



# 1W005 THRU 1W10

## Single Phase 1.0 AMP. Silicon Bridge Rectifiers



Voltage Range  
50 to 1000 Volts  
Current  
1.0 Ampere

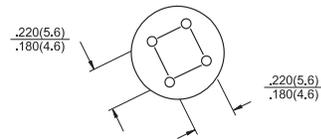
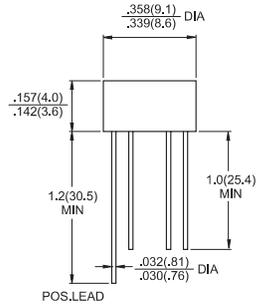
### Features

- ◇ UL Recognized File # E-96005
- ◇ 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

### RB-15



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	1W005	1W01	1W02	1W04	1W06	1W08	1W10	Units
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 @ $T_A = 50^\circ C$	$I_{(AV)}$	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 @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 100^\circ C$	$I_R$	10 500							$\mu A$ $\mu A$
Typical Thermal Resistance (Note)	$R\theta_{JA}$ $R\theta_{JL}$	36 13							$^{\circ}C/W$
Operating Temperature Range	$T_J$	-55 to +125							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^{\circ}C$

Note: Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.2 x 0.2" (5 x 5mm) Copper Pads.

## RATINGS AND CHARACTERISTIC CURVES ( 1W005 THRU 1W10)

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

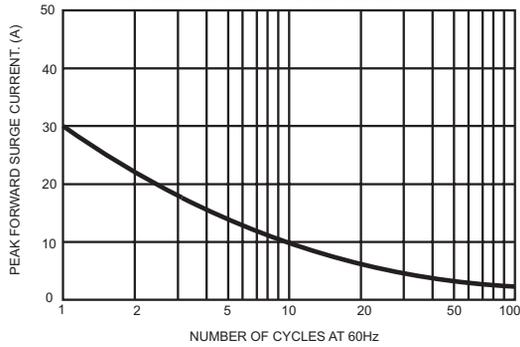


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

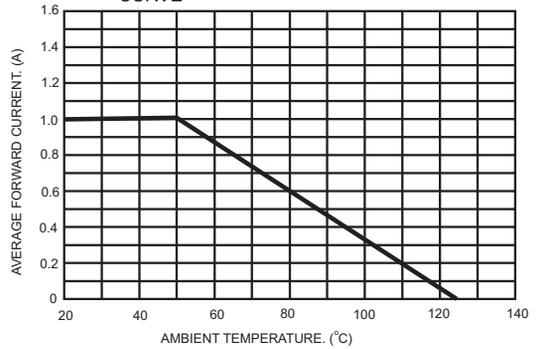


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

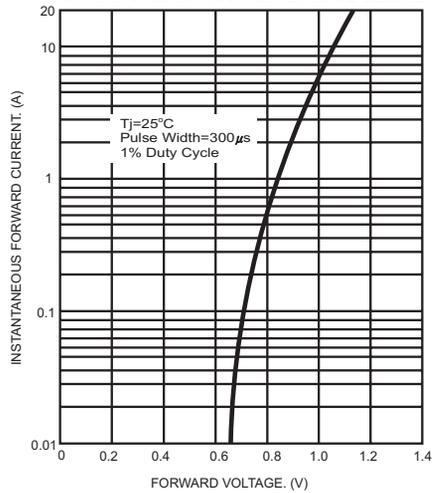


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

