**TSC 9b** 

# W005GM THRU W10GM

Single Phase 1.5 AMPS. Glass Passivated Bridge Rectifiers



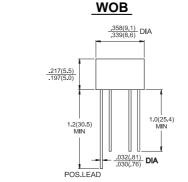
Voltage Range 50 to 1000 Volts Current 1.5 Amperes

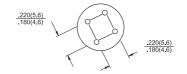
#### **Features**

- ♦ UL Recognized File # E-96005
- ♦ Glass passivated junction
- 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: 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	W 005GM	W 01GM	W 02GM	W 04GM	W 06GM	W 08GM	W 10GM	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	<b>V</b>
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 $@T_A = 50^{\circ}C$	I <sub>(AV)</sub>	1.5							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	50							Α
Maximum Instantaneous Forward Voltage @ 1.5A	$V_{F}$	1.0							>
Maximum DC Reverse Current @ T <sub>A</sub> =25°C	1-	10							uA
at Rated DC Blocking Voltage @ T <sub>A</sub> =125℃	I <sub>R</sub>	500							uA
Typical Thermal Resistance (Note)	$R\theta_{JA}$	36 13							<b>℃</b> /W
	$R heta_{JL}$								
Operating Temperature Range	TJ	-55 to +150							Ç
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							Ç

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 (W005GM THRU W10GM)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

40

40

40

40

40

40

40

40

60

100

NUMBER OF CYCLES AT 60Hz

AMBIENT TEMPERATURE. (°C)

FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

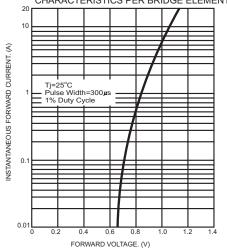


FIG.4- TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

