



## RS20005M thru RS2010M

**SINGLE-PHASE SILICON BRIDGE RECTIFIER**  
**VOLTAGE RANGE 50 to 1000 Volts CURRENT 20 Amperes**



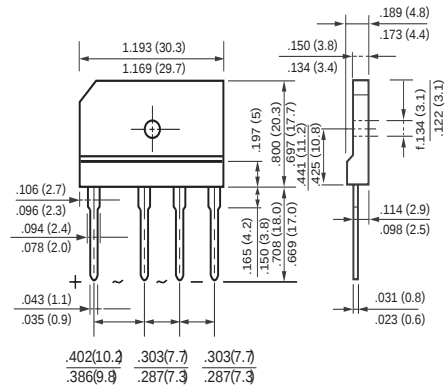
**RS-20M**

### 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

- \* Epoxy: Device has UL flammability classification 94V-O



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 $T_A = 25^{\circ}\text{C}$ unless otherwise noted)

| RATINGS                                                                                       | SYMBOL  | RS20005      | RS2001M | RS2002M | RS2004M | RS2006M | RS2008M | RS2010M | 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 Rectified Output Current at $T_c = 100^{\circ}\text{C}$ with heatsink | IO      | 20           |         |         |         |         |         |         | Amps               |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load            | IFSM    | 300          |         |         |         |         |         |         | Amps               |
| Operating and Storage Temperature Range                                                       | TJ,TSTG | -55 to + 150 |         |         |         |         |         |         | $^{\circ}\text{C}$ |

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

| CHARACTERISTICS                                    | SYMBOL | RS2000M | RS2001M | RS2002M | RS2004M | RS2005M | RS2008M | RS2010M | UNITS            |
|----------------------------------------------------|--------|---------|---------|---------|---------|---------|---------|---------|------------------|
| Maximum Forward Voltage Drop per element at 10A DC | VF     | 1.1     |         |         |         |         |         |         | Volts            |
| Maximum Reverse Current at Rated                   | IR     | 10      |         |         |         |         |         |         | $\mu\text{Amps}$ |
| DC Blocking Voltage per element                    |        | 0.2     |         |         |         |         |         |         | mAmps            |

### RATING AND CHARACTERISTIC CURVES (RS2001M THRU RS2007M)

