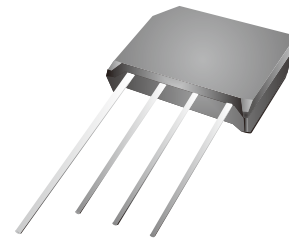


## KBL4005-G Thru. KBL410-G

Reverse Voltage: 50 to 1000V

Forward Current: 4.0Amperes

RoHS Device

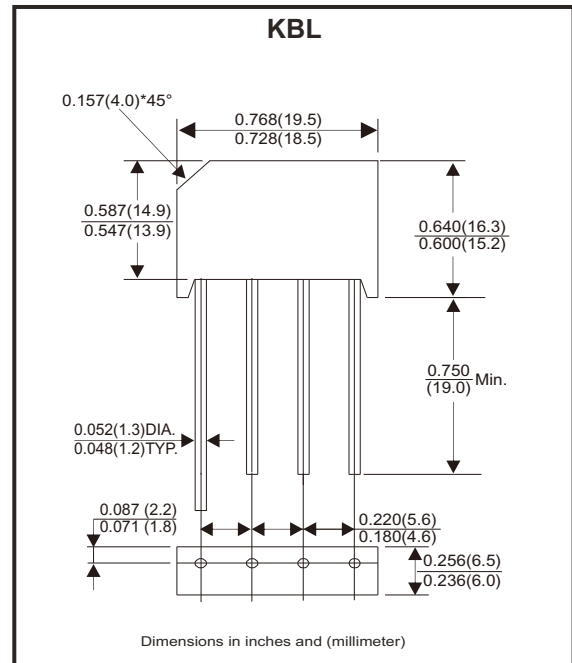


### Features

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability
- UL recognized file # E349301

### Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any



### Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

| Parameter   | Symbol     | KBL 4005-G  | KBL 401-G | KBL 402-G | KBL 404-G | KBL 406-G | KBL 408-G | KBL 410-G | Unit                 |
|---|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------|
| Maximum Repetitive 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 Rectified Current @ $T_A=50^\circ\text{C}$ (Note 1)   | $I_{(AV)}$ | 4.0         |           |           |           |           |           |           | A                    |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Super Imposed On Rated Load (JEDEC Method)                     | $I_{FSM}$  | 125         |           |           |           |           |           |           | A                    |
| $I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )   | $I^2t$     | 64.8        |           |           |           |           |           |           | $\text{A}^2\text{s}$ |
| Peak Forward Voltage per Diode at 4.0A DC   | $V_F$      | 1.1         |           |           |           |           |           |           | V                    |
| Maximum DC Reverse Current at Rated @ $T_J=25^\circ\text{C}$<br>DC Blocking Voltage per Diode @ $T_J=150^\circ\text{C}$ | $I_R$      | 10.0        |           |           |           |           |           |           | $\mu\text{A}$        |
|   |            | 1.0         |           |           |           |           |           |           | mA                   |
| Operating Junction Temperature Range  | $T_J$      | -55 to +150 |           |           |           |           |           |           | $^\circ\text{C}$     |
| Storage Temperature Range   | $T_{STG}$  | -55 to +150 |           |           |           |           |           |           | $^\circ\text{C}$     |

Notes:

1. Mounting conditions, 0.5" lead length maximum.

Company reserves the right to improve product design, functions and reliability without notice.

