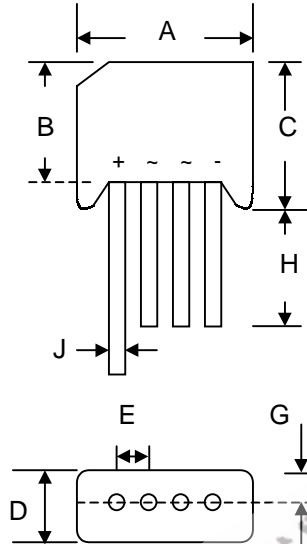


# KBL400G – KBL410G

## 4.0A GLASS PASSIVATED BRIDGE RECTIFIER

### Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards



| KBL                  |        |        |
|----------------------|--------|--------|
| Dim                  | Min    | Max    |
| A                    | 18.50  | 19.50  |
| B                    | 13.70  | 14.70  |
| C                    | 15.20  | 16.30  |
| D                    | 6.0    | 6.50   |
| E                    | 4.60   | 5.60   |
| G                    | —      | 2.10   |
| H                    | 19.00  | —      |
| J                    | 1.20 Ø | 1.30 Ø |
| All Dimensions in mm |        |        |

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 5.6 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

| Characteristic   | Symbol                            | KBL 400G    | KBL 401G | KBL 402G | KBL 404G | KBL 406G | KBL 408G | KBL 410G | Unit |
|--|-----------------------------------|-------------|----------|----------|----------|----------|----------|----------|------|
| Peak Repetitive Reverse Voltage  | V <sub>RRM</sub>                  | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V    |
| Working Peak Reverse Voltage   | V <sub>RWM</sub>                  |             |          |          |          |          |          |          |      |
| DC Blocking Voltage  | V <sub>R</sub>                    |             |          |          |          |          |          |          |      |
| RMS Reverse Voltage  | V <sub>R(RMS)</sub>               | 35          | 70       | 140      | 280      | 420      | 560      | 700      | V    |
| Average Rectified Output Current @T <sub>C</sub> = 75°C  | I <sub>O</sub>                    | 4.0         |          |          |          |          |          |          | A    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I <sub>FSM</sub>                  | 150         |          |          |          |          |          |          | A    |
| Forward Voltage (per element) @I <sub>F</sub> = 2.0A   | V <sub>FM</sub>                   | 1.1         |          |          |          |          |          |          | V    |
| Peak Reverse Current @T <sub>C</sub> = 25°C  | I <sub>R</sub>                    | 5.0         |          |          |          |          |          |          | µA   |
| At Rated DC Blocking Voltage @T <sub>C</sub> = 100°C   |                                   | 1.0         |          |          |          |          |          |          | mA   |
| Typical Thermal Resistance (Note 1)  | R <sub>θJC</sub>                  | 16          |          |          |          |          |          |          | K/W  |
| Operating and Storage Temperature Range  | T <sub>J</sub> , T <sub>STG</sub> | -65 to +150 |          |          |          |          |          |          | °C   |

Note: 1. Thermal resistance junction to case per element mounted on PC board with 13.0x13.0x0.03mm thick land areas.

