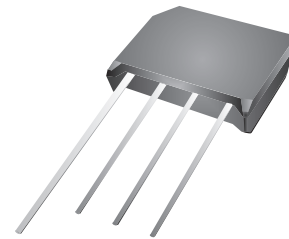


## KBL4005-G Thru. KBL410-G

Reverse Voltage: 50 to 1000V

Forward Current: 4.0Amperes

RoHS Device

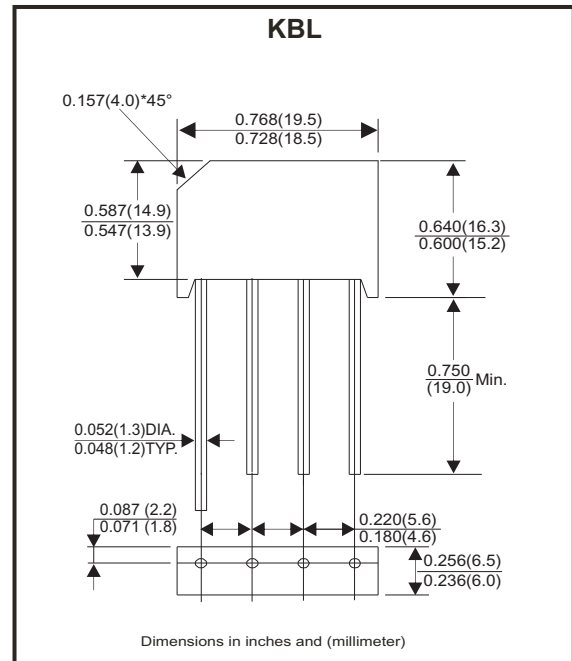


### Features

- Surge overload rating -125 amperes peak.
- Ideal for printed circuit board.
- UL recognized file # E217139 

### Mechanical Data

- Epoxy: U/L 94-V0 rate flame retardant.
- Case: Molded plastic, KBL
- Mounting position: Any
- Weight: 5.04 grams.



### 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<br>4005-G | KBL<br>401-G | KBL<br>402-G | KBL<br>404-G | KBL<br>406-G | KBL<br>408-G | KBL<br>410-G | Unit               |
|----------------------------------------------------------------------------------------|------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|
| Maximum Recurrent Peak Reverse Voltage                                                 | $V_{RRM}$  | 50            | 100          | 200          | 400          | 600          | 800          | 1000         | V                  |
| Maximum RMS Bridge Input 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 Output Current<br>at $T_A=50^{\circ}\text{C}$ (Note 1)         | $I_{(AV)}$ | 4.0           |              |              |              |              |              |              | A                  |
| Peak Forward Surge Current, 8.3ms Single Half<br>Sine-Wave Super Imposed On Rated Load | $I_{FSM}$  | 125           |              |              |              |              |              |              | A                  |
| Maximum Forward Voltage Drop Per Element<br>at 4.0A Peak                               | $V_F$      | 1.1           |              |              |              |              |              |              | V                  |
| Maximum DC Reverse Current<br>at Rate DC Blocking Voltage                              | $I_R$      | 10.0          |              |              |              |              |              |              | $\mu\text{A}$      |
| Maximum Reverse Current<br>at Rated DC Blocking Voltage and $T_A=150^{\circ}\text{C}$  | $I_R$      | 1.0           |              |              |              |              |              |              | mA                 |
| Operating 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:B

