

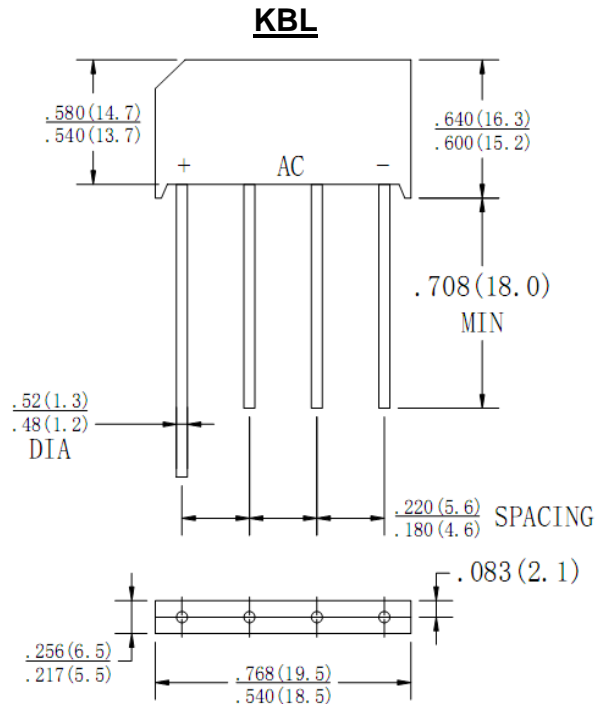


Features

- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed:
260°C/10 seconds / 0.375" (9.5mm)
lead length at 5 lbs.,(2.3kg) tension
- ✧ Leads solderable per MIL-STD-202,
Method 208
- ✧ Green compound with suffix "G" on packing
code & prefix "G" on datecode

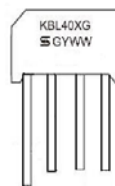
Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Leads solderable
per MIL-STD-750, Method 2026
- ✧ Weight: 5.61 grams



Dimensions in inches and (millimeters)

Marking Diagram



- KBL40XG = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

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 | Symbol | KBL 401G | KBL 402G | KBL 403G | KBL 404G | KBL 405G | KBL 406G | KBL 407G | 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 @ $T_A=50^\circ C$ | $I_{F(AV)}$ | 4 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 150 | | | | | | | A |
| Maximum Instantaneous Forward Voltage (Note 1) @2.0A @4.0A | V_F | 1.0 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Block Voltage @ $T_A=25^\circ C$ @ $T_A=125^\circ C$ | I_R | 10 500 | | | | | | | μA |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ $R_{\theta JL}$ | 19 2.4 | | | | | | | $^\circ C/W$ |
| Operating Temperature Range | T_J | - 55 to + 150 | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | - 55 to + 150 | | | | | | | $^\circ C$ |

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2 : Unit mount on P.C.B. 0.6" x 0.6" (16mmx16mm) Copper pads

RATINGS AND CHARACTERISTIC CURVES (KBL401G THRU KBL407G)

FIG. 1 FORWARD CURRENT DERATING CURVE

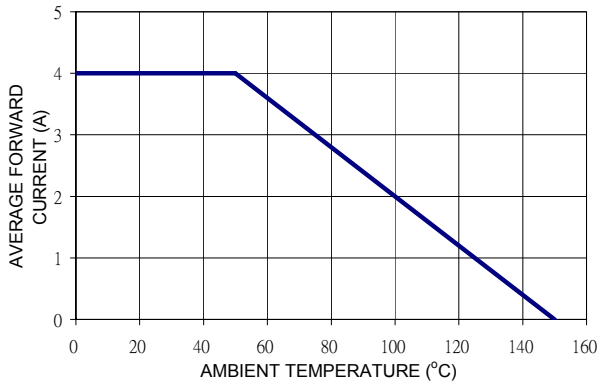


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

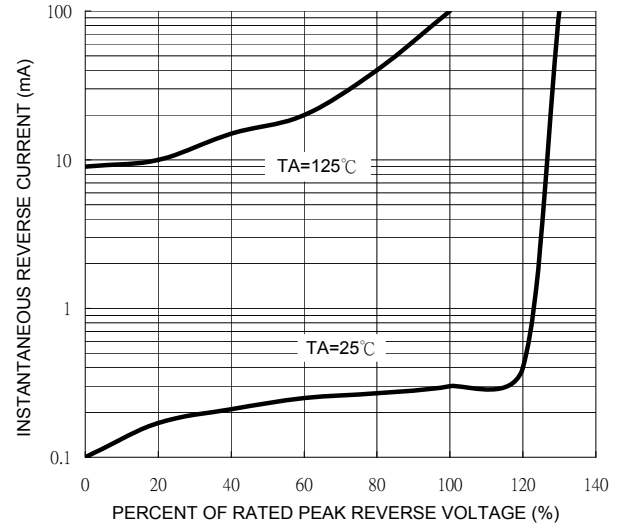


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

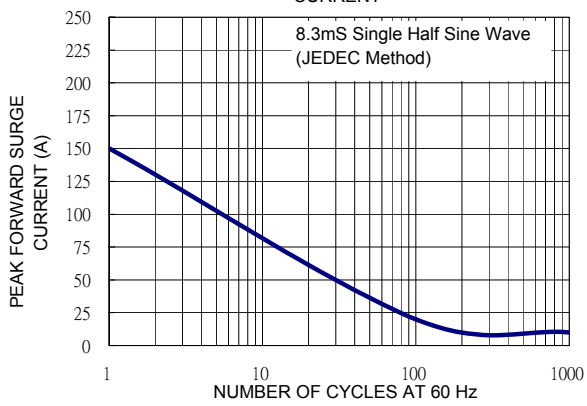


FIG. 4 TYPICAL JUNCTION CAPACITANCE

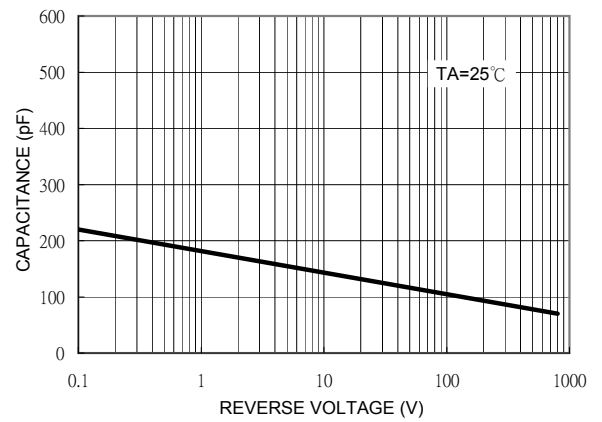


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

