



SILICON BRIDGE RECTIFIERS

Features

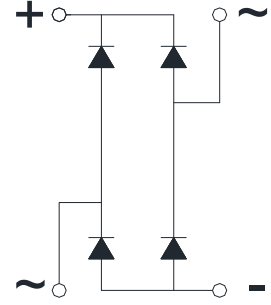
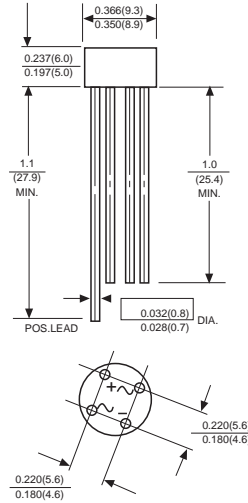
- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Ideal for printed circuit boards
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 260°C/10 seconds, 5 lbs. (2.3kg) tension

WOM

ROHS COMPLIANT

Mechanical Data

Case : JEDEC WOM Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.05 ounce, 1.42 grams



Dimensions in inches and (millimeters)

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%.

| Parameter | SYMBOLS | MDD | MDD | MDD | MDD | MDD | MDD | MDD | UNITS |
|--|-------------------|-------------|------|------|------|------|------|------|------------------|
| | | 2W005 | 2W01 | 2W02 | 2W04 | 2W06 | 2W08 | 2W10 | |
| Marking Code | | | | | | | | | |
| Maximum repetitive peak reverse voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V _{RMS} | 30 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward output rectified current at T _c =55°C (Note 1) | I _(AV) | 2.0 | | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 50 | | | | | | | A |
| Rating for Fusing (t<8.3ms) | I ² t | 10 | | | | | | | A ² s |
| Maximum instantaneous forward voltage drop per bridge element at 7.5A | V _F | 1.0 | | | | | | | V |
| Maximum DC reverse current at rated DC blocking voltage | I _R | 10 | | | | | | | μA |
| | | 0.5 | | | | | | | mA |
| Typical Thermal Capacitance | C _J | 15 | | | | | | | PF |
| Typical Thermal Resistance (Note 2) | R _{θJA} | 40 | | | | | | | °C/W |
| Operating junction temperature range | T _J | -55 to +125 | | | | | | | °C |
| storage temperature range | T _{STG} | -55 to +150 | | | | | | | °C |

NOTES:

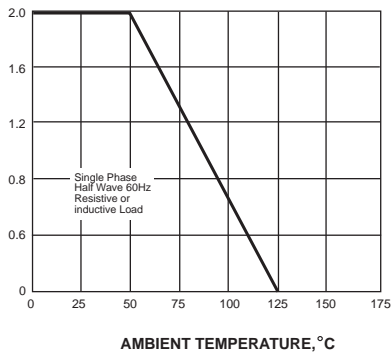
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P.C. board with 0.22" x 0.22" (5.5x5.5mm) copper pads, 0.375" (9.5mm) lead length.



Ratings And Characteristic Curves

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

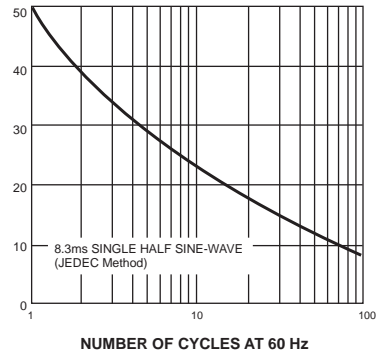
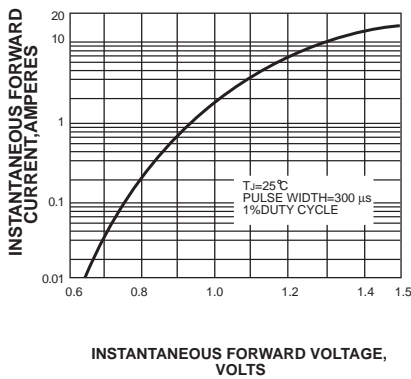


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

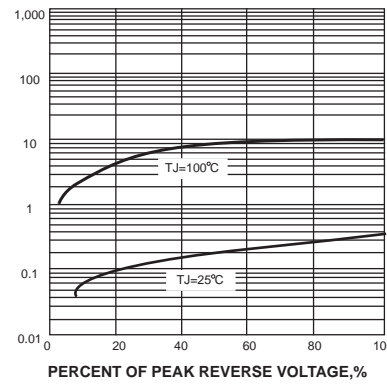
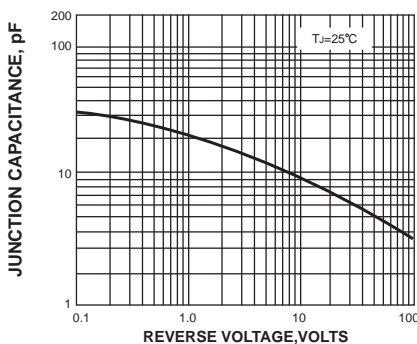
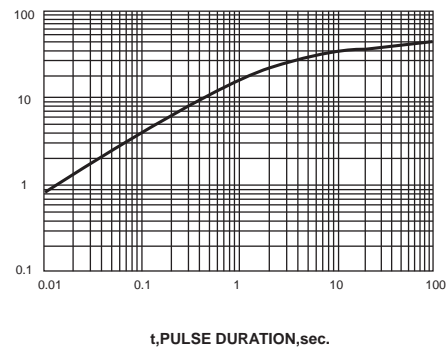


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.