



KBU10A~KBU10M

SILICON BRIDGE RECTIFIERS

VOLTAGE 50 to 1000 Volts **CURRENT** 10.0 Amperes

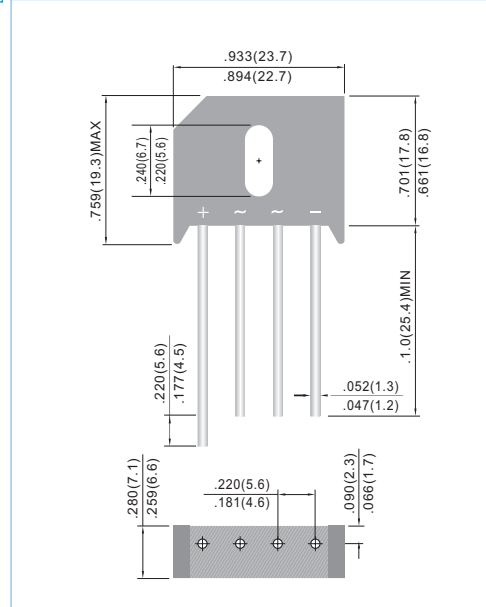
KBU Unit: inch (mm)

FEATURES

- Plastic material used carries Underwriters Laboratory Flammability Classification 94V-0
- Reliable low cost construction utilizing molded plastic technique.
- Surge overload rating : 300 amperes peak
- Ideal for printed circuit board.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: Reliable low cost construction utilizing molded plastic technique
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Mounting Position: Any
- Weight: 6.9 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| PARAMETER | SYMBOL | KBU10A | KBU10B | KBU10D | KBU10G | KBU10J | KBU10K | KBU10M | UNITS |
|--|-------------------|--------|--------|--------|-------------|--------|--------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Bridge Input 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 Output Current at T _A =100°C | I _{AV} | | | | 10.0 | | | | A |
| Rectified Output Current at T _A =45°C | | | | | 8.0 | | | | |
| Peak Forward Surge Current single-wave superimposed on rated load (JEDEC Method) | I _{FSM} | | | | 300 | | | | A |
| Maximum Instantaneous Forward Voltage Drop per Element at 8.0A | V _F | | | | 1.1 | | | | V |
| Maximum Reverse Leakage at Rated DC Blocking Voltage per element T _A =100°C | I _R | | | | 10.0 | | | | μA |
| | | | | | 300 | | | | mA |
| Maximum Temperature Resistance JC (Note1) | R _{BJ-C} | | | | 2.5 | | | | °C/W |
| Operating and Storage Temperature Range | T _{STG} | | | | -55 to +150 | | | | °C |



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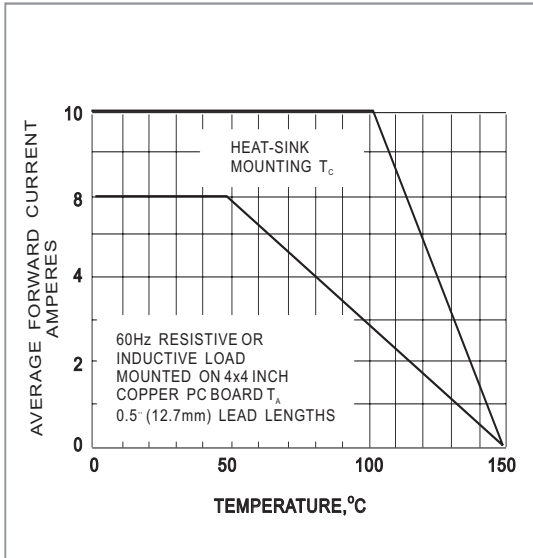


FIG. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

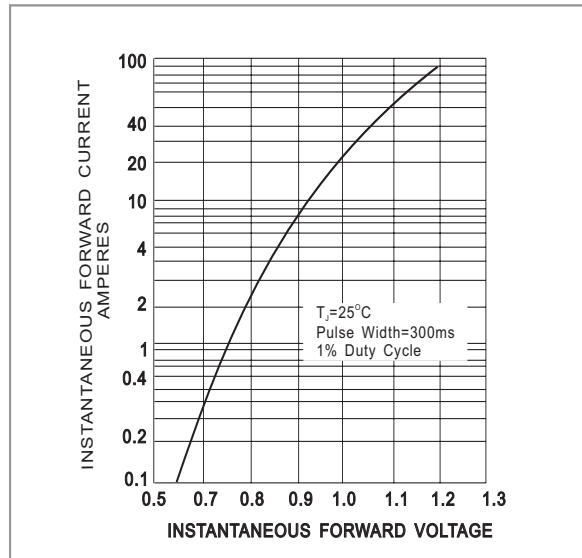


FIG. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

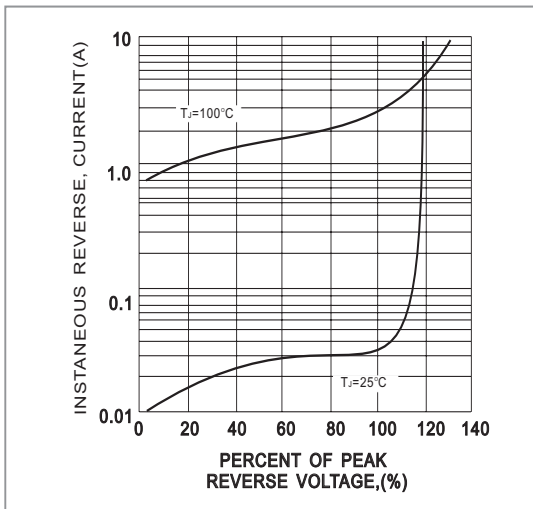


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

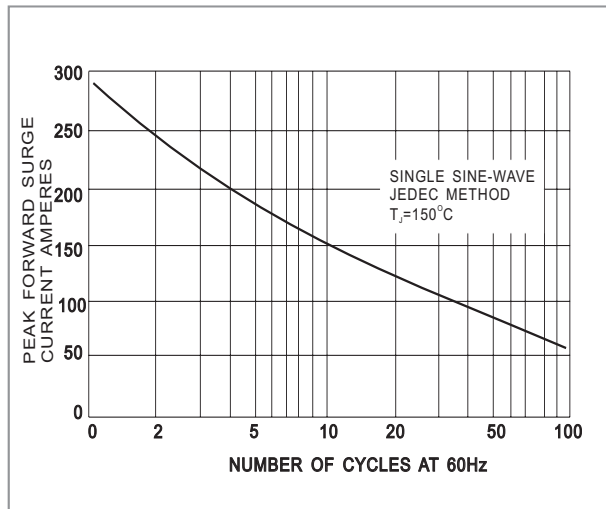


FIG. 4- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

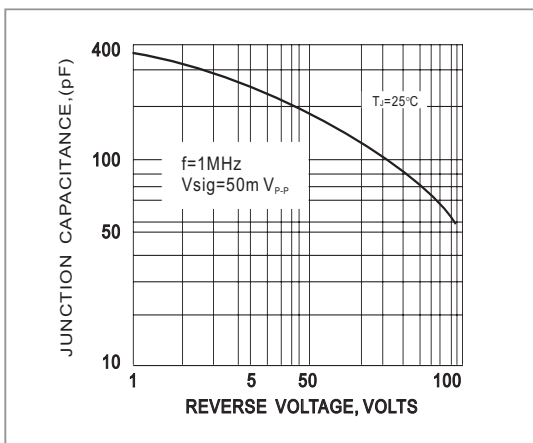


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER ELEMENT