



KBJ4005 THRU KBJ410

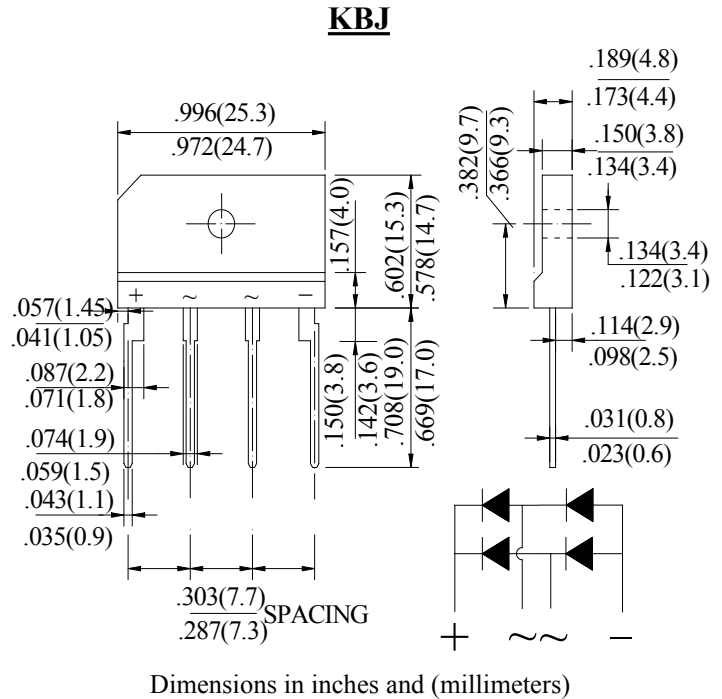
PINGWEI ENTERPRISE SINGLE PHASE 4.0 AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS

FEATURE

- . UL Listed Under Recognized Component Index, File Number E338195
- . Glass passivated chip junctions
- . High case dielectric strength
- . Low Reverse Leakage Current
- . High surge current capability
- . Ideal for Printed Circuit Board Applications

MECHANICAL DATA

- . Case: KBJ
- . Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0
- . Terminals: Pure tin plated, Lead free.
- Leads solderable per MIL-STD-750, Method 2026.
- . Polarity: Molded on Body
- . Mounting: Through Hole for #6 Screw
- . Mounting Torque: 5.0 in-lbs Maximum
- . Weight: 4.3 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Type Number | SYM BOL | KBJ 4005 | KBJ 401 | KBJ 402 | KBJ 404 | KBJ 406 | KBJ 408 | KBJ 410 | units |
|--|-------------|--------------|---------|---------|---------|---------|---------|---------|---------------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward (with heatsink Note2) Rectified Current @ $T_C=115^\circ\text{C}$ (without heatsink) | $I_{F(AV)}$ | 4.0 2.6 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I_{FSM} | 120 | | | | | | | A |
| Maximum Forward Voltage @ 4.0A DC Drop per element @ 2.0A DC | V_F | 1.1 1.0 | | | | | | | V |
| Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$ | I_R | 5.0 500.0 | | | | | | | μA |
| I^2t Rating for Fusing ($t < 8.3\text{ms}$) | I^2t | 59.7 | | | | | | | A^2Sec |
| Typical Junction Capacitance (Note 1) | C_J | 40 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{(JC)}$ | 5.5 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Storage Temperature | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |
| Operating Junction Temperature | T_J | -55 to +150 | | | | | | | $^\circ\text{C}$ |

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES (KBJ4005 THRU KBJ410)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

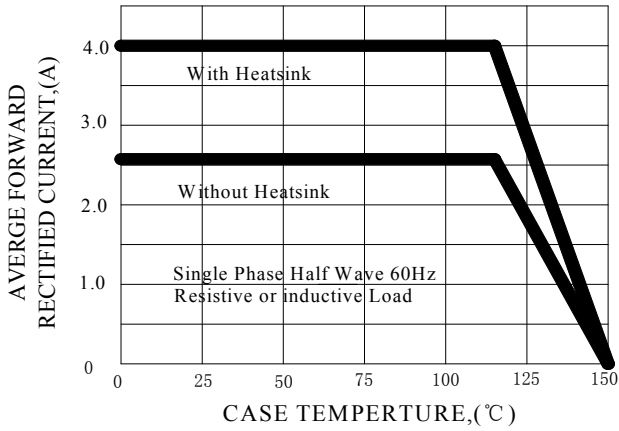


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

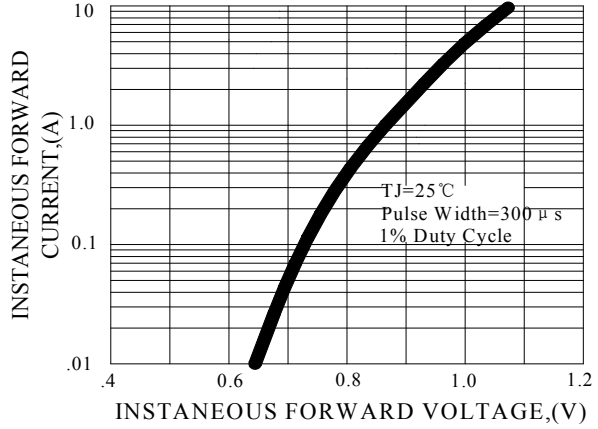


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

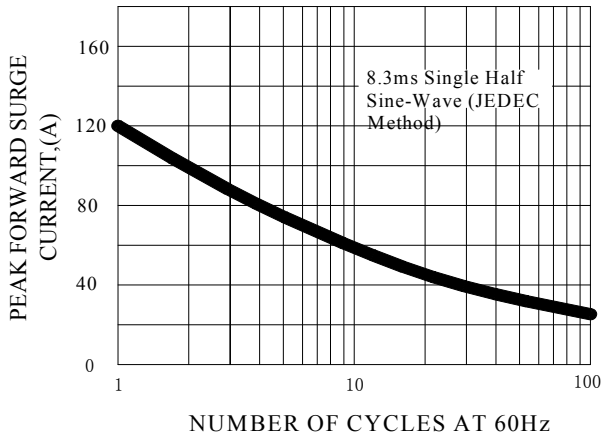


FIG.4-TYPICAL JUNCTION CAPACITANCE

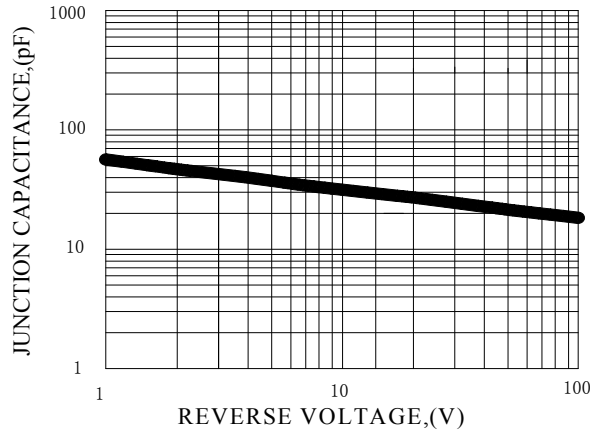


FIG.5-TYPICAL REVERSE CHARACTERISTICS

