
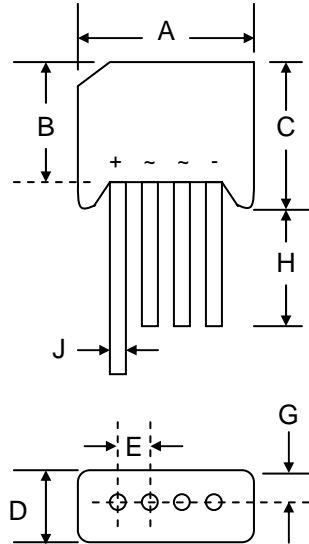


Features

- 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**



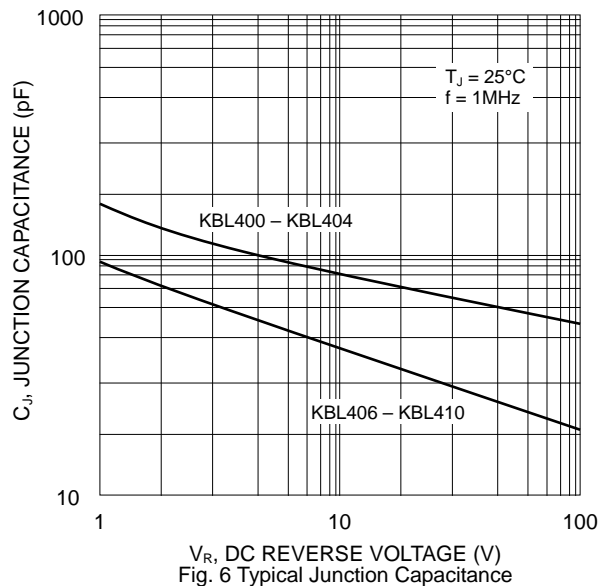
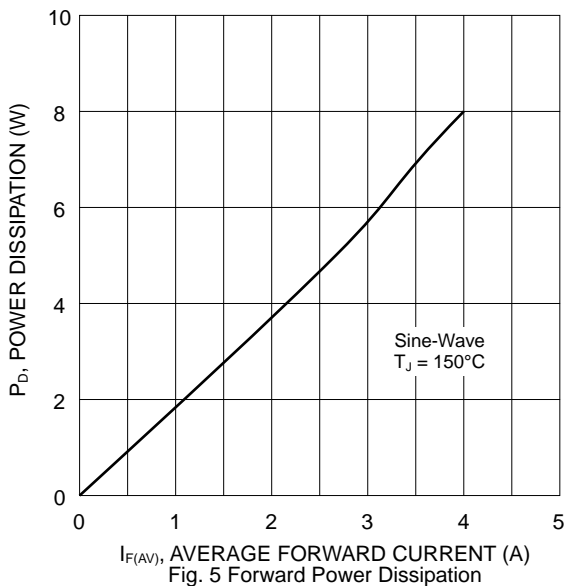
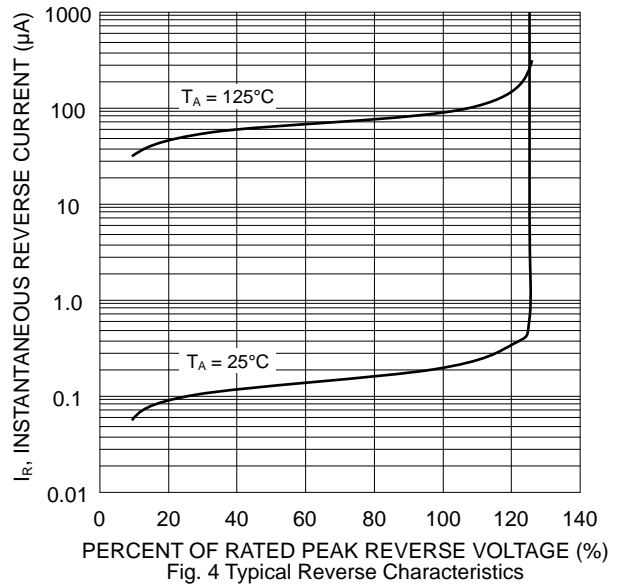
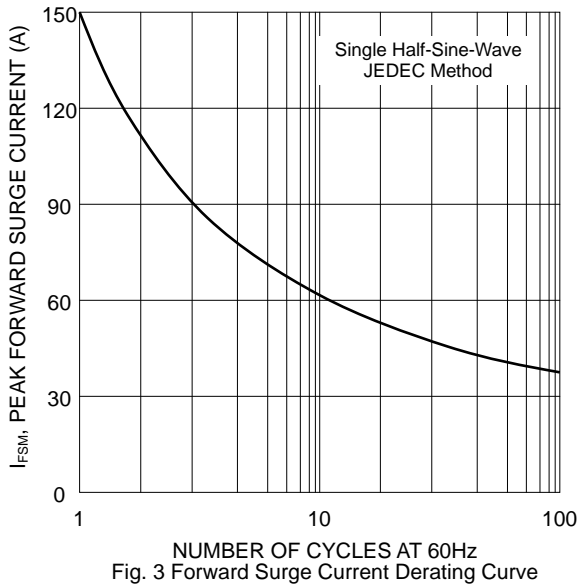
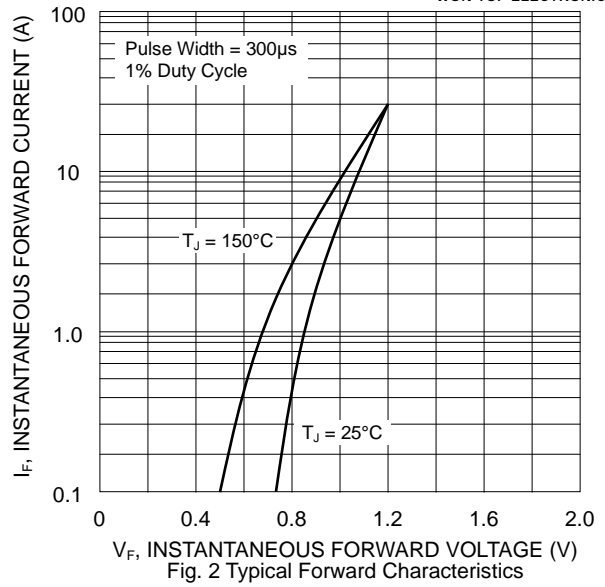
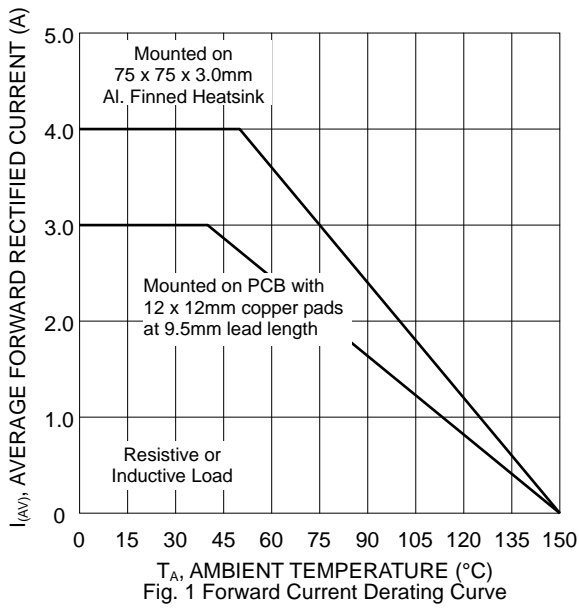
KBL		
Dim	Min	Max
A	18.50	19.50
B	13.70	15.70
C	15.20	16.30
D	5.50	6.50
E	4.60	5.60
G	—	2.10
H	19.00	—
J	1.20 Ø	1.30 Ø
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

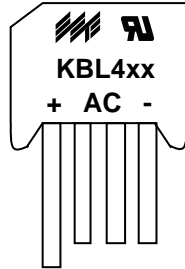
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	KBL 400	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	Unit
Peak Repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_A = 50^\circ\text{C}$ (Note 1)	I_O	4.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150							A
Forward Voltage per leg @ $I_F = 2.0\text{A}$	V_{FM}	1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_{RM}	5.0 1000							μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	93							A^2s
Typical Junction Capacitance (Note 2)	C_J	100					45		pF
Thermal Resistance Junction to Ambient (Note 3)	R_{JA}	19							$^\circ\text{C}/\text{W}$
Thermal Resistance Junction to Case (Note 1)	R_{JC}	2.4							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

- 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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