
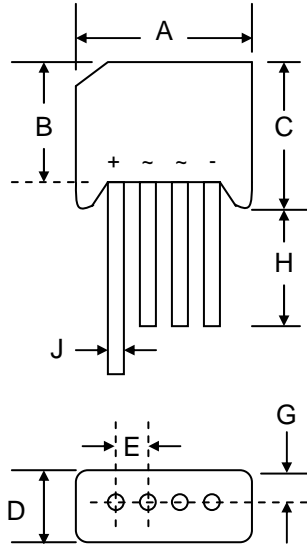


### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
-  Recognized File # E157705

### Mechanical Data

- Case: KBL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 5.6 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



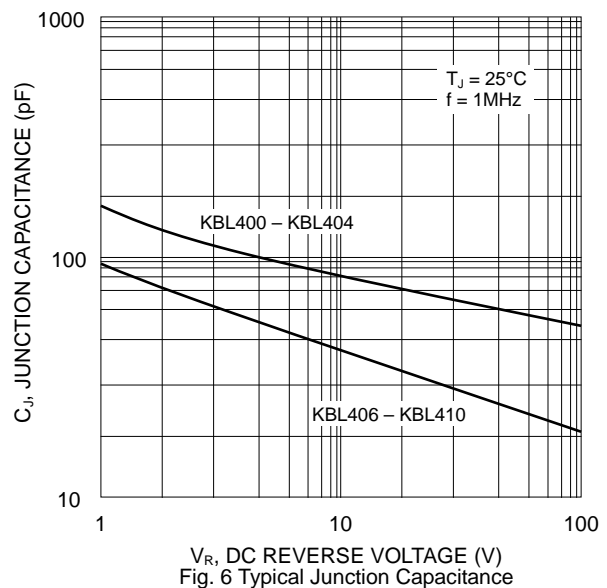
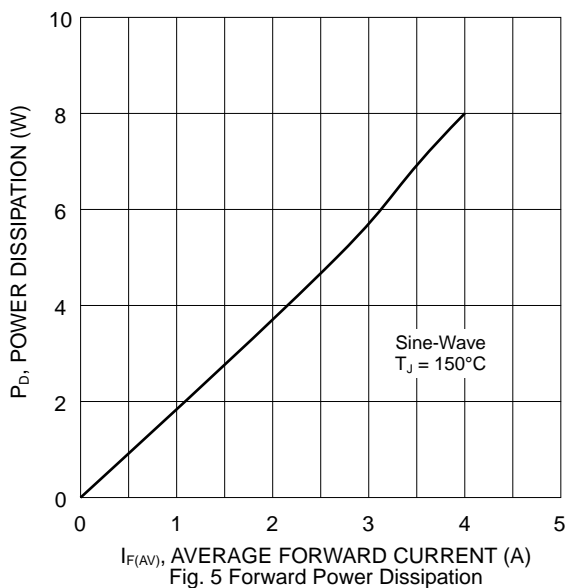
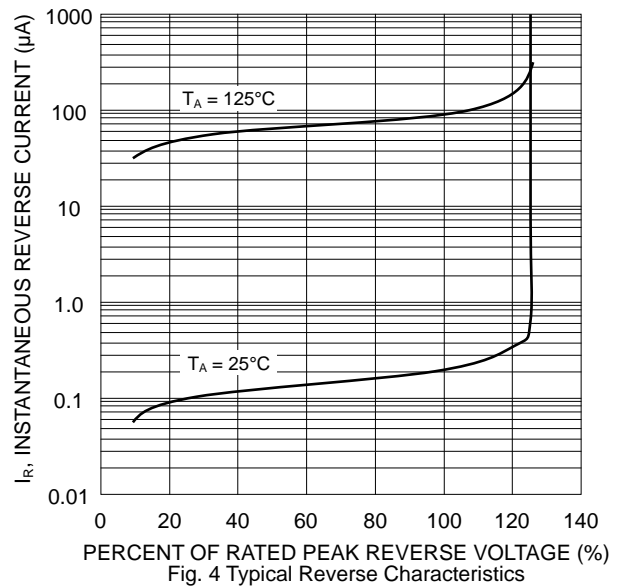
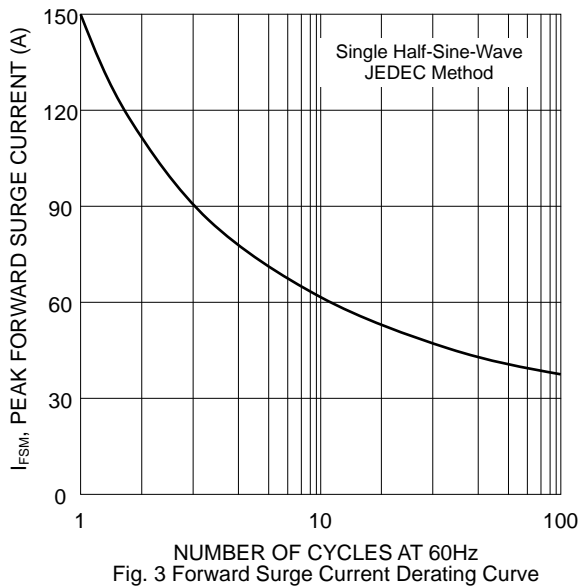
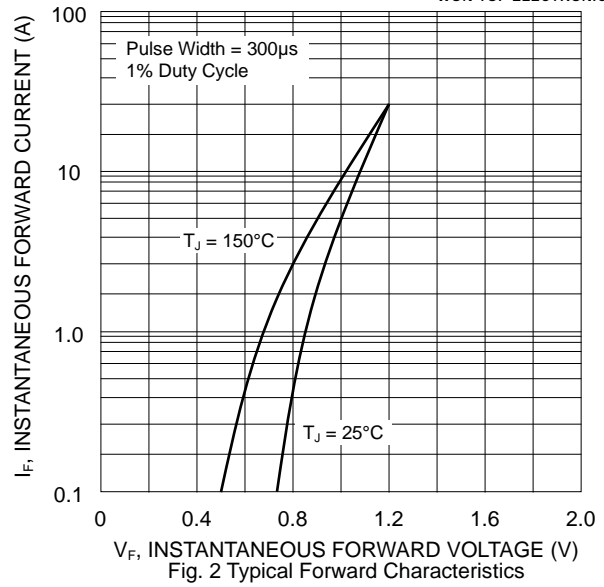
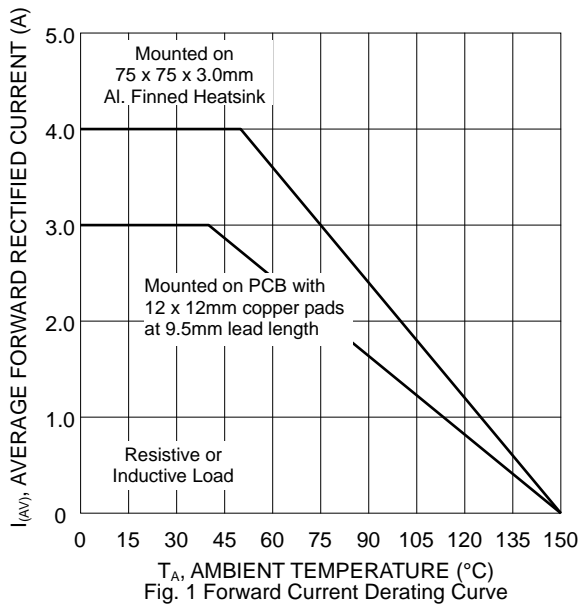
KBL		
Dim	Min	Max
A	18.50	19.50
B	13.70	15.70
C	15.20	16.30
D	5.50	6.50
E	4.60	5.60
G	—	2.10
H	19.00	—
J	1.20 Ø	1.30 Ø
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub>=25°C unless otherwise specified

