

**SINGLE-PHASE SILICON BRIDGE RECTIFIER**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 20 Amperes**

**FEATURES**

- \* Low leakage
- \* Low forward voltage
- \* Mounting position: Any
- \* Surge overload rating: 300 amperes peak
- \* Ideal for printed circuit boards
- \* High forward surge current capability

**MECHANICAL DATA**

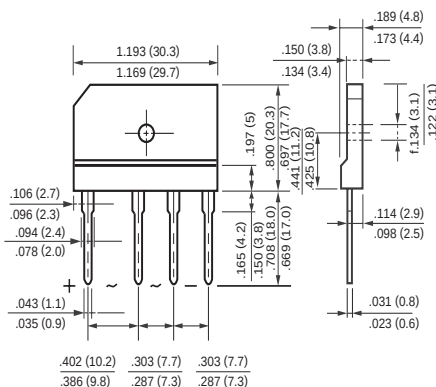
- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-O

**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-20M**



**MAXIMUM RATINGS** (At  $T_A = 25^\circ\text{C}$  unless otherwise noted)

| RATINGS                                                                                     | SYMBOL         | RS2001M      | RS2002M | RS2003M | RS2004M | RS2005M | RS2006M | RS2007M | UNITS            |
|---------------------------------------------------------------------------------------------|----------------|--------------|---------|---------|---------|---------|---------|---------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                                      | $V_{RRM}$      | 50           | 100     | 200     | 400     | 600     | 800     | 1000    | Volts            |
| Maximum RMS Bridge Input Voltage                                                            | $V_{RMS}$      | 35           | 70      | 140     | 280     | 420     | 560     | 700     | Volts            |
| Maximum DC Blocking Voltage                                                                 | $V_{DC}$       | 50           | 100     | 200     | 400     | 600     | 800     | 1000    | Volts            |
| Maximum Average Forward Rectified Output Current at $T_c = 100^\circ\text{C}$ with heatsink | $I_o$          | 20           |         |         |         |         |         |         | Amps             |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load          | $I_{FSM}$      | 300          |         |         |         |         |         |         | Amps             |
| Operating and Storage Temperature Range                                                     | $T_J, T_{STG}$ | -55 to + 150 |         |         |         |         |         |         | $^\circ\text{C}$ |

**ELECTRICAL CHARACTERISTICS** (At  $T_A = 25^\circ\text{C}$  unless otherwise noted)

| CHARACTERISTICS                                    | SYMBOL | RS2001M | RS2002M | RS2003M | RS2004M | RS2005M | RS2006M | RS2007M | UNITS            |
|----------------------------------------------------|--------|---------|---------|---------|---------|---------|---------|---------|------------------|
| Maximum Forward Voltage Drop per element at 10A DC | $V_F$  | 1.1     |         |         |         |         |         |         | Volts            |
| Maximum Reverse Current at Rated                   | $I_R$  | 10      |         |         |         |         |         |         | $\mu\text{Amps}$ |
| DC Blocking Voltage per element                    |        | 0.2     |         |         |         |         |         |         | mAmps            |

# RATING AND CHARACTERISTIC CURVES (RS2001M THRU RS2007M)

