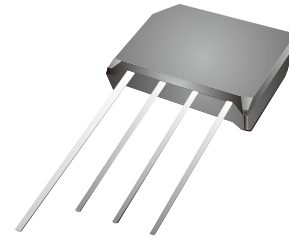


KBL4005-G Thru. KBL410-G

Reverse Voltage: 50 to 1000V

Forward Current: 4.0Amperes

RoHS Device

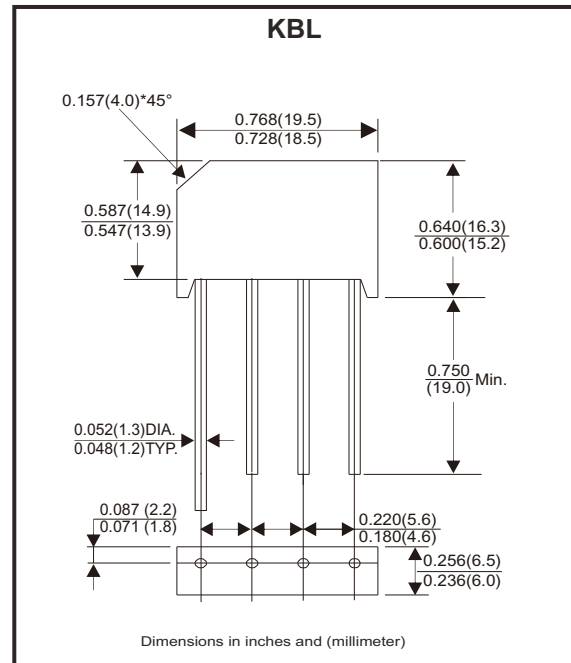


Features

- 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 | | | | | | | A^2s |
| Peak Forward Voltage per Diode at 4.0A DC | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated @ $T_J=25^\circ\text{C}$ DC Blocking Voltage per Diode @ $T_J=150^\circ\text{C}$ | I_R | 10.0 | | | | | | | μA |
| | | 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

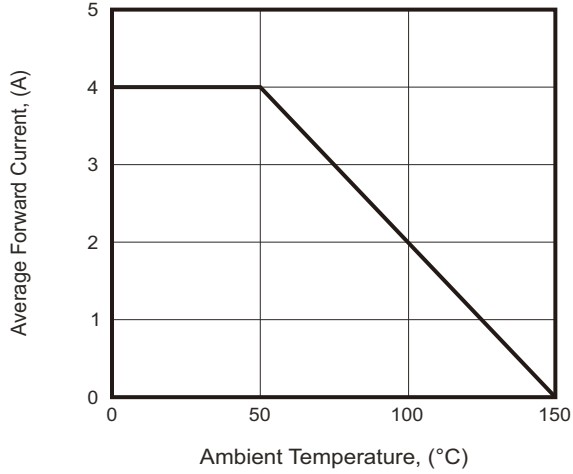


Fig.2 - Maximum Non-Repetitive Surge Current

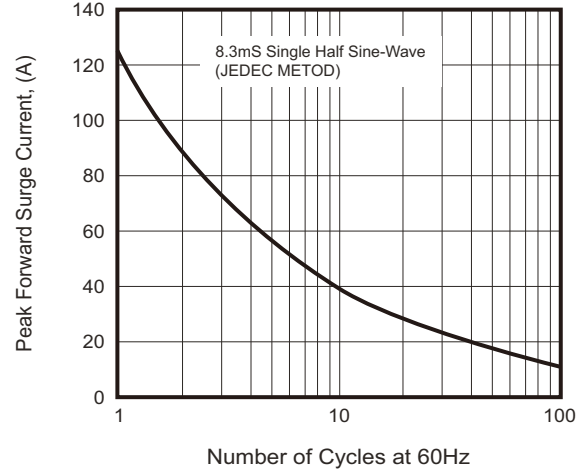


Fig.3 - Typical Reverse Characteristics

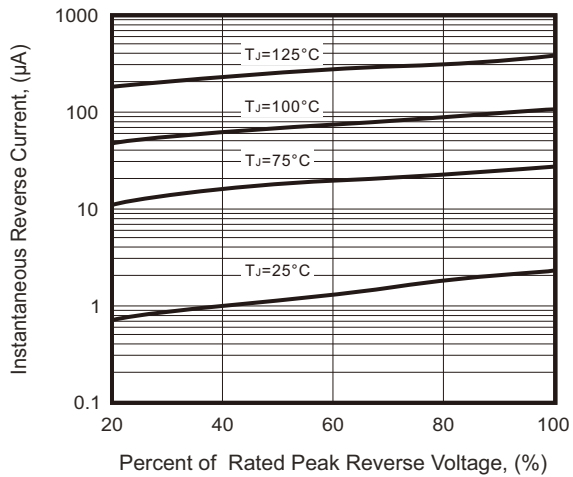
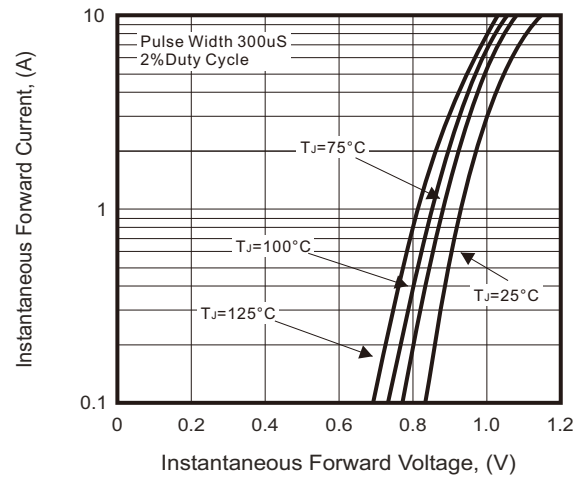
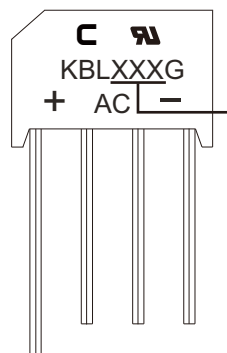


Fig.4 - Typical Forward Characteristics



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 (pcs) | CARTON (pcs) |
| KBL | 500 | 3,000 |