

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Amperes

**FEATURES**

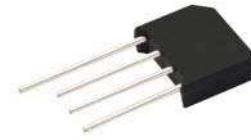
- \* Ideal for printed circuit board
- \* Surge overload rating: 150 amperes peak
- \* Mounting position: Any
- \* Weight: 4.8 grams

**MECHANICAL DATA**

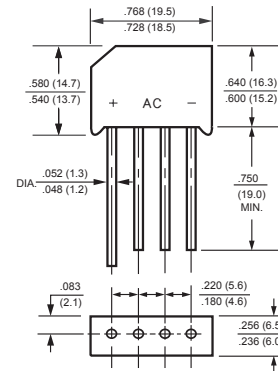
- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-0

**DISCONTINUED-**

"This series is replaced by the RS40XL series that meets to the same fit and function parameters.  
The RS40XL series is preferred for PCB assembly.



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 (@ TA=25 °C unless otherwise noted)**

| RATINGS   | SYMBOL                            | MDA970G1     | MDA970G2 | MDA970G3 | MDA970G5 | MDA970G6 | MDA970G8 | MDA970G10 | UNITS |
|---|-----------------------------------|--------------|----------|----------|----------|----------|----------|-----------|-------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>                  | 50           | 100      | 200      | 400      | 600      | 800      | 1000      | Volts |
| Maximum RMS Voltage   | V <sub>RMS</sub>                  | 35           | 70       | 140      | 280      | 420      | 560      | 700       | Volts |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>                   | 50           | 100      | 200      | 400      | 600      | 800      | 1000      | Volts |
| Maximum Average Forward Rectified Current at T <sub>A</sub> = 50 °C                               | I <sub>O</sub>                    | 4.0          |          |          |          |          |          |           | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I <sub>FSM</sub>                  | 150          |          |          |          |          |          |           | Amps  |
| Typical Thermal Resistance (Note 1)   | R <sub>θJC</sub>                  | 10           |          |          |          |          |          |           | °C/W  |
|   | R <sub>θJA</sub>                  | 28           |          |          |          |          |          |           |       |
| Typical Junction Capacitance (Note 3)   | C <sub>J</sub>                    | 40           |          |          |          |          |          |           | pF    |
| Operating and Storage Temperature Range   | T <sub>J</sub> , T <sub>STG</sub> | -55 to + 150 |          |          |          |          |          |           | °C    |

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

| CHARACTERISTICS   | SYMBOL                    | MDA970G1 | MDA970G2 | MDA970G3 | MDA970G5 | MDA970G6 | MDA970G8 | MDA970G10 | UNITS |
|---|---------------------------|----------|----------|----------|----------|----------|----------|-----------|-------|
| Maximum Instantaneous Forward Voltage at 6.28A DC       | V <sub>F</sub>            | 1.1      |          |          |          |          |          |           | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @ T <sub>A</sub> = 25 °C  | 5.0      |          |          |          |          |          |           | μAmps |
|   | @ T <sub>A</sub> = 100 °C | 100      |          |          |          |          |          |           |       |

- NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.  
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".  
3. Measured at 1MHz and applied reverse voltage of 4.0 volts.