

KBJ2A - KBJ2M

2.0A BRIDGE RECTIFIER

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- UL Recognized File # E157705

Mechanical Data

Case: Molded Plastic

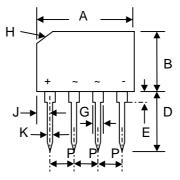
Terminals: Plated Leads Solderable per

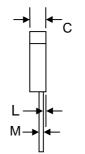
MIL-STD-202, Method 208

Polarity: As Marked on Body

Weight: 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 | | | | |
| K | 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_A=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 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 _A = 50°C | lo | 2.0 | | | | | | | Α |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 50 | | | | | | Α | |
| I ² t Rating for Fusing (t < 8.35ms) | l ² t | 32 | | | | | | A ² 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 $@T_C = 100^{\circ}C$ | lR | 10 500 | | | | | μΑ | | |
| Typical Thermal Resistance (per leg) (Note 1) | RθJA | 47 | | | | | K/W | | |
| Typical Thermal Resistance (per leg) (Note 2) | R _θ JC | 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.

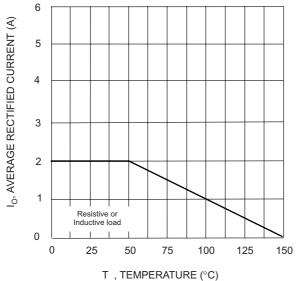


Fig. 1 Forward Current Derating Curve

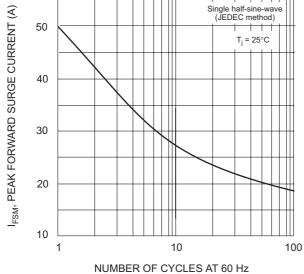


Fig. 3 Maximum Non-Repetitive Surge Current

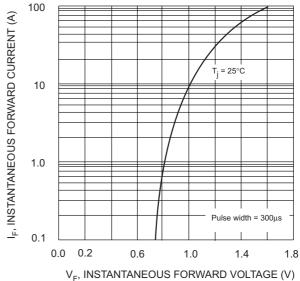
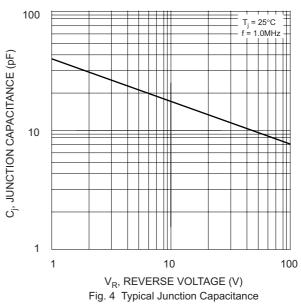


Fig. 2 Typical Fwd Characteristics, per element



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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