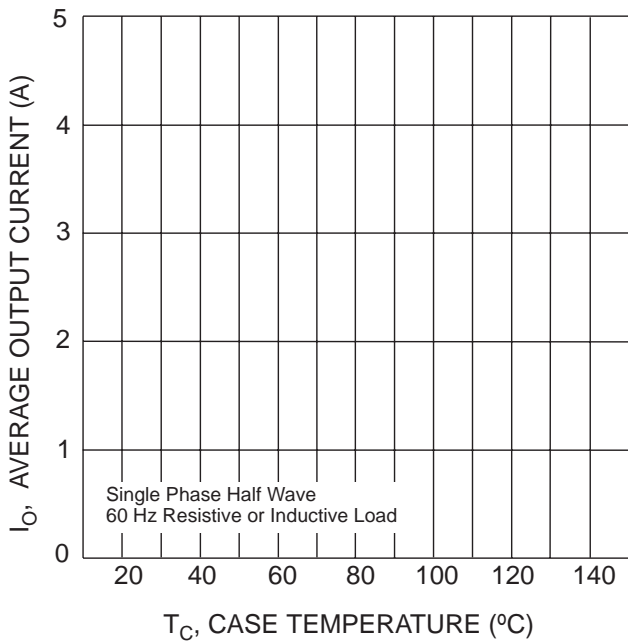


Fig. 1 Forward Current Derating Curve

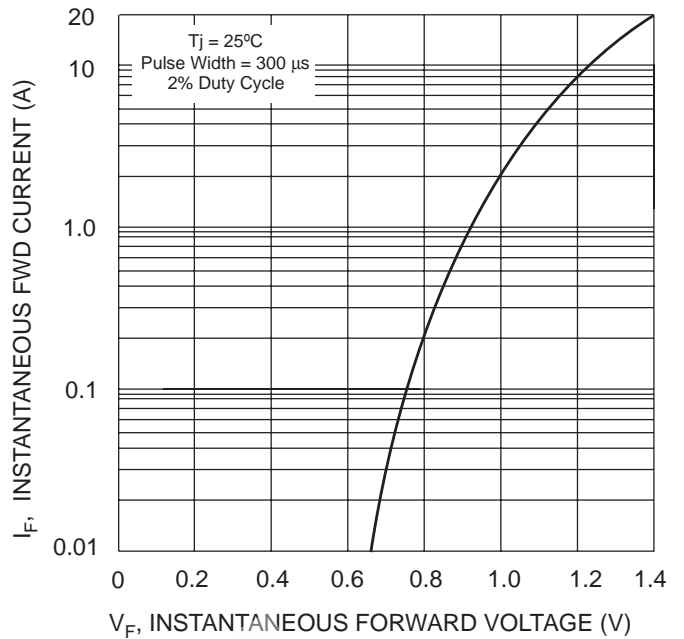


Fig. 2 Typical Forward Characteristics, per element

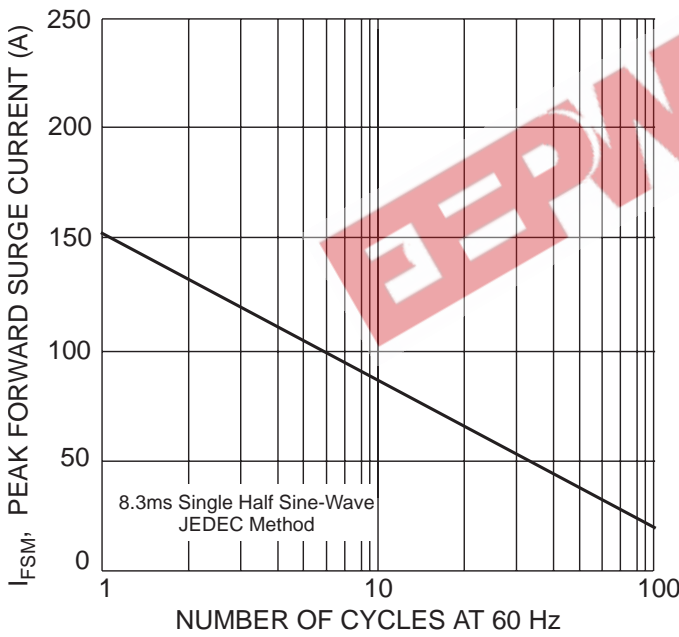


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

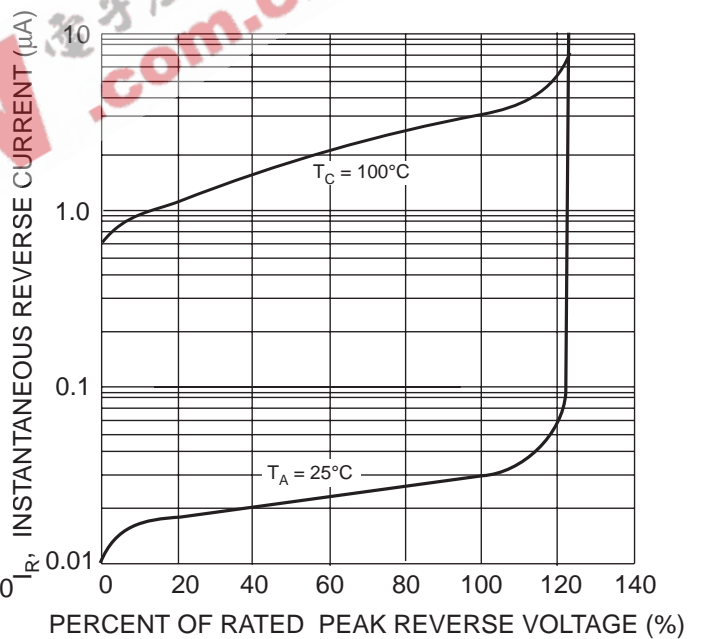


Fig. 4 Typical Reverse Characteristics, per element

## ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| KBL400G     | SIL Bridge   | 500 Units/Box     |
| KBL401G     | SIL Bridge   | 500 Units/Box     |
| KBL402G     | SIL Bridge   | 500 Units/Box     |
| KBL404G     | SIL Bridge   | 500 Units/Box     |
| KBL406G     | SIL Bridge   | 500 Units/Box     |
| KBL408G     | SIL Bridge   | 500 Units/Box     |
| KBL410G     | SIL Bridge   | 500 Units/Box     |

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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