



KBL401G THRU KBL407G

Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers

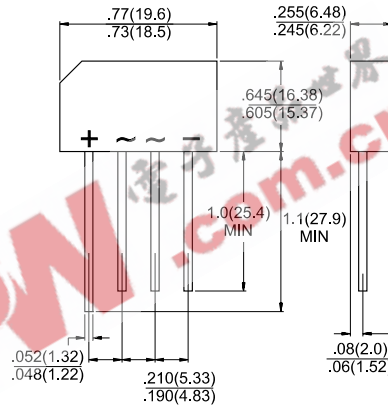


Voltage Range
50 to 1000 Volts
Current
4.0 Amperes

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



Dimensions in inches and (millimeters)

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 _A = 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 _A =25°C at Rated DC Blocking Voltage @ T _A =125°C | 10 500 | | | | | | | uA uA |
| Typical Thermal Resistance (Note) R _{θJA} R _{θJL} | 19 2.4 | | | | | | | °C/W |
| Operating Temperature Range T _J | -55 to +150 | | | | | | | °C |
| Storage Temperature Range T _{STG} | -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

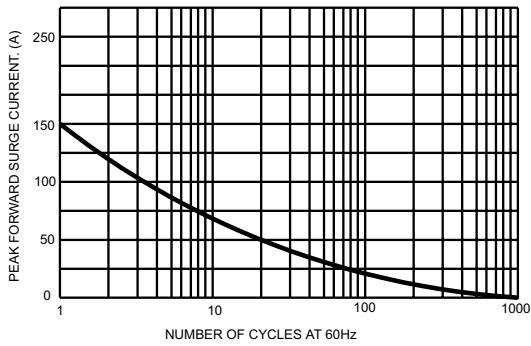


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

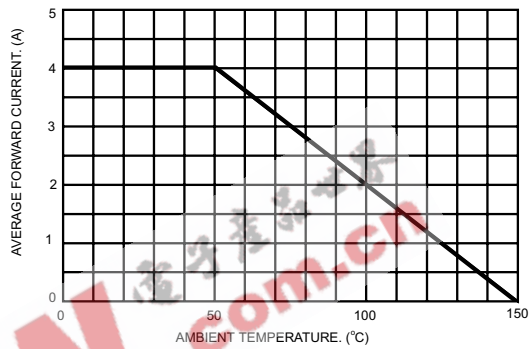


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

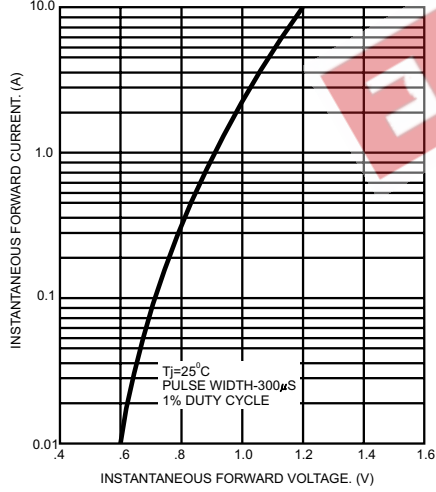


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