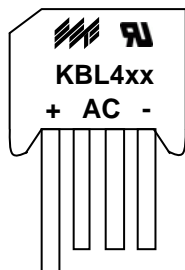
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	KBL 400	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current    @T <sub>A</sub> = 50°C (Note 1)	I <sub>O</sub>	4.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	150							A
Forward Voltage per leg                    @I <sub>F</sub> = 2.0A	V <sub>FM</sub>	1.1							V
Peak Reverse Current                        @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage            @T <sub>A</sub> = 125°C	I <sub>RM</sub>	5.0 1000							µA
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	93							A <sup>2</sup> s
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	100				45			pF
Thermal Resistance Junction to Ambient (Note 3) Thermal Resistance Junction to Case (Note 1)	R <sub>θJA</sub> R <sub>θJC</sub>	19 2.4							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150							°C

Note: 1. Mounted on 75 x 75 x 3.0mm thick Al. heatsink.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
3. Mounted on PCB with 12 x 12mm copper pads and measured at lead length 9.5mm from case.



## MARKING INFORMATION



KBL4xx = Device Number  
 xx = 00, 01, 02, 04, 06, 08 or 10  
 Polarity = As Marked on Body

## PACKAGING INFORMATION

### BULK


Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
230 x 230 x 50	500	495 x 245 x 180	3,000	19.5

**Note:** 1. Paper box, white or brown color.

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBL400	SIL Bridge	500 Units/Box
KBL401	SIL Bridge	500 Units/Box
KBL402	SIL Bridge	500 Units/Box
KBL404	SIL Bridge	500 Units/Box
KBL406	SIL Bridge	500 Units/Box
KBL408	SIL Bridge	500 Units/Box
KBL410	SIL Bridge	500 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, KBL400-LF.**

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**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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