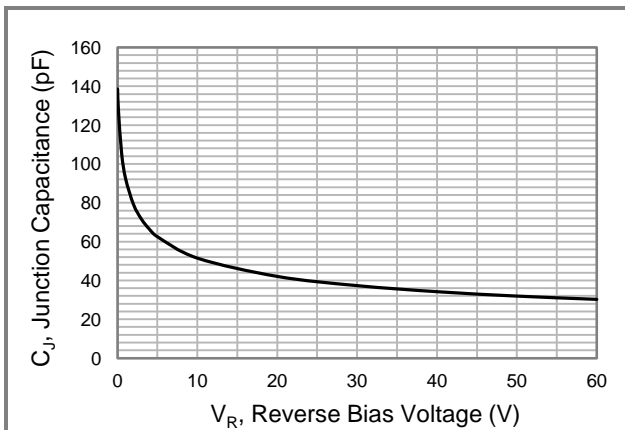


Fig.5 Typical Junction Capacitance



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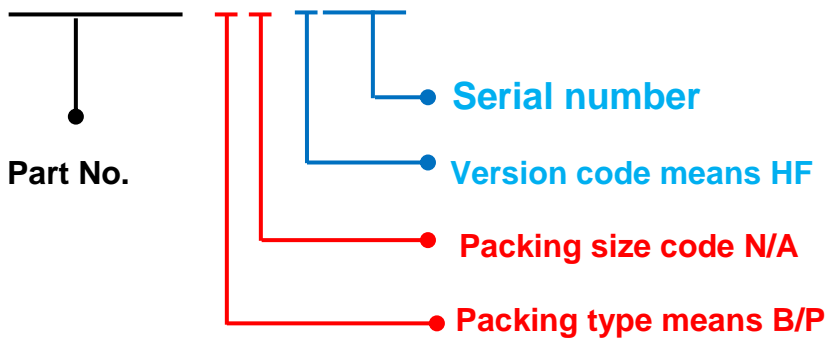
Part No_packing code_Version

KBJ1004_B0_00001

KBJ1004_B0_10001

For example :

KBJ1004_B0_00001



| Packing Code XX | | | | Version Code XXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|--------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 st Code | HF or RoHS | 1 st Code | 2 st ~5 st Code |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number |
| Bulk Packing (B/P) | B | 13" | 2 | | | |
| Tube Packing (T/P) | T | 26mm | X | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | |



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