

# W005GM THRU W10GM

Single Phase 1.5 AMPS. Glass Passivated Bridge Rectifiers



Voltage Range 50 to 1000 Volts Current 1.5 Amperes

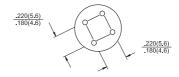
**WOB** 

.358(9.1) .339(8.6) DIA

### **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

# .217(5.5) .197(5.0) 1.2(30.5) MIN 1.0(25.4) 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	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	>
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	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							٧
Maximum DC Reverse Current @ T <sub>A</sub> =25°C	I <sub>R</sub>	10						uA	
at Rated DC Blocking Voltage @ T <sub>A</sub> =125℃					500				uA
Typical Thermal resistance (Note)	RθJA	36							<b>%C\W</b>
	RθJL				13				
Operating Temperature Range	TJ	-55 to +150							$^{\circ}\!\mathbb{C}$
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							$^{\circ}\!\mathbb{C}$

Note: Thermal resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.47 x 0.47" (12 x 12mm) Copper Pads.



#### RATINGS AND CHARACTERISTIC CURVES (W005GM THRU W10GM)

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

50

30

20

10

2

NUMBER OF CYCLES AT 60Hz

FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

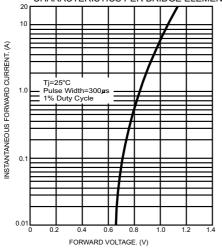


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

