

4.0A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1000 V

Forward Current – 4.0A

FEATURES

- ◆ Surge overload rating-125 amperes peak
- ◆ Polarity:As marked on body
- ◆ Ideal for printed circuit board
- ◆ Plastic material has U/L

The flammability classification 94V-0

- ◆ Reliable low cost construction utilizing molded plastic technique

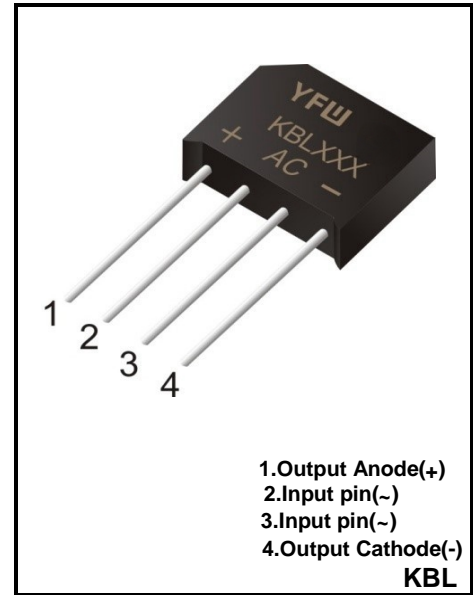
MECHANICAL DATA

- ◆ Case: KBL
- ◆ Terminals: Solderable per MIL-STD-202, Method 208
- ◆ Approx. Weight: 5.6g /0.2oz

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.



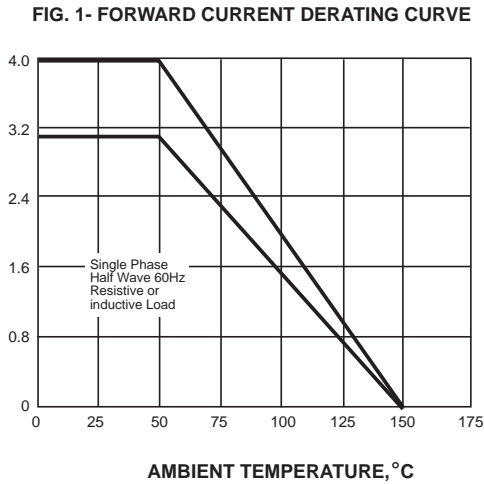
| Parameter | Symbols | KBL401 | KBL402 | KBL404 | KBL406 | KBL408 | KBL410 | Units |
|---|-----------------|--------|--------|--------|--------|------------|--------|-------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current at $T_C=100^{\circ}C$ (Note 1) | $I_{(AV)}$ | | | | | 4.0 3.0 | | |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | | | | | 125 | | |
| Forward Voltage per element at 2.0A DC and 25°C | V_F | | | | | 1.0 | | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @Ta=25°C @Ta=125°C | I_R | | | | | 10 500 | | |
| I2t Rating for Fusing(3ms≤t≤8.3ms) | I^2t | | | | | 166 | | |
| Typical Junction Capacitance (Note1) | C_J | | | | | 105 | | |
| Typical Thermal Resistance (Note2) | $R_{\theta JA}$ | | | | | 20 | | |
| Operating and Storage Temperature Range | T_j, T_{stg} | | | | | -55 ~ +150 | | |

