W005M THRU W10M

# SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

### **VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.5 Amperes**

#### **FEATURES**

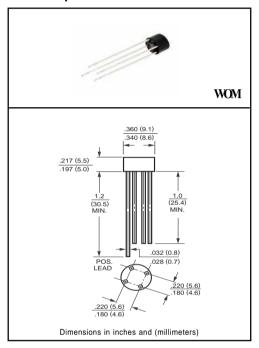
- \* High reverse voltage to 1000V
- \* Surge overload ratings to 50 amperes peak
- \* Good for printed circuit board assembly
- \* Mounting position: Any
- \* Weight: 1.20 grams

#### **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%.



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

| RATINGS                                                                                           | SYMBOL | W005M        | W01M | W02M | W04M | W06M | W80W | W10M | 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 TA = 25°C                                     | lo     | 1.5          |      |      |      |      |      |      | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM   | 50           |      |      |      |      |      |      | Amps  |
| Operating Temperature Range                                                                       | TJ     | -55 to + 150 |      |      |      |      |      |      | ٥C    |
| Storage Temperature Range                                                                         | Тѕтс   | -55 to + 150 |      |      |      |      |      |      | ٥C    |

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

| CHARACTERISTICS                                     |             | SYMBOL | W005M | W01M | W02M | W04M | W06M | W80W | W10M | UNITS |
|-----------------------------------------------------|-------------|--------|-------|------|------|------|------|------|------|-------|
| Maximum Forward Voltage Drop per element at 1.0A DC |             | VF     | 1.0   |      |      |      |      |      |      | Volts |
| Maximum Reverse Current at Rated                    | @Ta = 25°C  | - Ir   | 5.0   |      |      |      |      |      |      | uAmps |
| DC Blocking Voltage per element                     | @TA = 100°C |        | 1     |      |      |      |      |      |      | mAmps |

## RATING AND CHARACTERISTIC CURVES ( W005M THRU W10M )

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT 50 PEAK FORWARD SURGE CURRENT, (A) 8.3ms Single Half Sine-Wave 40 (JEDED Method) 30 20 10 0 2 6 8 1 0 20 40 60 NUMBER OF CYCLES AT 60Hz

