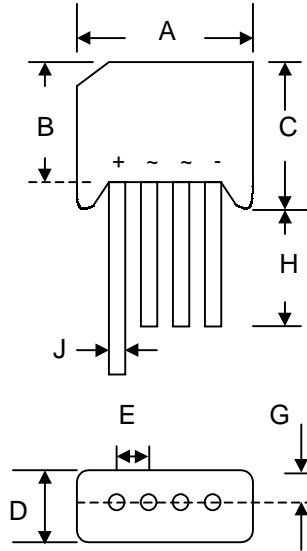


Features

- 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 |
| A | 18.50 | 19.50 |
| B | 13.70 | 14.70 |
| C | 15.20 | 16.30 |
| D | 6.0 | 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 Working Peak Reverse Voltage DC Blocking Voltage | V_{RRM} V_{RWM} V_R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @ $T_C = 75^\circ\text{C}$ | 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 element) @ $I_F = 2.0\text{A}$ | V_{FM} | 1.1 | | | | | | | V |
| Peak Reverse Current @ $T_C = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_C = 100^\circ\text{C}$ | I_R | 10 1.0 | | | | | | | μA mA |
| Rating for Fusing ($t < 8.3\text{ms}$) (Note 1) | I^2t | 166 | | | | | | | A^2s |
| Typical Thermal Resistance (Note 2) | $R_{\theta JC}$ | 19 | | | | | | | K/W |
| Operating and Storage Temperature Range | T_j, T_{STG} | -65 to +125 | | | | | | | $^\circ\text{C}$ |

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

Note: 1. Non-repetitive for $t > 1\text{ms}$ and $< 8.3\text{ms}$.

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

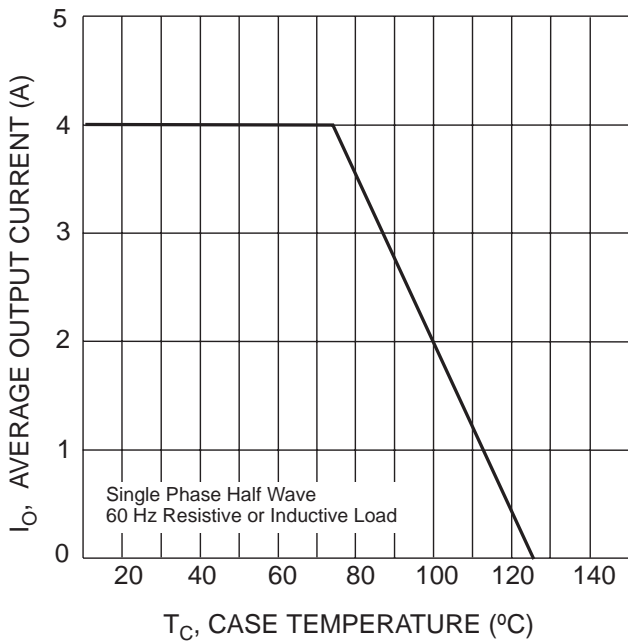


Fig. 1 Forward Current Derating Curve

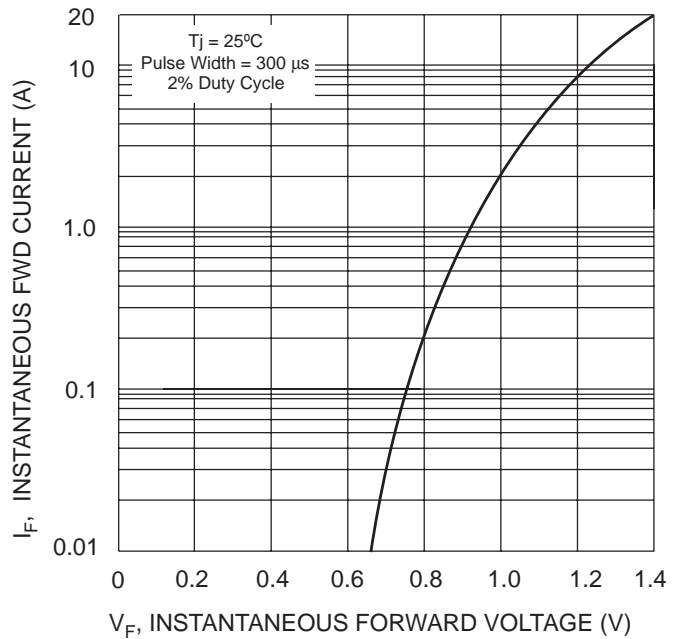


Fig. 2 Typical Forward Characteristics, per element

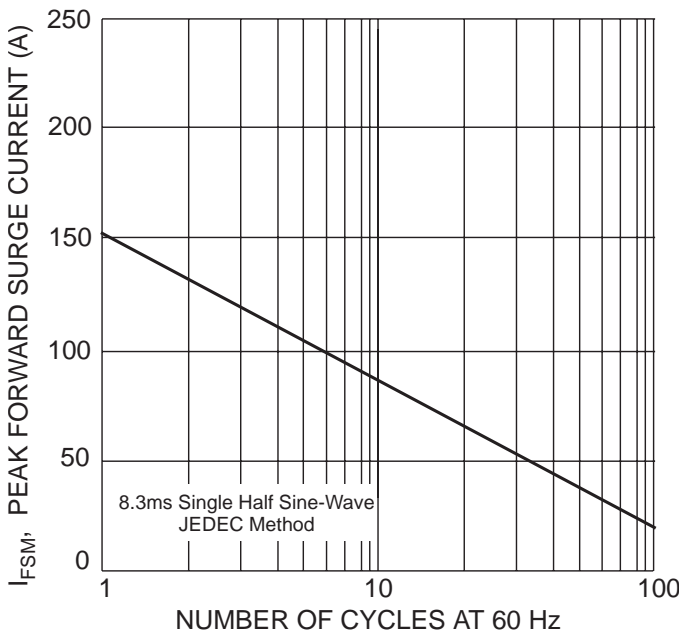


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

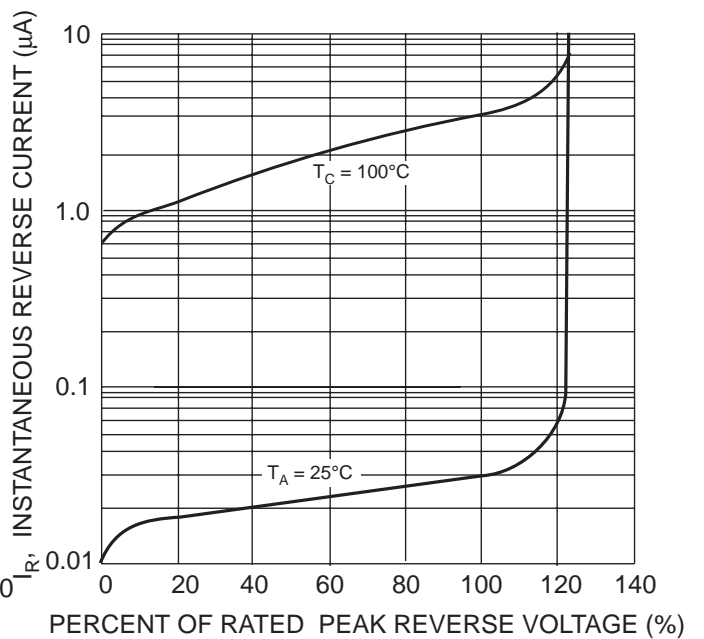


Fig. 4 Typical Reverse Characteristics, per element

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 |

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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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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