



SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Ampere

FEATURES

- * Ideal for printed circuit board
- * Surge overload rating: 200 amperes peak
- * Mounting position: Any
- * Weight: 5.15 grams
- * Molded structure
- * RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"

MECHANICAL DATA

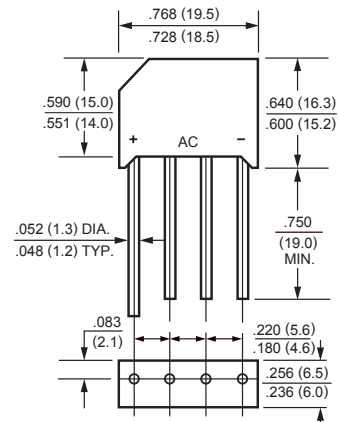
- * UL listed the recognized component directory, file #E195711
- * Epoxy: Device has UL flammability classification 94V-0

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%.



RS-4L



Dimensions in inches and (millimeters)

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

| RATINGS | SYMBOL | RS401L | RS402L | RS403L | RS404L | RS405L | RS406L | RS407L | 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 TA = 75°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 |
| Operating Temperature Range | TJ | -55 to + 150 | | | | | | | °C |
| Storage Temperature Range | TSTG | -55 to + 150 | | | | | | | °C |
| Typical Junction Capacitance (Note) | CJ | 40 | | | | | | | pF |

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

| CHARACTERISTICS | SYMBOL | RS401L | RS402L | RS403L | RS404L | RS405L | RS406L | RS407L | UNITS |
|--|--------|--------|--------|--------|--------|--------|--------|--------|-------------|
| Maximum Forward Voltage Drop per Bridge Element at 4.0A DC | VF | 1.1 | | | | | | | Volts |
| Maximum Reverse Current at Rated Dc Blocking Voltage per element | IR | 5 | | | | | | | uAmps |
| | | | | | | | | | @TA = 100°C |

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts



RATING AND CHARACTERISTIC CURVES (RS401L THRU RS407L)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

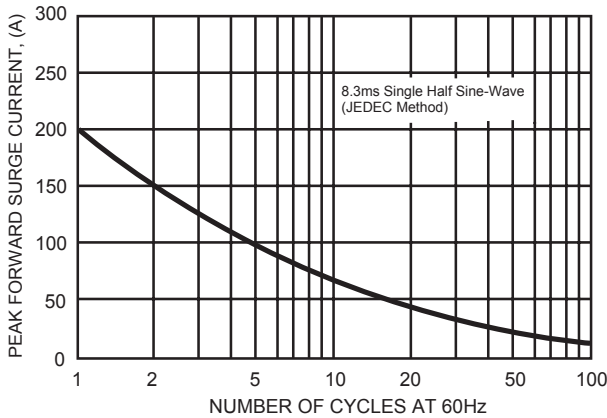


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

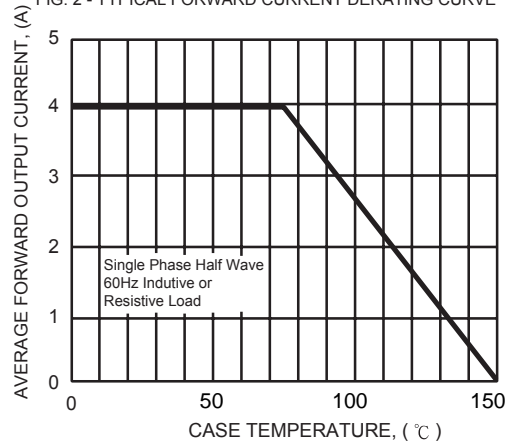


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

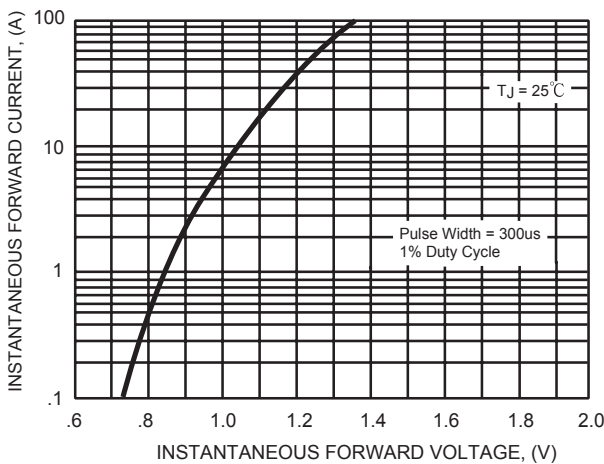


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

