



# KBL401G THRU KBL407G

Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers

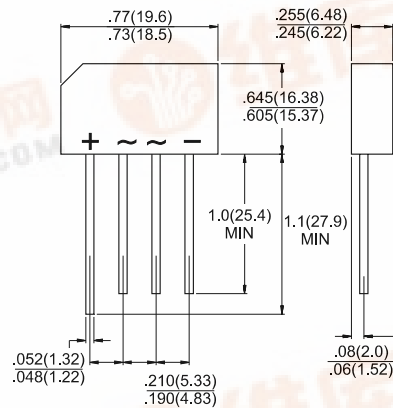


Voltage Range  
50 to 1000 Volts  
Current  
4.0 Amperes

### KBL

### Features

- ✧ UL Recognized File # E-96005
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed:  
250°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs. ( 2.3 Kg ) tension
- ✧ Leads solderable per MIL-STD-202,  
Method 208



### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Type Number  | KBL 401G    | KBL 402G | KBL 403G | KBL 404G | KBL 405G | KBL 406G | KBL 407G | Units    |
|--|-------------|----------|----------|----------|----------|----------|----------|----------|
| Maximum Recurrent Peak Reverse Voltage   | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V        |
| Maximum RMS Voltage  | 35          | 70       | 140      | 280      | 420      | 560      | 700      | V        |
| Maximum DC Blocking Voltage  | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V        |
| Maximum Average Forward Rectified Current @ T <sub>A</sub> = 50°C                                      | 4.0         |          |          |          |          |          |          | A        |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)     | 150         |          |          |          |          |          |          | A        |
| Maximum Instantaneous Forward Voltage @ 4.0A   | 1.1         |          |          |          |          |          |          | V        |
| Maximum DC Reverse Current @ T <sub>A</sub> =25°C at Rated DC Blocking Voltage @ T <sub>A</sub> =125°C | 10<br>500   |          |          |          |          |          |          | uA<br>uA |
| Typical Thermal Resistance (Note) R <sub>θJA</sub><br>R <sub>θJL</sub>                                 | 19<br>2.4   |          |          |          |          |          |          | °C/W     |
| Operating Temperature Range T <sub>J</sub>   | -55 to +150 |          |          |          |          |          |          | °C       |
| Storage Temperature Range T <sub>STG</sub>   | -55 to +150 |          |          |          |          |          |          | °C       |

Note: Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. With 0.47 x 0.47" (12 x 12mm) Copper Pads.





## RATINGS AND CHARACTERISTIC CURVES (KBL401G THRU KBL407G)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

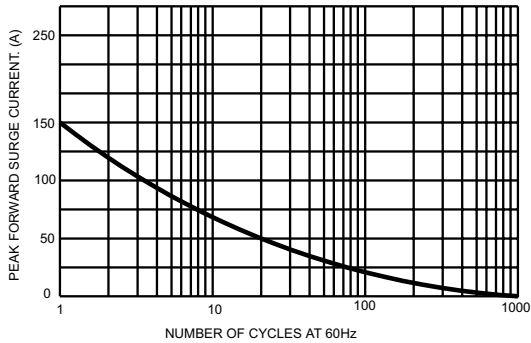


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

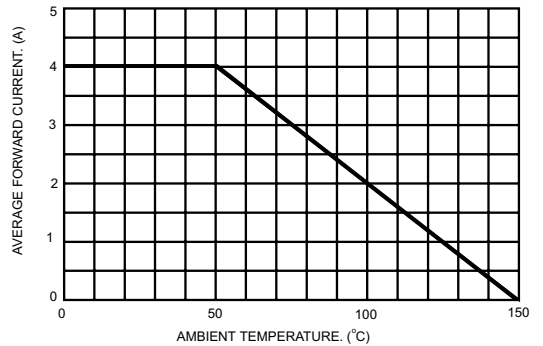


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

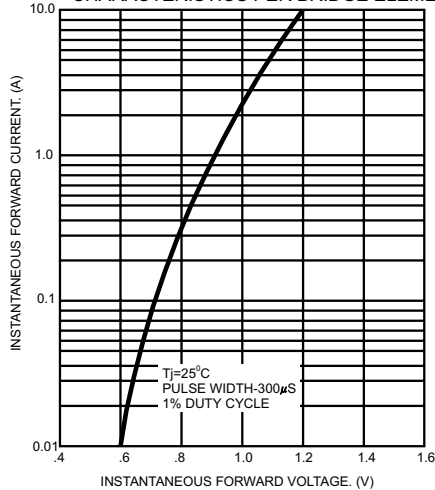


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