REV:D

## Rating and Characteristics Curves (KBL4005-G Thru. KBL410-G)

Fig.1 - Forward Current Derating Curve

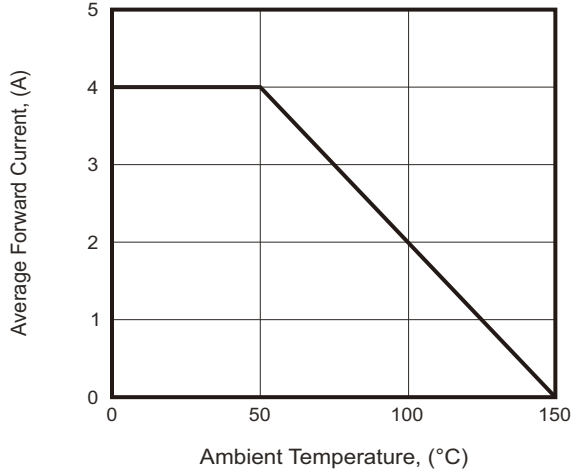


Fig.2 - Maximum Non-Repetitive Surge Current

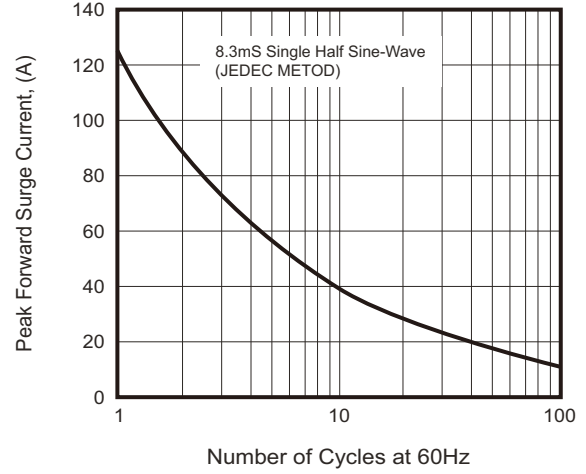


Fig.3 - Typical Reverse Characteristics

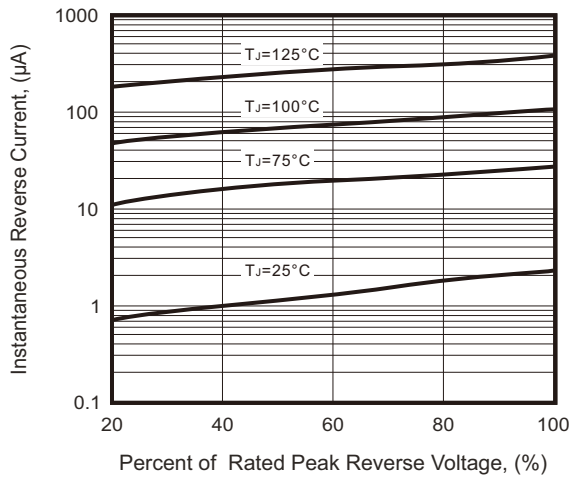
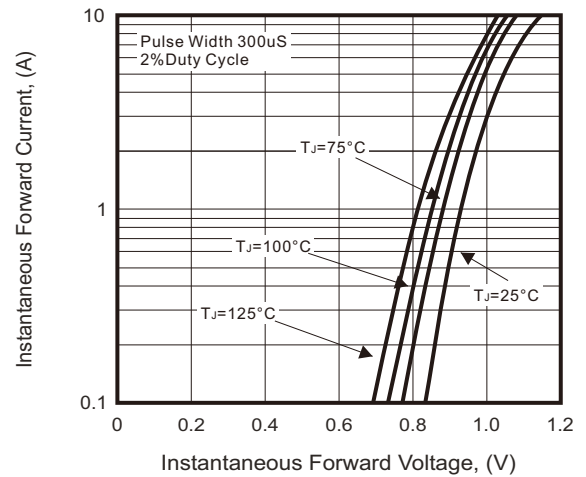
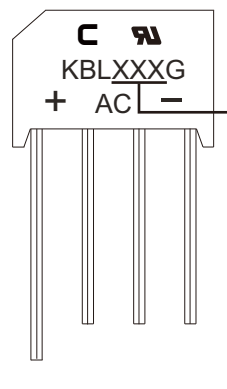


Fig.4 - Typical Forward Characteristics



## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| KBL4005-G   | KBL005G      |
| KBL401-G    | KBL01G       |
| KBL402-G    | KBL02G       |
| KBL404-G    | KBL04G       |
| KBL406-G    | KBL06G       |
| KBL408-G    | KBL08G       |
| KBL410-G    | KBL10G       |



XX / XXX = Product type marking code

C = Comchip Logo

## Standard Packaging

| Case Type | BULK PACK      |                   |
|-----------|----------------|-------------------|
|           | BOX<br>( pcs ) | CARTON<br>( pcs ) |
| KBL       | 500            | 3,000             |

# Mouser Electronics

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