

# **KBL400 - KBL410**

## 4.0A BRIDGE RECTIFIER

#### **Features**

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

#### **Mechanical Data**

Case: Molded Plastic

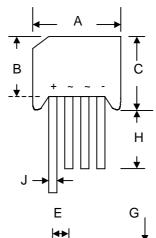
Terminals: Plated Leads Solderable per

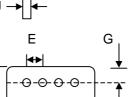
MIL-STD-202, Method 208 Polarity: As Marked on Body

Weight: 5.6 grams (approx.)

Mounting Position: Any

Marking: Type Number





KBL							
Dim	Min	Max					
Α	18.50	19.50					
В	13.70	14.70					
С	15.20	16.30					
D	6.0	6.50					
Е	4.60	5.60					
G	_	2.10					
Н	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	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	٧
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	٧
Average Rectified Output Current @T <sub>C</sub> = 75°C	lo	4.0							А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150							А
Forward Voltage (per element) @I <sub>F</sub> = 2.0A	VFM	1.1						V	
Peak Reverse Current $@T_C = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_C = 100^{\circ}C$	I ID	10 1.0						μA mA	
Rating for Fusing (t < 8.3ms) (Note 1)	l <sup>2</sup> t	166							A <sup>2</sup> s
Typical Thermal Resistance (Note 2)	R <sub>θ</sub> JC	19							K/W
Operating and Storage Temperature Range	Tj, TsTG	-65 to +125							°C

#### \*Glass Passivated forms are available upon request.

Note: 1. Non-repetitive for t > 1ms and < 8.3ms.

2. Thermal resistance junction to case per element mounted on PC board with 13.0x13.0x0.03mm thick land areas.

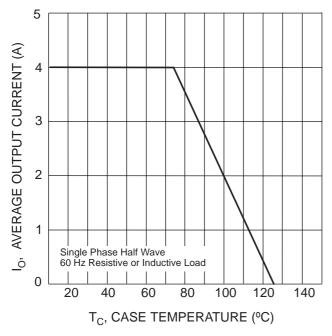


Fig. 1 Forward Current Derating Curve

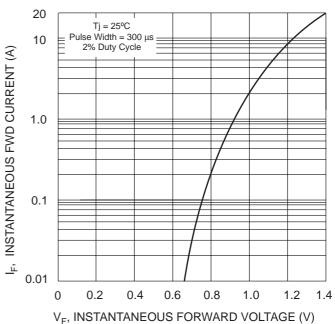


Fig. 2 Typical Forward Characteristics, per element

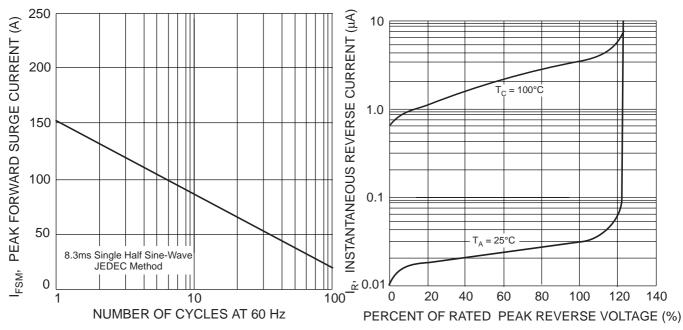


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

Fig. 4 Typical Reverse Characteristics, per element

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