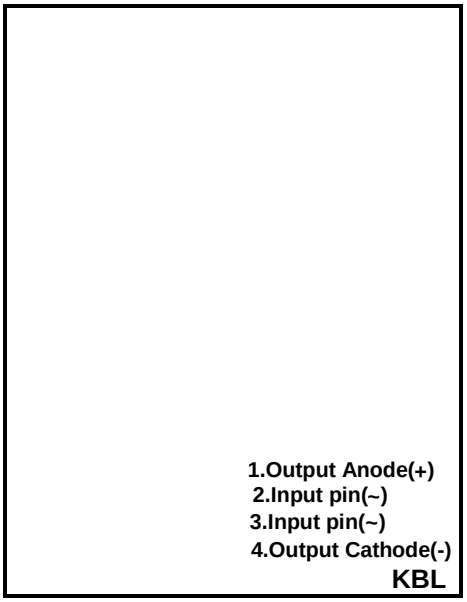
# KBL401 THRU KBL410 KBL

**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 (Note 1) | $I_{(AV)}$ | 4.0<br>3.0 | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine- | $I_{(AV)}$ | | | | | | | |

FIG. 1- FORWARD CURRENT DERATING CURVE

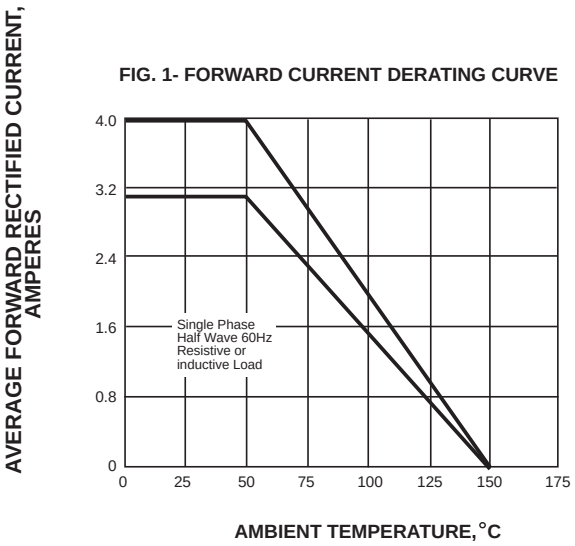



FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

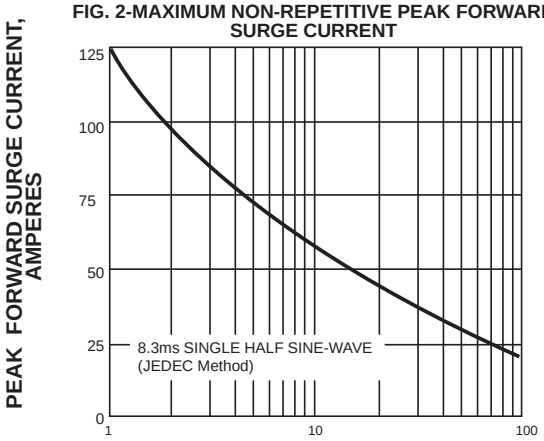



FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

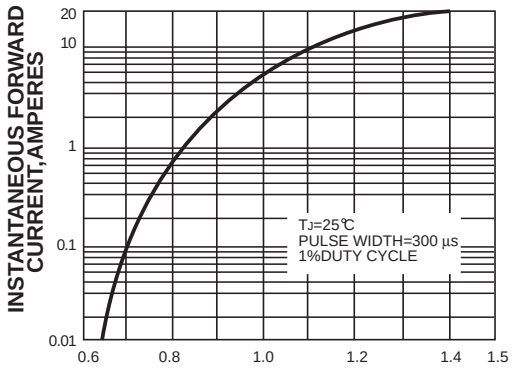



