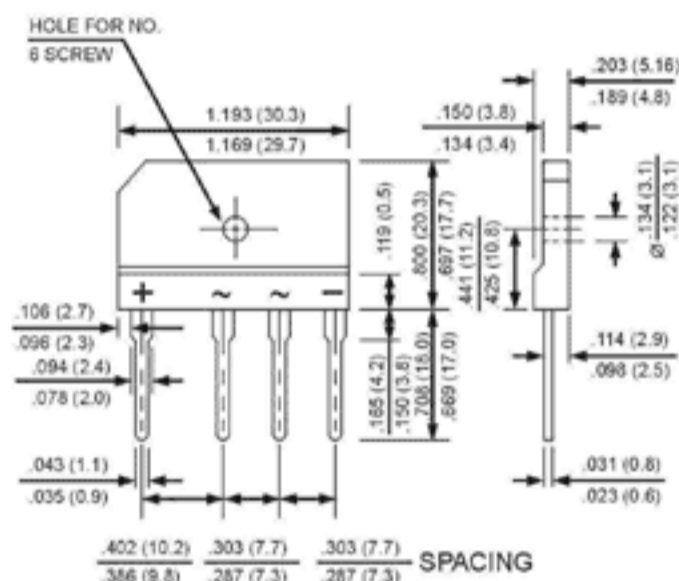


SILICON BRIDGE RECTIFIERS
REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 6.0 Amperes
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | KBJ 6A | KBJ 6B | KBJ 6D | KBJ 6G | KBJ 6J | KBJ 6K | KBJ 6M | UNIT |
|--|------------------|-----------|-----------|-----------|-----------|-------------|-----------|-----------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @T _c =100°C (with heatsink Note 2) (without heatsink) | I _{AV} | | | | | 6.0 | | | A |
| | | | | | | 2.8 | | | |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method) | I _{FSM} | | | | | 170 | | | A |
| Maximum Forward Voltage at 3.0A DC | V _F | | | | | 1.0 | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =125°C | I _R | | | | | 5.0 | | | uA |
| | | | | | | 500 | | | |
| I ² t Rating for fusing (t<8.3ms) | I ² t | | | | | 120 | | | A ² S |
| Typical Junction Capacitance per element (Note 1) | C _J | | | | | 55 | | | pF |
| Typical Thermal Resistance (Note 2) | R _{θJC} | | | | | 1.8 | | | °C/W |
| Operating Temperature Range | T _J | | | | | -40 to +125 | | | °C |
| Storage Temperature Range | T _{STG} | | | | | -40 to +125 | | | °C |

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 2. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.