



**RoHS COMPLIANCE**

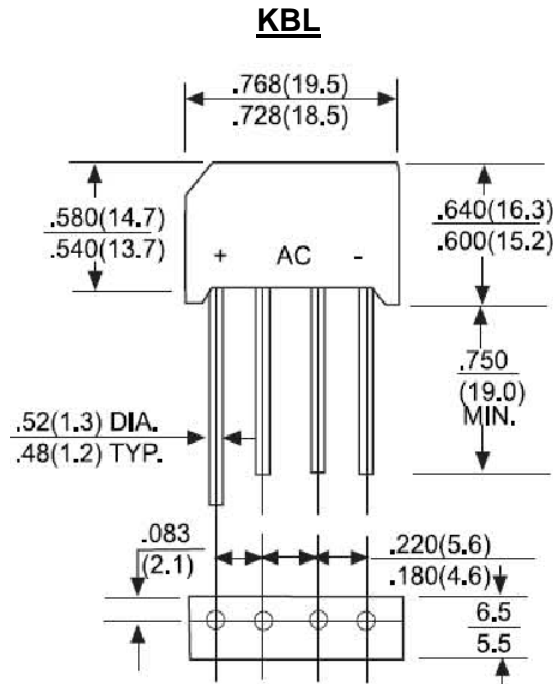


**Features**

- ✧ 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

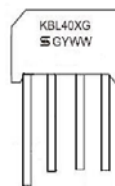
**Mechanical Data**

- ✧ 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 @ $T_A=50^{\circ}C$	$I_{F(AV)}$	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 @ $T_A=25^{\circ}C$ @ $T_A=125^{\circ}C$	$I_R$	10 500							$\mu A$
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

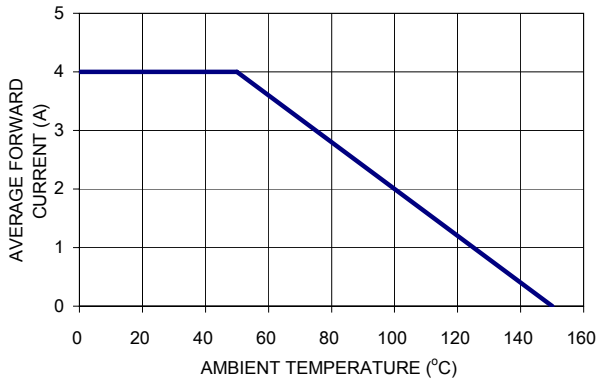


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

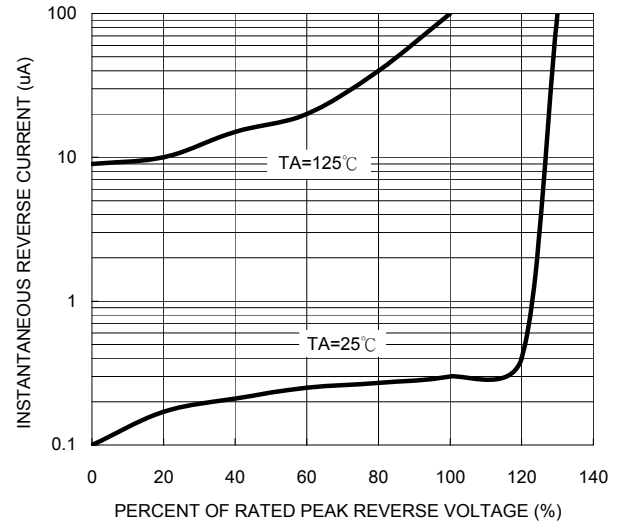


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

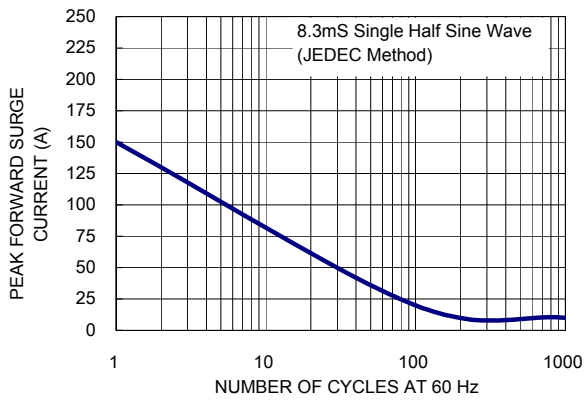


FIG. 4 TYPICAL JUNCTION CAPACITANCE

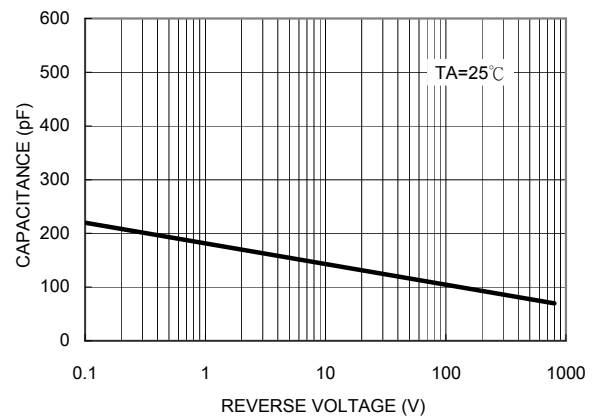


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

