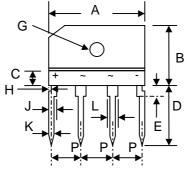


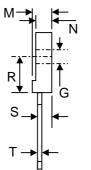
KBJ4A - KBJ4M

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





| KBJ-4 | | | | | | |
|----------------------|---------|------|--|--|--|--|
| Dim | Min Max | | | | | |
| Α | 24.7 | 25.3 | | | | |
| В | 14.7 | 15.3 | | | | |
| С | | 4.0 | | | | |
| D | 17.0 | 18.0 | | | | |
| E | 3.3 | 3.7 | | | | |
| G | 3.1Ø | 3.4Ø | | | | |
| Н | 1.05 | 1.45 | | | | |
| J | 1.7 | 2.1 | | | | |
| K | 0.9 | 1.1 | | | | |
| L | 1.5 | 1.9 | | | | |
| М | 4.8 | 5.16 | | | | |
| N | 3.8 | 4.4 | | | | |
| Р | 7.3 | 7.7 | | | | |
| R | 9.3 | 9.7 | | | | |
| S | 3.4 | 3.9 | | | | |
| Т | 0.6 | 0.8 | | | | |
| All Dimensions in mm | | | | | | |
| | | | | | | |

Mechanical Data

Case: Molded Plastic

 Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: As Marked on BodyWeight: 4.0 grams (approx.)Mounting Position: Any

Marking: Type Number

Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

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

| Characteristic | Symbol | KBJ4A | KBJ4B | KBJ4D | KBJ4G | KBJ4J | KBJ4K | KBJ4M | Unit |
|---|--------------------|-------------|-------|-------|-------|-------|-------|-------|------------------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | VRRM VRWM 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 $@T_C = 100^{\circ}C$ $@T_A = 25^{\circ}C$ | lo | 4.0 2.4 | | | | | | Α | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 150 | | | | | А | | |
| I ² t Rating for Fusing (t < 8.35ms) | l²t | | | | 93 | | | | A ² s |
| Forward Voltage (per diode) @I _F = 2.0A | VFM | | | | 1.0 | | | | V |
| Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_C = 100^{\circ}C$ | IR | 5.0 500 | | | | μΑ | | | |
| Typical Thermal Resistance (per leg) (Note 1) | R_{θ} JA | 30 | | | | | K/W | | |
| Typical Thermal Resistance (per leg) (Note 2) | R _θ JC | 5.5 | | | | | | 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.

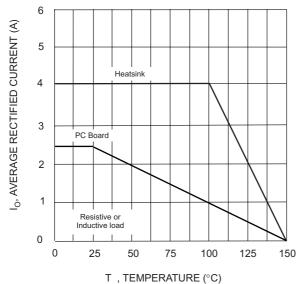
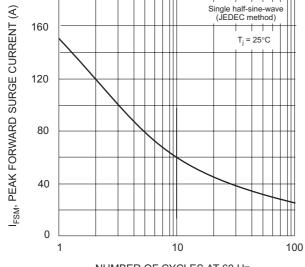


Fig. 1 Forward Current Derating Curve



NUMBER OF CYCLES AT 60 Hz Fig. 3 Maximum Non-Repetitive Surge Current

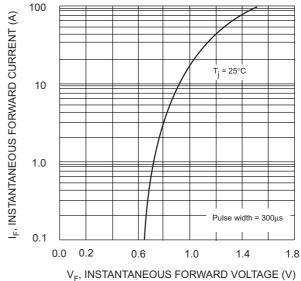
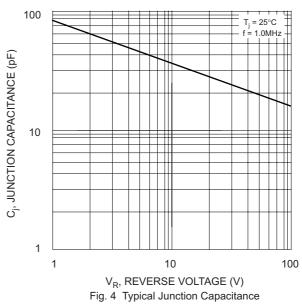


Fig. 2 Typical Fwd Characteristics, per element



ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity | | | |
|-------------|--------------|-------------------|--|--|--|
| KBJ4A | SIL Bridge | 25 Units/Tube | | | |
| KBJ4B | SIL Bridge | 25 Units/Tube | | | |
| KBJ4D | SIL Bridge | 25 Units/Tube | | | |
| KBJ4G | SIL Bridge | 25 Units/Tube | | | |
| KBJ4J | SIL Bridge | 25 Units/Tube | | | |
| KBJ4K | SIL Bridge | 25 Units/Tube | | | |
| KBJ4M | SIL Bridge | 25 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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