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

Fig.1 - Derating Curve Output Rectified Current

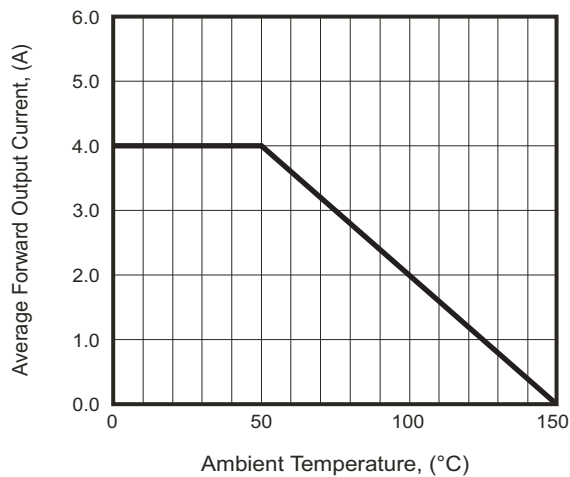


Fig.2 - Max. Forward Surge Current

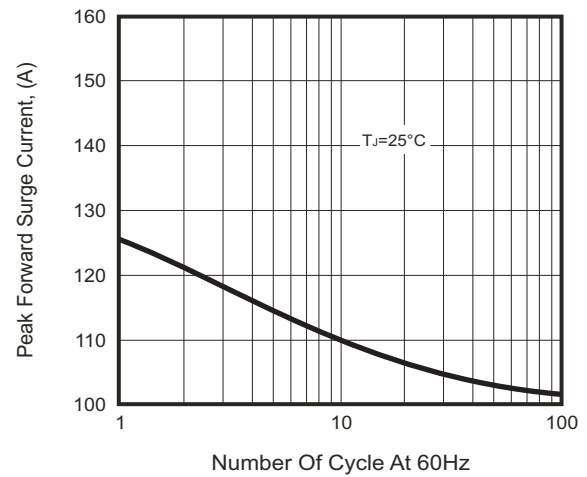


Fig.3 - Typical Forward Characteristics

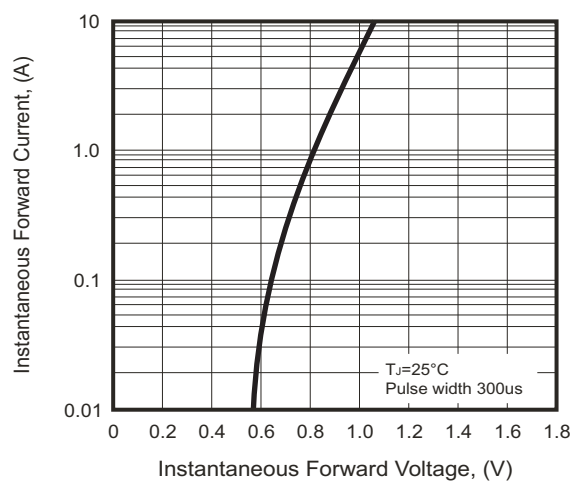
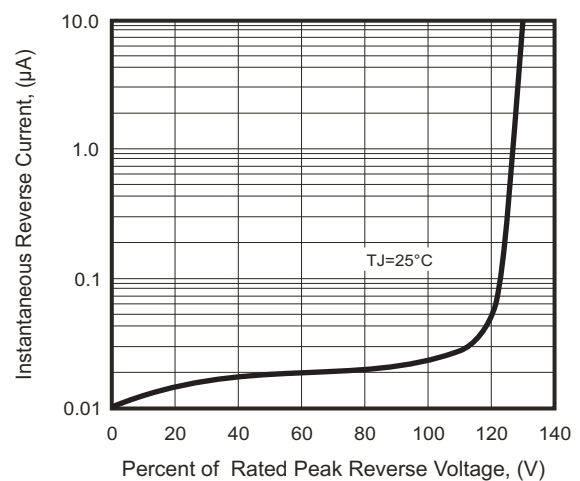
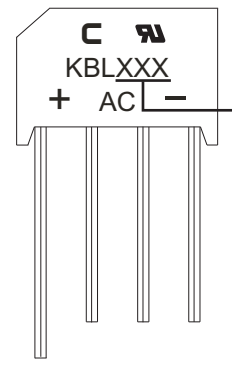


Fig.4 - Typical Reverse Characteristics



## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| KBL4005-G   | KBL005       |
| KBL401-G    | KBL01        |
| KBL402-G    | KBL02        |
| KBL404-G    | KBL04        |
| KBL406-G    | KBL06        |
| KBL408-G    | KBL08        |
| KBL410-G    | KBL10        |



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             |