

W005M - W10M

Single Phase 1.5 AMPS. Silicon Bridge Rectifiers

WOB

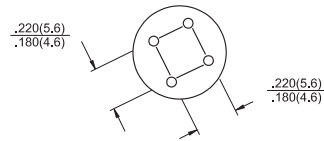
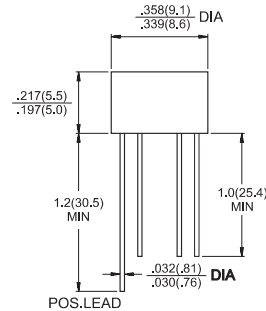


Features

- ✧ UL Recognized File # E-96005
- ✧ Surge overload ratings to 40 amperes peak
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction technique results in inexpensive product
- ✧ High temperature soldering guaranteed:
260 °C / 10 seconds / 0.375" (9.5mm)
lead length at 5 lbs. (2.3 Kg) tension

Mechanical Data

- ✧ Case: Molded plastic
- ✧ Lead: Solder plated
- ✧ Polarity: As marked
- ✧ Weight: 1.10 grams



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating 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%

| Type Number | Symbol | W005M | W01M | W02M | W04M | W06M | W08M | W10M | Units |
|--|------------------------------------|-------------|------|------|------|------|------|------|--------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @ $T_A = 50^\circ\text{C}$ | $I_{(AV)}$ | 1.5 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 40 | | | | | | | A |
| Maximum Instantaneous Forward Voltage @ 1.5A | V_F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$ | I_R | 10 500 | | | | | | | uA uA |
| Typical thermal Resistance (Note) | $R_{\theta JA}$ $R_{\theta JL}$ | 36 13 | | | | | | | $^\circ\text{C/W}$ |
| Operating Temperature Range | T_J | -55 to +125 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

Note: Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. at 0.375" (9.5mm) Lead Lengths with 0.4" x 0.4" (10mm x 10mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES (W005M THRU W10M)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

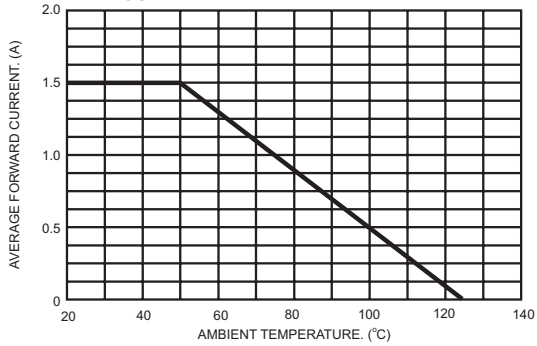


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

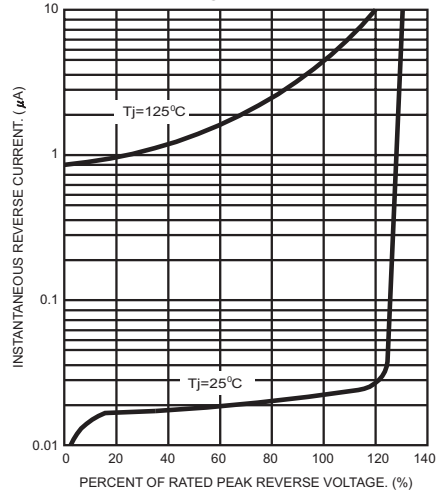


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

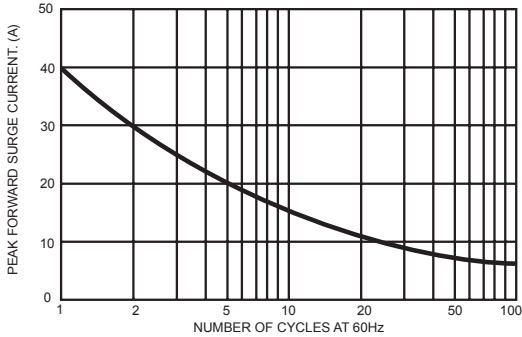


FIG.4- TYPICAL JUNCTION CAPACITANCE

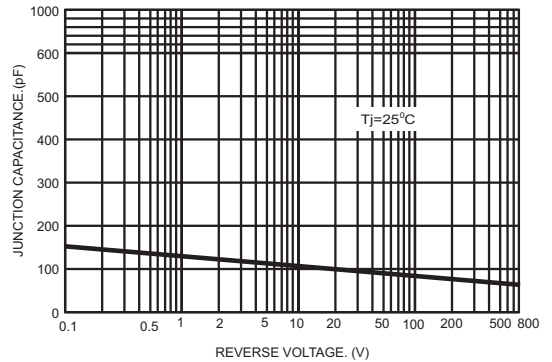


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