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

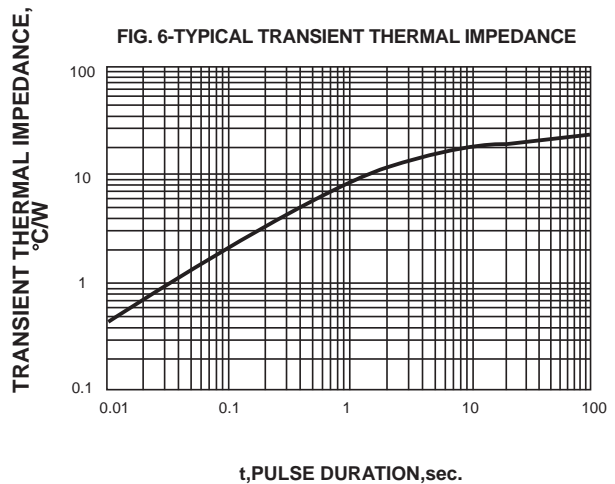
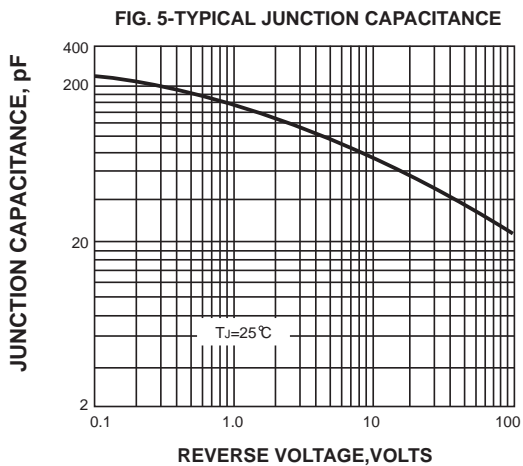
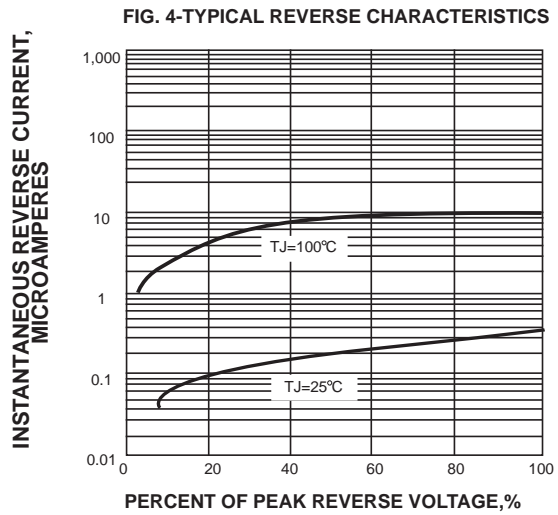
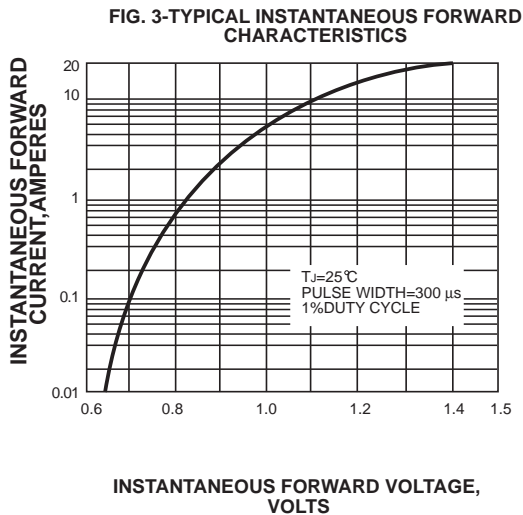
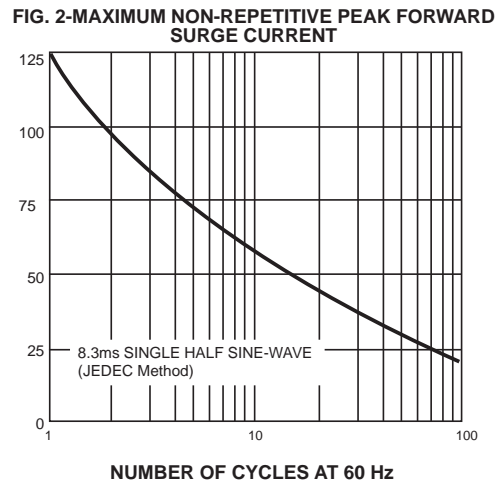
(2) Unit case mounted on 7.5" x 7.5" x 0.3cm" Al plate heat sink.

Ratings And Characteristic Curves

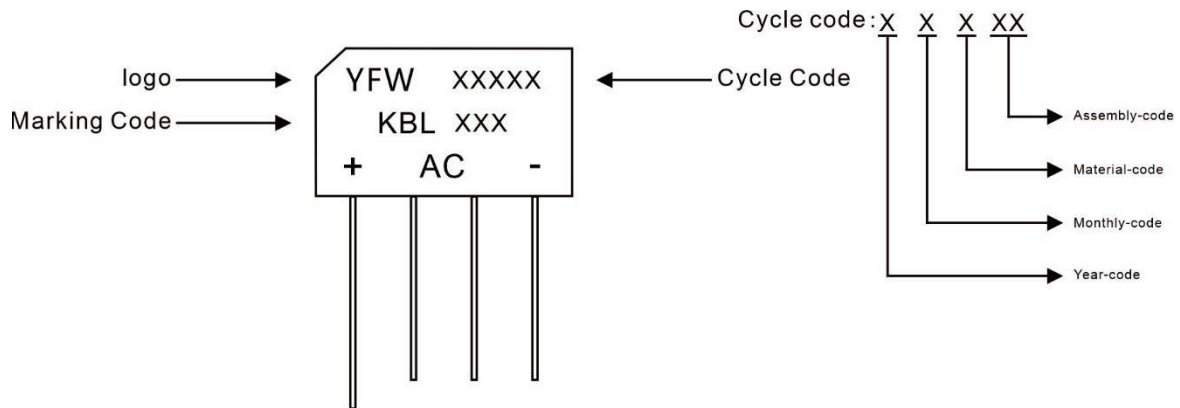
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



PEAK FORWARD SURGE CURRENT, AMPERES



Marking Diagram



Ordering information

| Package | Packing Description | Packing Quantity |
|---------|---------------------|---------------------------|
| KBL | bulk | 500PCS/Box 3000PCS/Carton |

Package Dimensions

KBL

| Dim. | Millimeter(mm) | | Dimensions inInch | |
|------|----------------|------|-------------------|------|
| | Min. | Max. | Min. | Max. |
| A | 18.5 | 19.5 | 0.73 | 0.77 |
| B | 13.9 | 14.9 | 0.55 | 0.59 |
| C | 18.0 | / | 0.71 | / |
| C1 | 15.0 | / | 0.59 | / |
| D | 5.5 | 6.5 | 0.22 | 0.26 |
| E | 4.6 | 5.6 | 0.18 | 0.22 |
| F | 1.2 | 1.3 | 0.05 | 0.05 |
| G | 15.2 | 16.3 | 0.60 | 0.64 |
| H | 1.6 | 2.0 | 0.06 | 0.08 |

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