

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**

VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Amperes

FEATURES

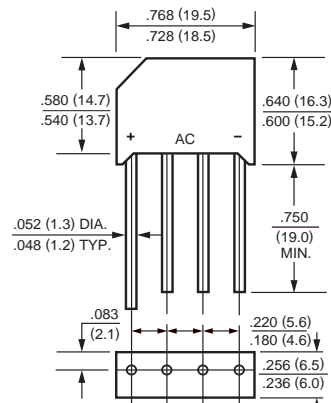
- * Ideal for printed circuit board
- * Surge overload rating: 200 amperes peak
- * Mounting position: Any
- * Weight: 4.8 grams

MECHANICAL DATA

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



RS-4L



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 | MDA970G1 | MDA970G2 | MDA970G3 | MDA970G5 | MDA970G6 | MDA970G8 | MDA970G10 | UNITS |
|---|--------|--------------|----------|----------|----------|----------|----------|-----------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Bridge Input 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 Output Current at TA = 50°C | Io | 4.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 200 | | | | | | | Amps |
| Typical Thermal Resistance from junction to case | RθJC | 10 | | | | | | | °C/W |
| Typical Thermal Resistance from junction to ambient | RθJA | 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 | MDA970G1 | MDA970G2 | MDA970G3 | MDA970G5 | MDA970G6 | MDA970G8 | MDA970G10 | UNITS | |
|---|--------|----------|----------|----------|----------|----------|----------|-----------|--------------|-------|
| Maximum Forward Voltage Drop per Bridge Element at 6.28A DC | VF | 1.1 | | | | | | | Volts | |
| Maximum Reverse Current at Rated | IR | 5.0 | | | | | | | @ TA = 25°C | uAmps |
| DC Blocking Voltage per element | | | | | | | | | @ TA = 100°C | 1 |

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

RATING AND CHARACTERISTIC CURVES (MDA970G1 THRU MDA970G10)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

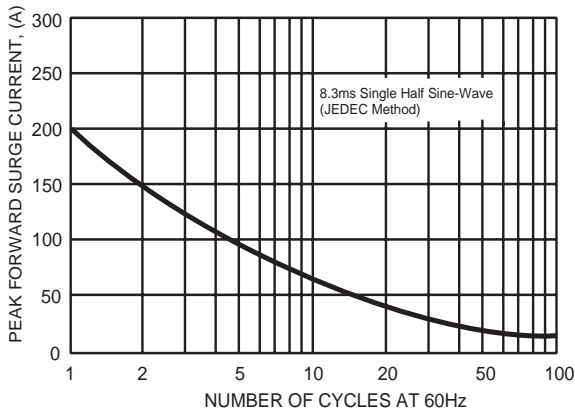


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

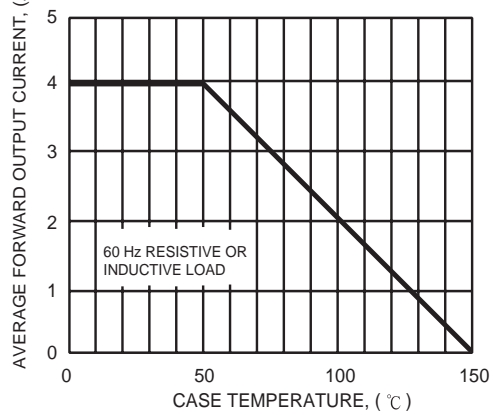


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

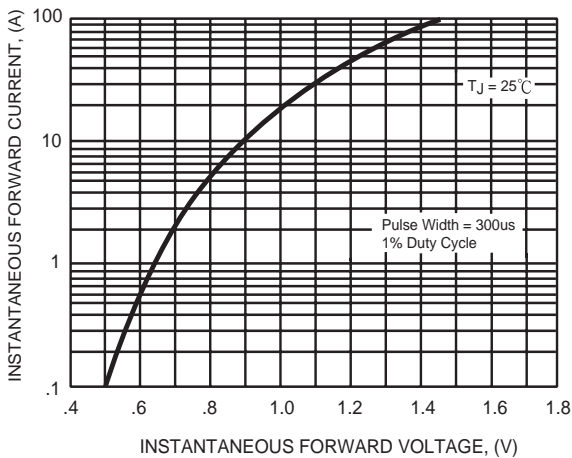


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

