

VI. Bridge Rectifier

**1.5A Silicon Bridge Rectifier
W-005M~W-10M**

(Package: WOM)

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| <p><u>FEATURES</u></p> <ul style="list-style-type: none"> • The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 • Ideal for printed circuit boards • Low reverse leakage • High forward surge current capability • High temperature soldering guaranteed : 235 /10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3 kg) tension <p><u>MECHANICAL DATA</u></p> <ul style="list-style-type: none"> • Case : Molded plastic body • Terminals : Plated leads solderable per MIL-STD-750, Method 2026 • Polarity : Polarity symbols marked on case • Mounting Position : Any • Weight : 0.042 ounce, 1.2 grams | <p>Case: WOM Dimensions in inches and (millimeters)</p> |
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Ratings & Electrical Characteristics

Ratings at 25 ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Characteristics | Symbol | W-005M | W-01M | W-02M | W-04M | W-06M | W-08M | W-10M | Units |
|---|-------------|-------------|-------|-------|-------|-------|-------|-------|---------|
| Maximum repetitive 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 output rectified current at $T_a = 25$ (Note 2) | I_o | 1.5 | | | | | | | Amps |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 50.0 | | | | | | | Amps |
| Rating for Fusing ($t < 8.3ms$) | I^2t | 10 | | | | | | | A^2s |
| Maximum instantaneous forward voltage drop per bridge element at 1.5A | V_F | 1.0 | | | | | | | Volts |
| Maximum DC reverse current $T_a=25$ at rated DC blocking voltage $T_a=100$ | I_R | 10 | | | | | | | μA |
| | | 0.5 | | | | | | | mA |
| Typical junction capacitance (Note 1) | C_j | 15 | | | | | | | PF |
| Typical thermal resistance | R_{th-JA} | 40 | | | | | | | / W |
| Operating junction temperature range | T_j | -55 to +125 | | | | | | | |
| Storage temperature range | T_{stg} | -55 to +150 | | | | | | | |

Note :
1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts
2. Unit mounted on P.C. board with 0.22" x 0.22" (5.5 x 5.5mm) copper pads, 0.375" (9.5mm) lead length

Ratings and Characteristic Curves of W-005M~W-10M

