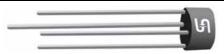
**TSC 9b** 

# **1W005G** THRU **1W10G**

Single Phase 1.0 AMP. Glass Passivated Bridge Rectifiers



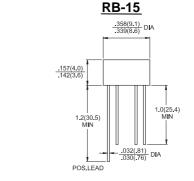
Voltage Range 50 to 1000 Volts Current 1.0 Ampere

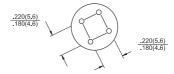
#### **Features**

- ♦ 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**

♦ Case: Molded plastic
 ♦ Lead: Solder plated
 ♦ Polarity: As marked
 ♦ Weight: 1.07 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 005G	1W 01G	1W 02G	1W 04G	1W 06G	1W 08G	1W 10G	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	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>	1.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	30							Α
Maximum Instantaneous Forward Voltage @ 1.0A	$V_{F}$	1.0							V
Maximum DC Reverse Current @ $T_A$ =25 $^{\circ}$ C at Rated DC Blocking Voltage @ $T_A$ =125 $^{\circ}$ C	I <sub>R</sub>	10							uA
	чК				500				uA
Typical Thermal Resistance (Note)	$R\theta_{JA}$				36				<b>℃/W</b>
	$R heta_{JL}$				13				
Operating Temperature Range	TJ	-55 to +150							${\mathbb C}$
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							ပ္

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 (1W005G THRU 1W10G)

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

10

10

10

10

10

10

NUMBER OF CYCLES AT 60Hz

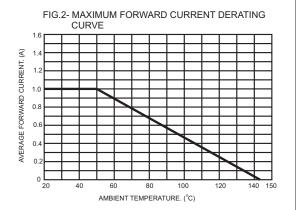


FIG.3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

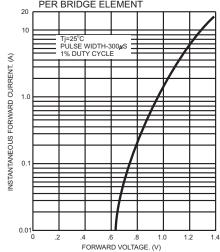


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

