# W005M THRU W10M

## SINGLE-PHASE SILICON BRIDGE RECTIFIER

**康比電子**
HORNBY ELECTRONIC

*REVERSE VOLTAGE:* **50 to 1000 VOLTS**

*FORWARD CURRENT:* **1.5 AMPERE**

### FEATURES

· Surge overload rating: 40 amperes peak

· Ideal for printed circuit board

· Reliable low cost construction utilizing molded
  plastic technique

· High temperature soldering guaranteed: 250℃/
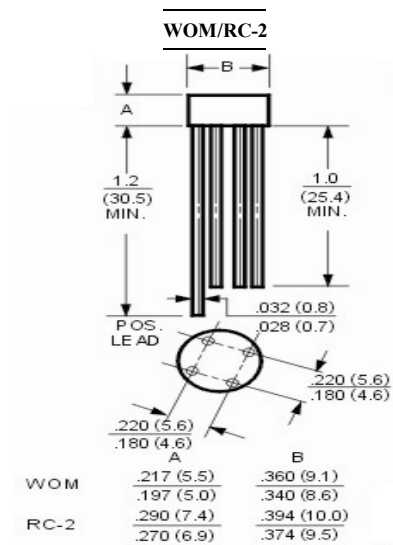  10SEC/ 9.5mm lead length at 2.3kg tension

### MECHANICAL DATA

Case: Reliable low cost construction utilizing molded

plastic technique results in inexpensive product

Terminals: Leads solderable per MIL-STD-202,

method 208 guaranteed

Mounting position: Any

Weight: 0.05ounce, 1.3gram



**WOM/RC-2**

**Dimensions in inches and (millimeters)**

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## Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60H$_Z$, resistive or inductive load.

For capacitive load, derate current by 20%.

| | Symbols | W005M | W01M | W02M | W04M | W06M | W08M | W10M | Units |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS 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 Current .375"(9.5mm) Lead Length at $T_A$=50℃ | $I_{(AV)}$ | 1.5 | | | | | | | Amp |
| Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method) | $I_{FSM}$ | 40 | | | | | | | Amp |
| Maximum Forward Voltage at 1.5A DC and 25℃ | $V_F$ | 1.0 | | | | | | | Volts |
| Maximum Reverse Current at $T_A$=25℃ at Rated DC Blocking Voltage $T_A$=100℃ | $I_R$ | 5.0 500 | | | | | | | uAmp |
| Typical Junction Capacitance (Note 1) | $C_J$ | 24 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{0JA}$ | 36 | | | | | | | ℃/W |
| Typical Thermal Resistance (Note 2) | $R_{0JL}$ | 13 | | | | | | | ℃/W |
| Operating and Storage Temperature Range | $T_J$，Tstg | -55 to +150 | | | | | | | ℃ |

**NOTES:**

1- Measured at 1 MH$_Z$ and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.

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## *RATINGS AND CHARACTERISTIC CURVES*

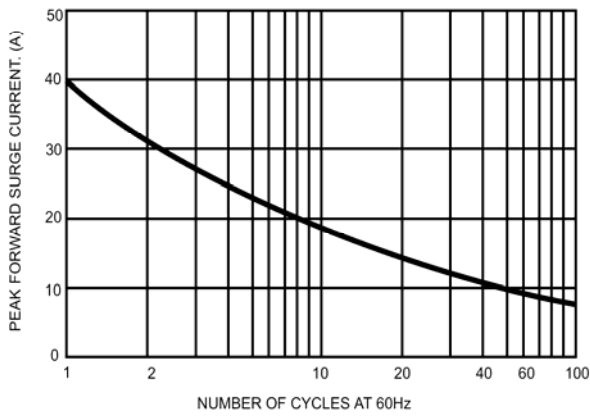FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

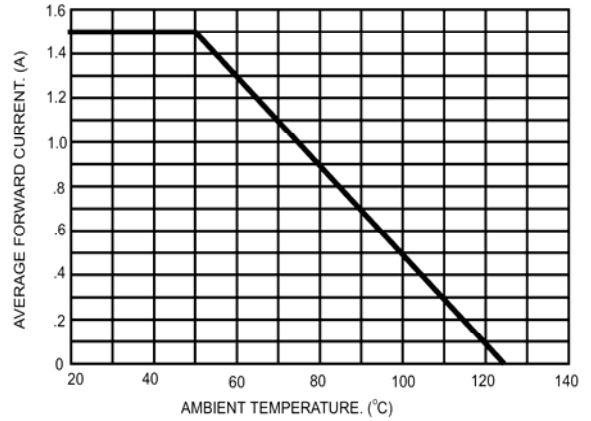FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

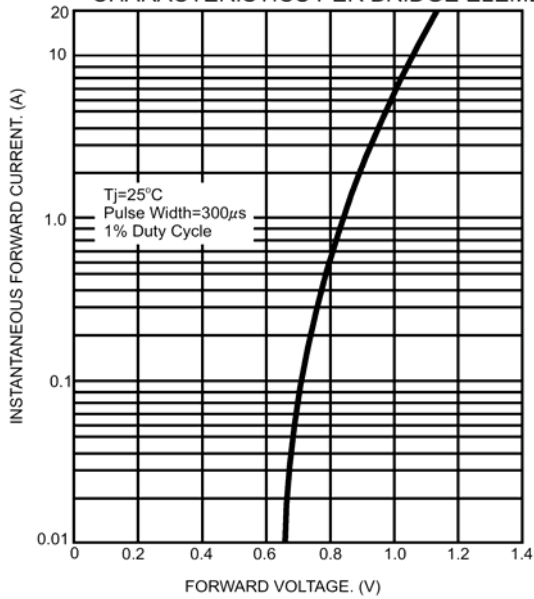FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT