

# SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

**RS101  
THRU  
RS107**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere**

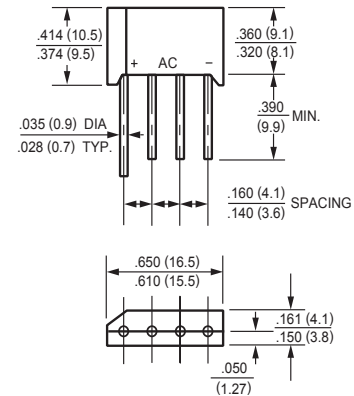
## FEATURES

- \* Low cost
- \* Low leakage
- \* Low forward voltage
- \* Mounting position: Any
- \* Weight: 1.26 grams

## MECHANICAL DATA

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

**RS-1**



## 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%.

Dimensions in inches and (millimeters)

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

| RATINGS  | SYMBOL | RS101        | RS102 | RS103 | RS104 | RS105 | RS106 | RS107 | 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     | 1.0          |       |       |       |       |       |       | Amps  |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM   | 30           |       |       |       |       |       |       | Amps  |
| Operating Temperature Range  | TJ     | -55 to + 125 |       |       |       |       |       |       | °C    |
| Storage Temperature Range  | TSTG   | -55 to + 150 |       |       |       |       |       |       | °C    |

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

| CHARACTERISTICS  | SYMBOL | RS101 | RS102 | RS203 | RS204 | RS205 | RS206 | RS207 | UNITS |
|--|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Forward Voltage Drop per Bridge Element at 1.0A DC       | VF     | 1.0   |       |       |       |       |       |       | Volts |
| Maximum Reverse Current at Rated DC Blocking Voltage per element | IR     | 10    |       |       |       |       |       |       | uAmps |
|  |        | 1     |       |       |       |       |       |       | mAmps |

## RATING AND CHARACTERISTIC CURVES ( RS101 THRU RS107 )

FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

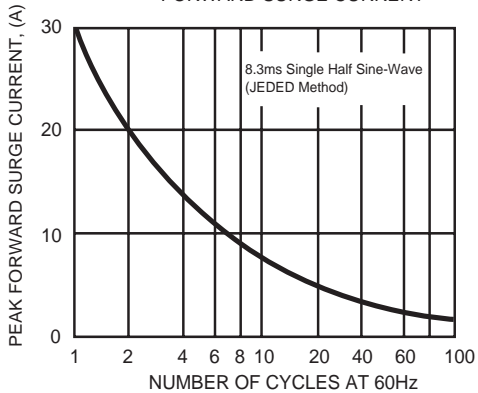


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

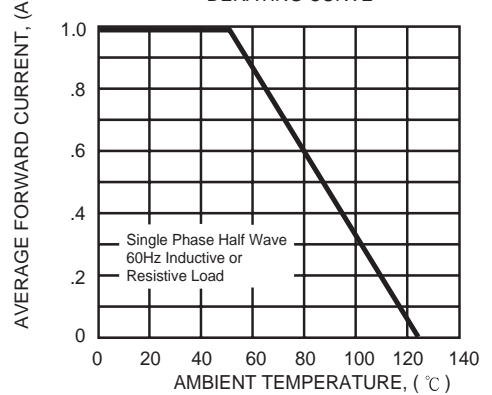


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

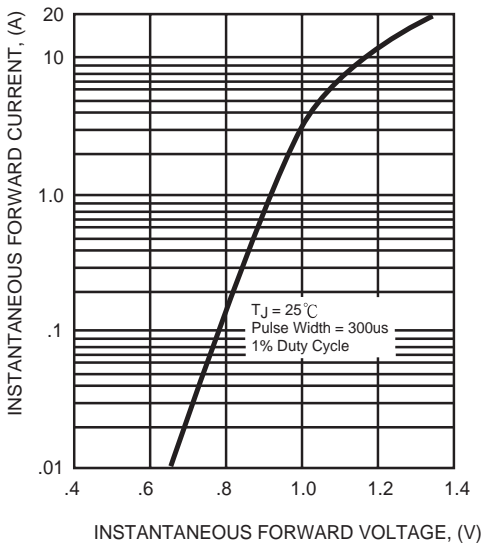


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

