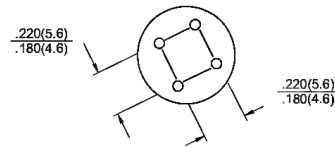
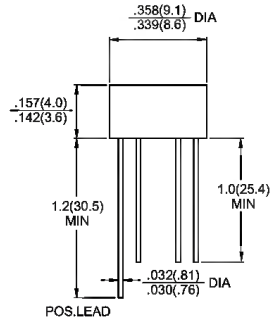
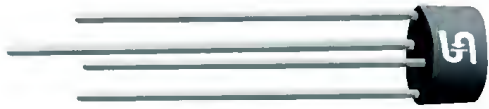




# 1W005 - 1W10

Single Phase 1.0 AMP. Silicon Bridge Rectifiers

## RB-15



### 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: Pure tin plated, Lead free.
- ◇ 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	1W005	1W01	1W02	1W04	1W06	1W08	1W10	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	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 )	IFSM	30							A
Maximum Instantaneous Forward Voltage @ 1.0A	V <sub>F</sub>	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 <sub>R</sub>	10 500							uA uA
Typical Thermal resistance (Note)	R <sub>θJA</sub> R <sub>θJL</sub>	36 13							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°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.

Version: B08

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

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

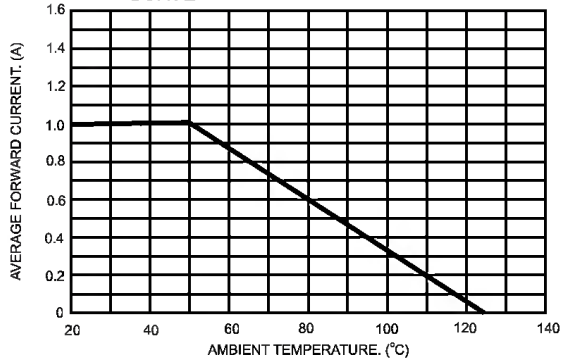


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

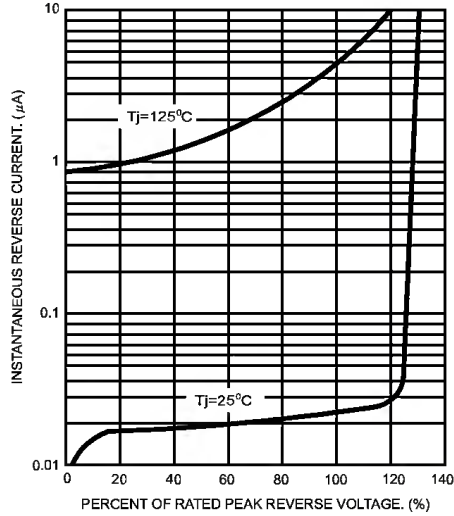


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

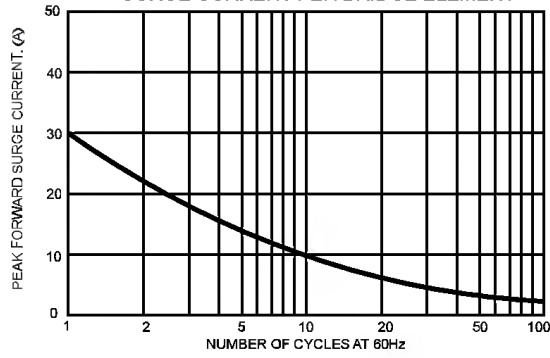


FIG.4- TYPICAL JUNCTION CAPACITANCE

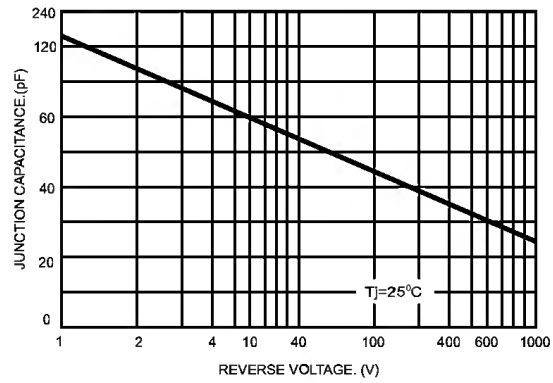


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

