



# 1W005GM THRU 1W10GM

Single Phase 1.0 AMP. Glass Passivated Bridge Rectifiers



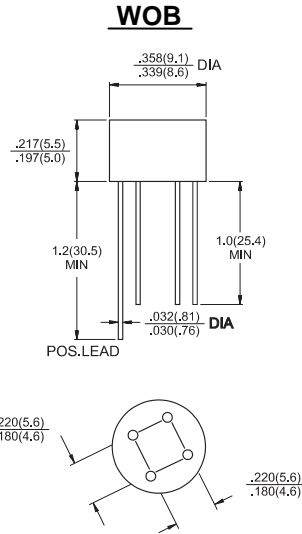
Voltage Range  
50 to 1000 Volts  
Current  
1.0 Ampere

## Features

- ✧ UL Recognized File # E-96005
- ✧ Glass passivated junction
- ✧ 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

- ✧ Cases: 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	1W	1W	1W	1W	1W	1W	1W	Units
		005GM	01GM	02GM	04GM	06GM	08GM	10GM	
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 @ $T_A = 50^\circ\text{C}$	$I_{(AV)}$	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 @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$ $\mu\text{A}$
Typical Thermal Resistance (Note)	$R\theta_{JA}$ $R\theta_{JL}$	36 13							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

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 (1W005GM THRU 1W10GM)

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

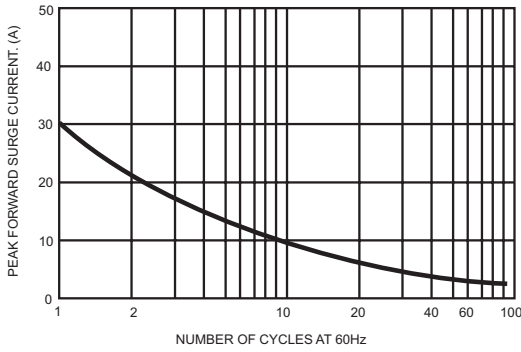


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

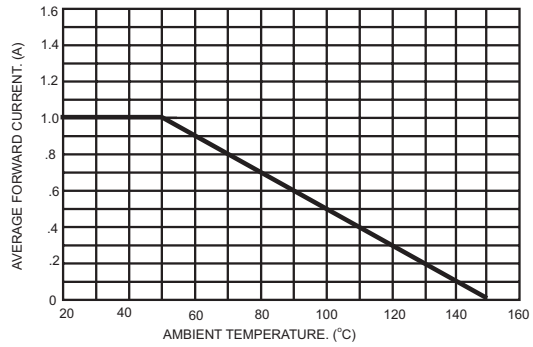


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

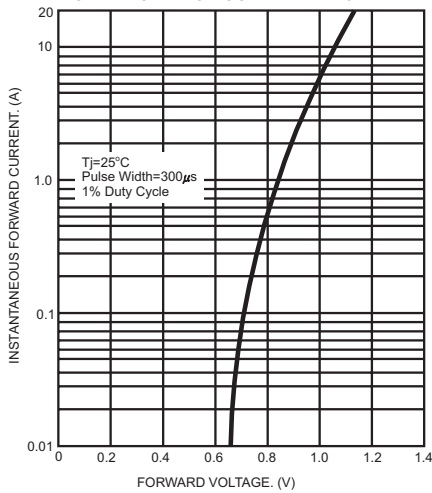
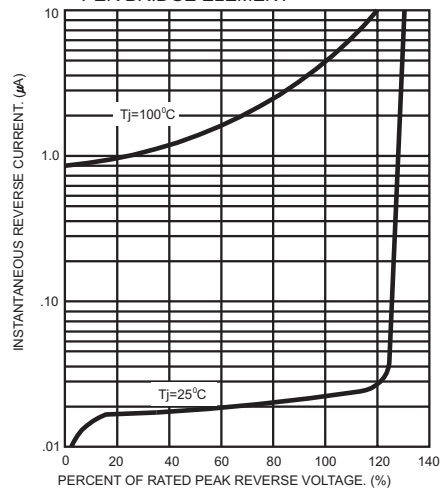


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



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Datasheets for electronics components.