

SINGLE-PHASE SILICON BRIDGE RECTIFIER

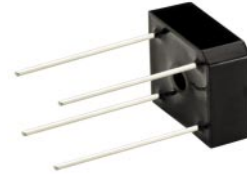
VOLTAGE RANGE 50 to 100 Volts CURRENT 8.0 Amperes

FEATURES

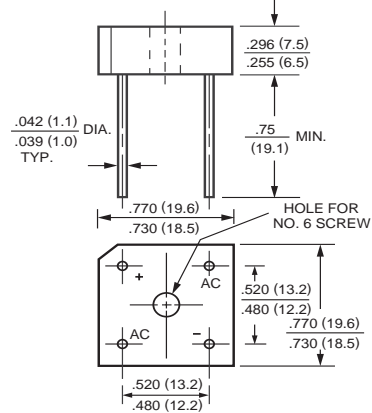
- * Surge overload rating: 125 amperes peak
- * Low forward voltage drop
- * Mounting position: Any
- * Mounting: Hole thru for # 6 screw

MECHANICAL DATA

- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-0



BR-8



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

| RATINGS | SYMBOL | BR805 | BR81 | BR82 | BR84 | BR86 | BR88 | BR810 | UNITS | |
|--|--------|-------|------|------|------|--------------|------|-------|-------|------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts | |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts | |
| Maximum DC Blocking Voltage | Vdc | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts | |
| Maximum Average Forward Tc = 50°C Rectified Output Current at: Tc = 100°C TA = 50°C | Io | 8.0 | | | | | | | Amps | |
| | | 6.0 | | | | | | | | |
| | | 6.0 | | | | | | | | |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | | | | | 125 | | | | Amps |
| Typical Thermal Resistance from junction to case | R θ JC | | | | | 7 | | | | °C/W |
| Typical Thermal Resistance from junction to ambient | R θ JA | | | | | 28 | | | | |
| Operating Temperature Range | TJ | | | | | -55 to + 150 | | | | °C |
| Storage Temperature Range | TSTG | | | | | -55 to + 150 | | | | °C |

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | BR805 | BR81 | BR82 | BR84 | BR86 | BR88 | BR810 | UNITS | |
|---|--------|-------|------|------|------|------|------|-------|-------|-------|
| Maximum Forward Voltage Drop per element at 4.0A DC | VF | | | | | 1.1 | | | | Volts |
| Maximum Reverse Current at Rated | IR | | | | | 5.0 | | | | uAmps |
| DC Blocking Voltage per element | | | | | | 0.2 | | | | mAmps |

Note: "Fully ROHS compliant", "100% Sn plating (Pb-free)".

RATING AND CHARACTERISTIC CURVES (BR805 THRU BR810)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

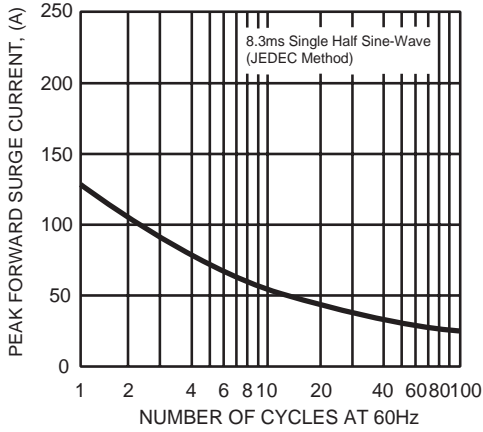


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

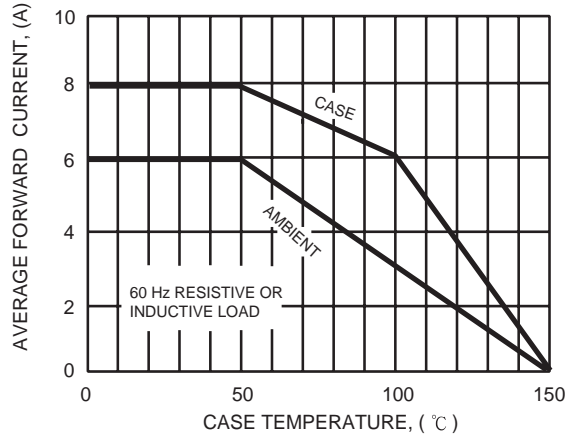


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

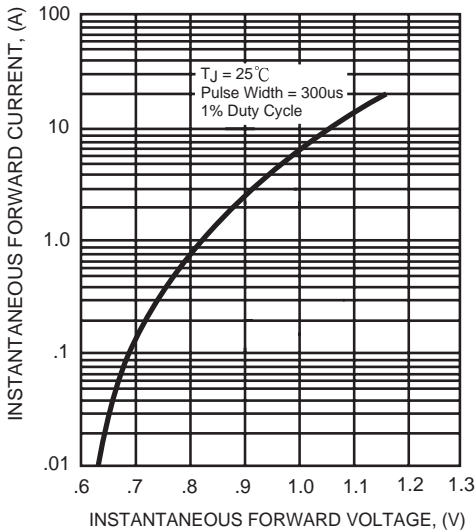


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

