

1W005M - 1W10M

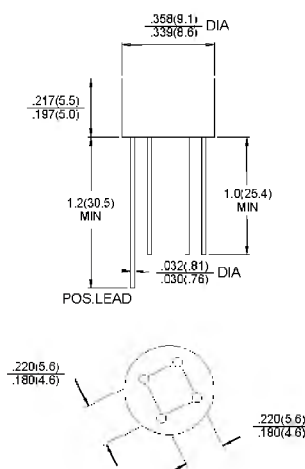
Single Phase 1.0 AMP. Silicon Bridge Rectifiers

WOB



Features

- ✧ UL Recognized File # E-96005
- ✧ Surge overload ratings to 30 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: Pure tin plated, Lead free.
- ✧ 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	1W 005M	1W 01M	1W 02M	1W 04M	1W 06M	1W 08M	1W 10M	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 °C	I _(AV)	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30							A
Maximum Instantaneous Forward Voltage @ 1.0A	V _F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _A =25 °C @ T _A =125 °C	I _R	10 500							uA uA
Typical Thermal resistance (Note)	R _{θJA} R _{θJL}	36 13							°C/W
Operating Temperature Range	T _J	-55 to +125							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

Note: Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.2" x 0.2" (5mm x 5mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES (1W005 THRU 1W10)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

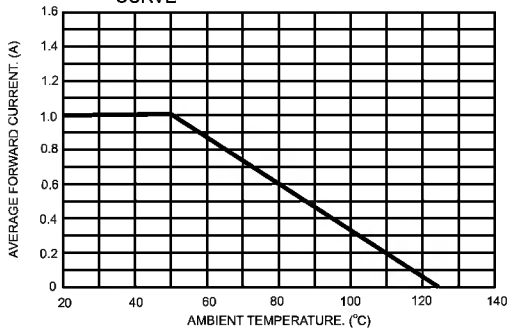


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

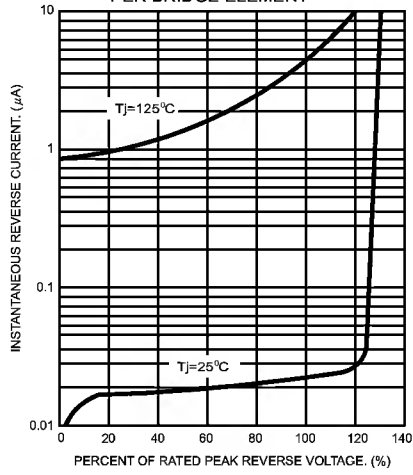


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

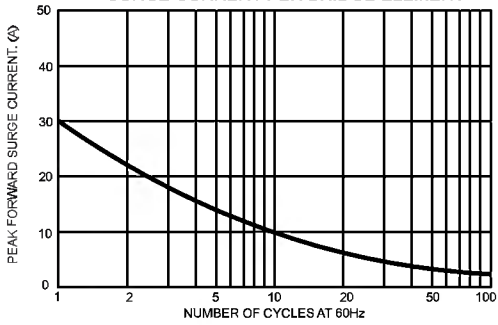


FIG.4- TYPICAL JUNCTION CAPACITANCE

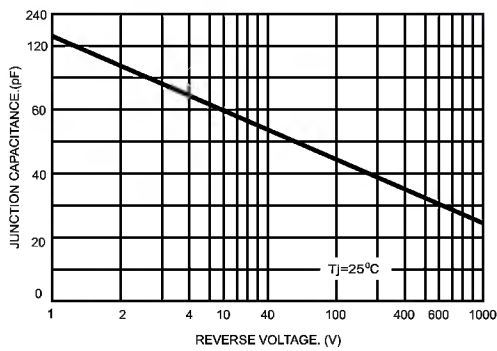


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

