

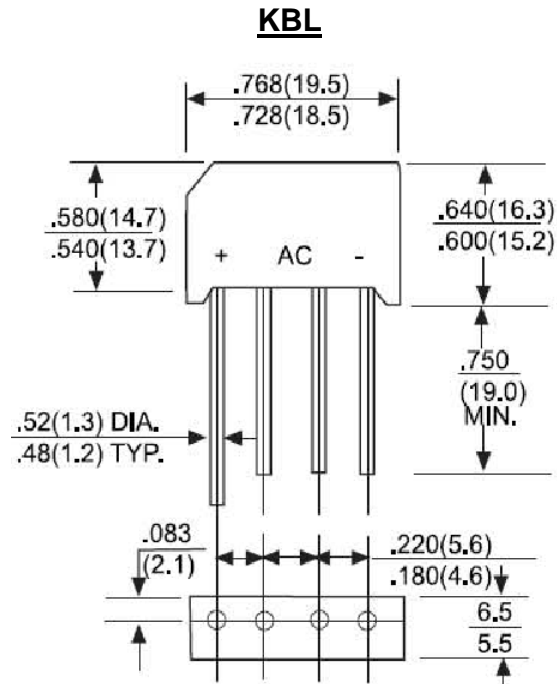

**RoHS
COMPLIANCE**


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

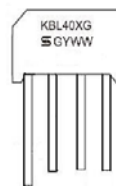
Mechanical Data

- ✧ 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 @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	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 A @ 4 A	V_F	1.0 1.1							V
Maximum DC Reverse Current at Rated DC Block Voltage @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	I_R	10 500							μA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	19 2.4							$^\circ\text{C/W}$
Operating Temperature Range	T_J	- 55 to + 150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 150							$^\circ\text{C}$

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

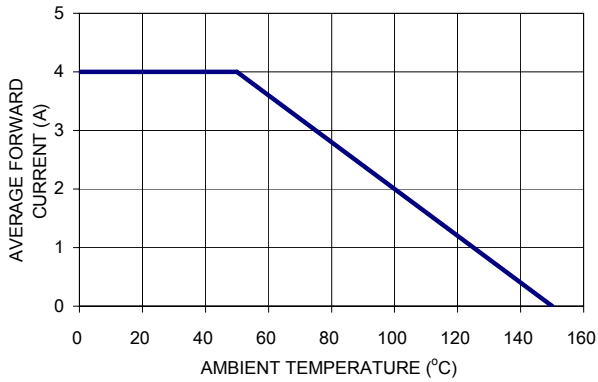


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

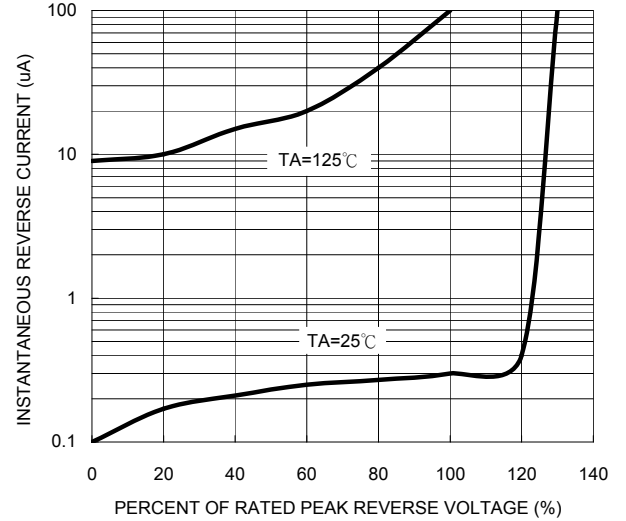


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

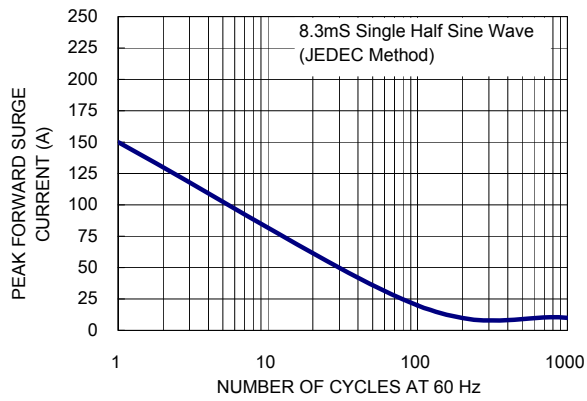


FIG. 4 TYPICAL JUNCTION CAPACITANCE

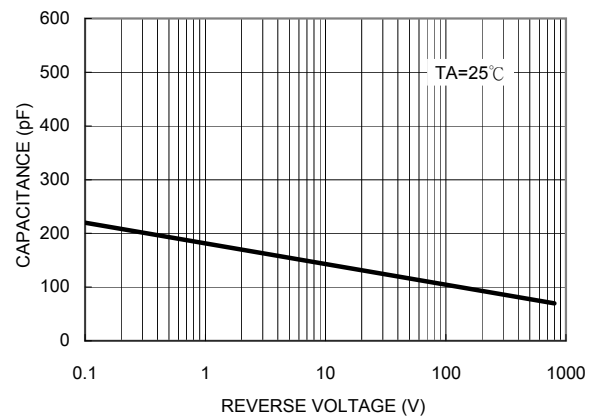
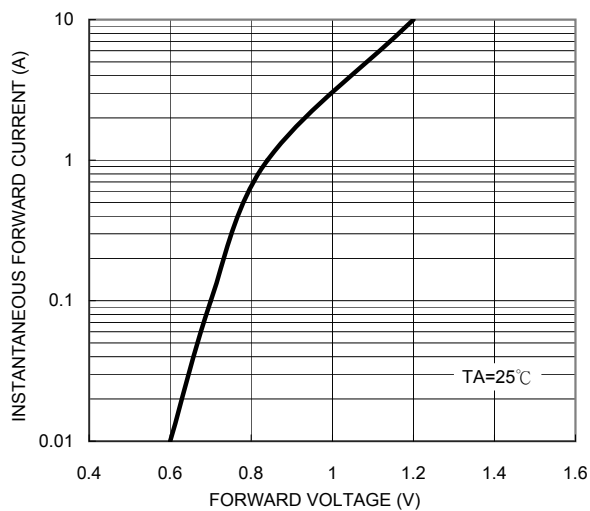


FIG. 5 TYPICAL FORWARD CHARACTERISTICS



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