



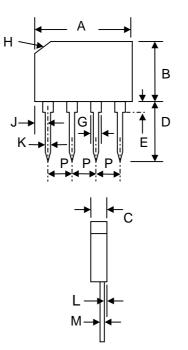
# 2.0A BRIDGE RECTIFIER

### Features

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

#### **Mechanical Data**

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 2.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



| KBJ-2                |            |      |  |  |  |  |
|----------------------|------------|------|--|--|--|--|
| Dim                  | Min        | Max  |  |  |  |  |
| Α                    | 19.7       | 20.3 |  |  |  |  |
| В                    | 10.7       | 11.3 |  |  |  |  |
| С                    | 3.8        | —    |  |  |  |  |
| D                    | 13.0       | 14.0 |  |  |  |  |
| Е                    | 2.3        | 2.7  |  |  |  |  |
| G                    | 1.65       | _    |  |  |  |  |
| н                    | 3.17 x 45° |      |  |  |  |  |
| J                    | 2.3        | 2.7  |  |  |  |  |
| К                    | 0.9        | 1.14 |  |  |  |  |
| L                    | 0.8        | 1.2  |  |  |  |  |
| М                    | _          | 0.51 |  |  |  |  |
| Р                    | 4.8        | 5.3  |  |  |  |  |
| All Dimensions in mm |            |      |  |  |  |  |

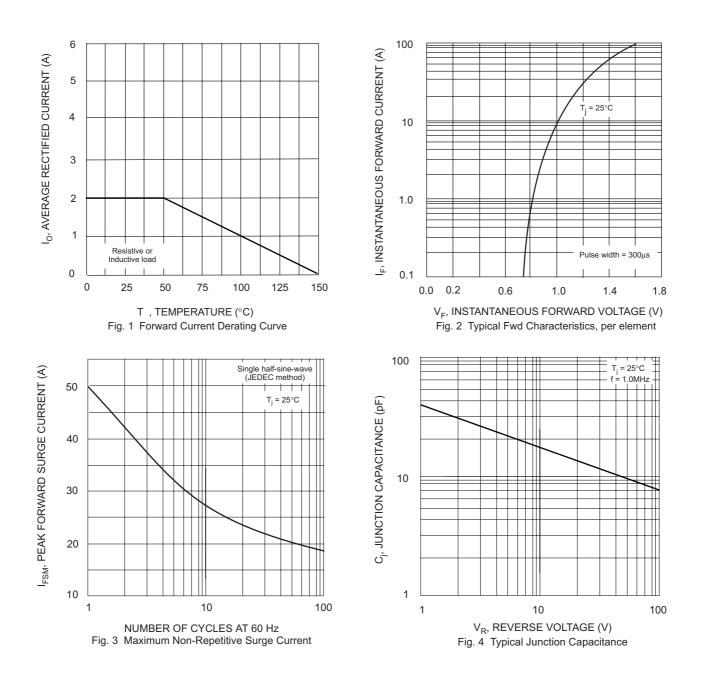
## Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

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

| Characteristic  | Symbol             | KBJ2A       | KBJ2B | KBJ2D | KBJ2G | KBJ2J | KBJ2K            | KBJ2M | Unit |
|---|--------------------|-------------|-------|-------|-------|-------|------------------|-------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | Vrrm<br>Vrwm<br>Vr | 50          | 100   | 200   | 400   | 600   | 800              | 1000  | V    |
| RMS Reverse Voltage   | VR(RMS)            | 35          | 70    | 140   | 280   | 420   | 560              | 700   | V    |
| Average Rectified Output Current $@T_A = 50^{\circ}C$   | lo                 | 2.0         |       |       |       |       |                  | А     |      |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | IFSM               | 50          |       |       |       |       | A                |       |      |
| I <sup>2</sup> t Rating for Fusing (t < 8.35ms)   | l <sup>2</sup> t   | 32          |       |       |       |       | A <sup>2</sup> s |       |      |
| Forward Voltage (per diode) $@I_F = 1.0A$   | Vfm                | 1.0         |       |       |       |       | V                |       |      |
| Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_C = 100^{\circ}C$                          | IR                 | 10<br>500   |       |       |       |       | μA               |       |      |
| Typical Thermal Resistance (per leg) (Note 1)   | RθJA               | 47          |       |       |       |       | K/W              |       |      |
| Typical Thermal Resistance (per leg) (Note 2)   | Rejc               | 10          |       |       |       |       | K/W              |       |      |
| Operating and Storage Temperature Range   | Tj, TSTG           | -55 to +150 |       |       |       |       | °C               |       |      |

Note: 1. Thermal resistance junction to ambient, mounted on PCB at 9.5mm lead length.

2. Thermal resistance junction to case, mounted on 5.0 x 4.0 x 0.8cm thick AL plate heatsink.



#### ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| KBJ2A       | SIL Bridge   | 50 Units/Tube     |
| KBJ2B       | SIL Bridge   | 50 Units/Tube     |
| KBJ2D       | SIL Bridge   | 50 Units/Tube     |
| KBJ2G       | SIL Bridge   | 50 Units/Tube     |
| KBJ2J       | SIL Bridge   | 50 Units/Tube     |
| KBJ2K       | SIL Bridge   | 50 Units/Tube     |
| KBJ2M       | SIL Bridge   | 50 Units/Tube     |

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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