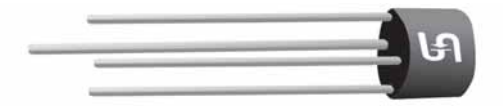
TAIWAN SEMICONDUCTOR

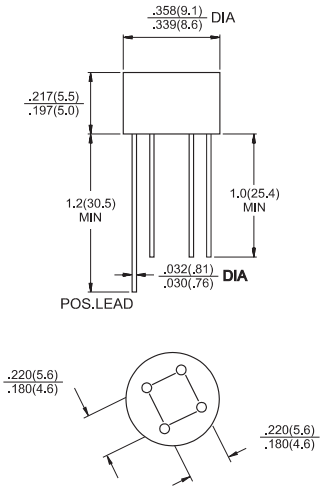
2W005M - 2W10M

Single Phase 2.0 AMPS. Silicon Bridge Rectifiers

WOB

RoHS COMPLIANCE





Dimensions in inches and (millimeters)

Features

- ✧ UL Recognized File # E-96005
- ✧ Surge overload ratings to 50 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

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	2W 005M	2W 01M	2W 02M	2W 04M	2W 06M	2W 08M	2W 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	$I_{(AV)}$	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50							A
Maximum Instantaneous Forward Voltage @ 2.0A	V_F	1.1							V
Maximum DC Reverse Current @ T_A=25 °C at Rated DC Blocking Voltage @ T_A=125 °C	I_R	10 500							uA uA
Typical Thermal resistance (Note)	$R_{\theta JA}$ $R_{\theta JL}$	40 15							°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 at 0.375" (9.5mm) Lead Length for P.C.B. Mounting.

RATINGS AND CHARACTERISTIC CURVES (2W005M THRU 2W10M)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

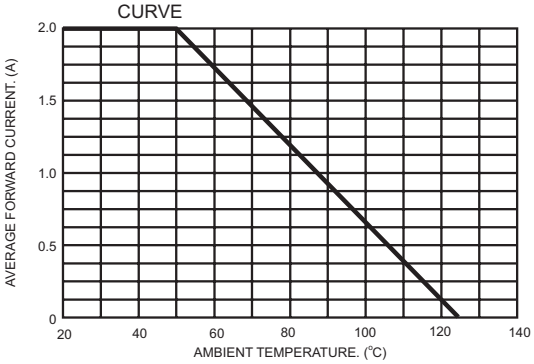


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

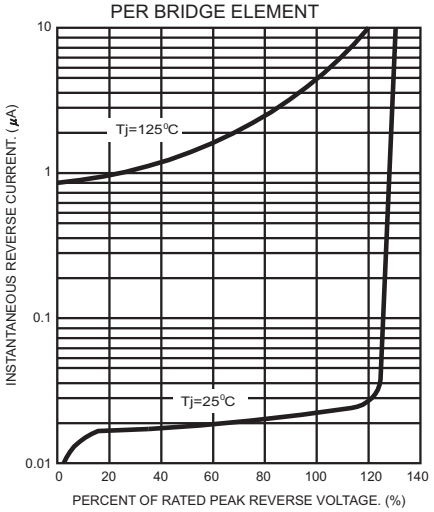


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

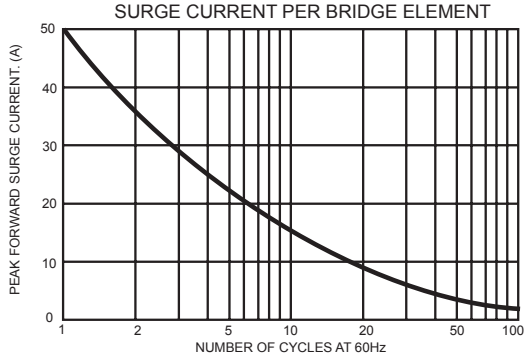


FIG.4- TYPICAL JUNCTION CAPACITANCE

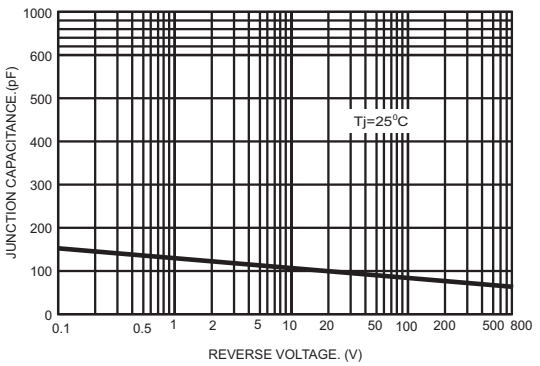


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