FIG. 4-TYPICAL REVERSE CHARACTERISTICS

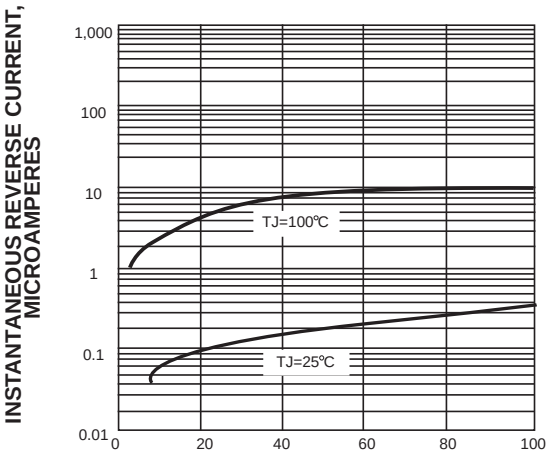



FIG. 5-TYPICAL JUNCTION CAPACITANCE

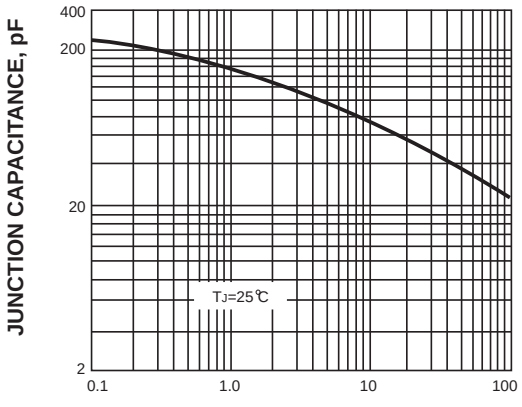
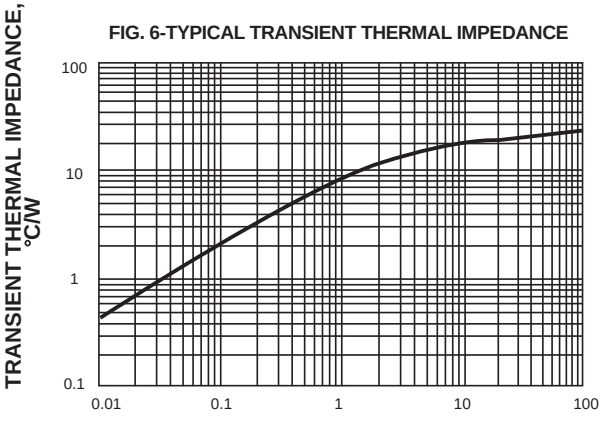
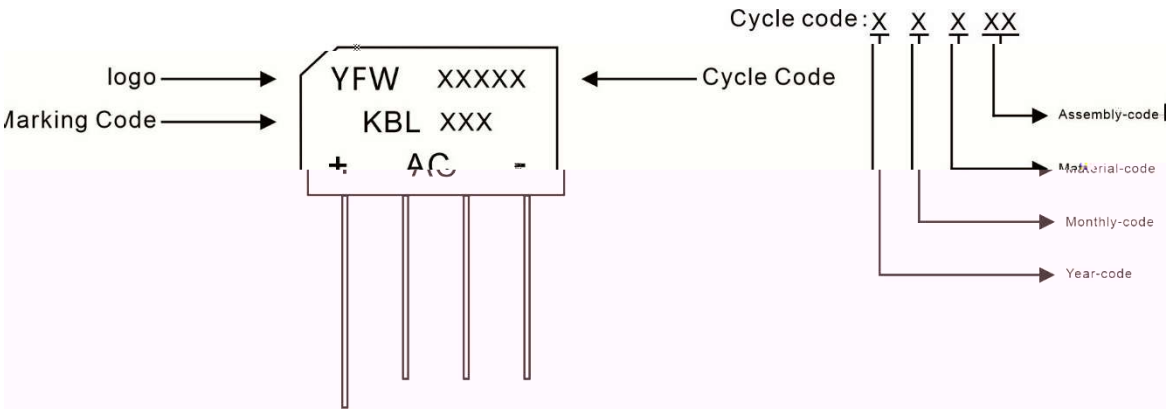



FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



## Marking Diagram

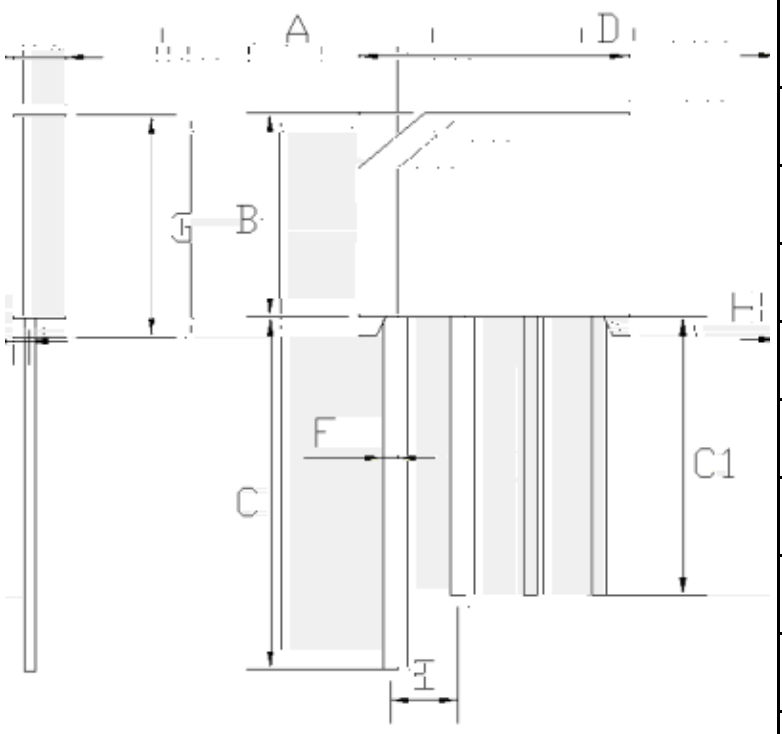



## Ordering information

| 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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