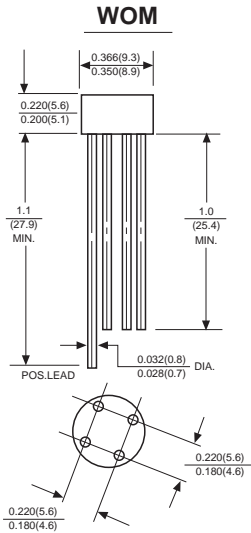


W005M THRU W10M

SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.5 Amperes



Dimensions in inches and (millimeters)

FEATURES

- ◆ 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:
260°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| | SYMBOLS | W005M | W01M | W02M | W04M | W06M | W08M | W10M | 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 $T_A=25^\circ\text{C}$ (Note 2) | $I_{(AV)}$ | 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 ($t < 8.3\text{ms}$) | I^2t | 10 | | | | | | | A^2s |
| Maximum instantaneous forward voltage drop per bridge element at 1.0A | V_F | 1.0 | | | | | | | Volts |
| Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$ | I_R | 10 | | | | | | | μA |
| | | 0.5 | | | | | | | mA |
| Typical Junction Capacitance (Note 1) | C_J | 15 | | | | | | | pF |
| Typical Thermal Resistance | R_{qJA} | 40 | | | | | | | $^\circ\text{C/W}$ |
| Operating junction temperature range | T_J | -55 to +125 | | | | | | | $^\circ\text{C}$ |
| storage temperature range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

2. Unit mounted on P.C. board with 0.22" x 0.22" (5.5x5.5mm) copper pads, 0.375" (9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES W005M THRU W10M

