TSC 9b

2W005M THRU **2W10M**

Single Phase 2.0 AMPS. Silicon Bridge Rectifiers



Voltage Range 50 to 1000 Volts Current 2.0 Amperes

WOB

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

.358(9.1) DIA .339(8.6) DIA .217(6.5) .197(5.0) 1.2(30.5) MIN POS.LEAD



Dimensions in inches and (millimeters)

Mechanical Data

Case: Molded plastic
 Lead: Solder plated
 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	2W	2W	2W	2W	2W	Units
		005M	01M	02M	04M	06M	08M	10M	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	>
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	>
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	٧
Maximum Average Forward Rectified Current $@T_A = 50^{\circ}C$	I _(AV)	2.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50							Α
Maximum Instantaneous Forward Voltage @ 2.0A	V_{F}	1.1							V
Maximum DC Reverse Current @ T _A =25℃	I _R	10						uA	
at Rated DC Blocking Voltage @ T _A =100℃					500				uA
Typical Thermal Resistance (Note)	$R\theta_{JA}$				40				℃W
	$R\theta_{JL}$				15				
Operating Temperature Range	TJ	-55 to +125							ಭ
Storage Temperature Range	T _{STG}	-55 to +150							ಭ

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 NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

40

8.3ms Single Half Sine Wave JEDEC Method

10

NUMBER OF CYCLES AT 60Hz

FIG.2- MAXIMUM CURRENT DERATING CURVE OUTPUT RECTIFIED CURRENT

2.0

RESISTIVE INDUCTIVE LOAD

1.0

40

AMBIENT TEMPERATURE. (°C)



