

# Silicon Bridge Rectifier



## Features:

- Surge overload rating 50 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in expensive product

## Specifications:

Reverse Voltage : 50 to 1,000Volts  
Forward Current : 1.5 Amperes  
Mounting position : Any

## Maximum Ratings And Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Characteristics  | Symbol     | W005        | W01 | W02 | W04 | W06 | W08 | W10   | Unit          |
|--|------------|-------------|-----|-----|-----|-----|-----|-------|---------------|
| Max. Recurrent Peak Reverse Voltage  | $V_{RRM}$  | 50          | 100 | 200 | 400 | 600 | 800 | 1,000 | V             |
| Max. RMS Voltage   | $V_{RMS}$  | 35          | 70  | 140 | 280 | 420 | 560 | 700   | V             |
| Max. DC Blocking Voltage   | $V_{DC}$   | 50          | 100 | 200 | 400 | 600 | 800 | 1,000 | V             |
| Max. Average Forward Rectified Current @ $T_A = 25^\circ C$                                    | $I_{(AV)}$ | 1.5         |     |     |     |     |     |       | A             |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed on Rated Load            | $I_{FSM}$  | 50          |     |     |     |     |     |       | A             |
| $I^2t$ Rating for Fusing ( $t < 8.3ms$ )   | $I^2t$     | 5           |     |     |     |     |     |       | $A^2s$        |
| Max. Forward Voltage Drop Per Element at 1.5A Peak   | $V_F$      | 1.1         |     |     |     |     |     |       | V             |
| Max. Reverse Current at Rated DC Blocking Voltage<br>$T_J = 25^\circ C$<br>$T_J = 100^\circ C$ | $I_R$      | 10<br>1     |     |     |     |     |     |       | $\mu A$<br>mA |
| Operating Temperature Range  | $T_J$      | -55 to +150 |     |     |     |     |     |       | $^\circ C$    |
| Storage Temperature Range  | $T_{STG}$  | -55 to +150 |     |     |     |     |     |       | $^\circ C$    |

## Rating And Characteristic Curves:

FIG.1-MXIMUM NON-REPETITIVE SURGE CURRENT

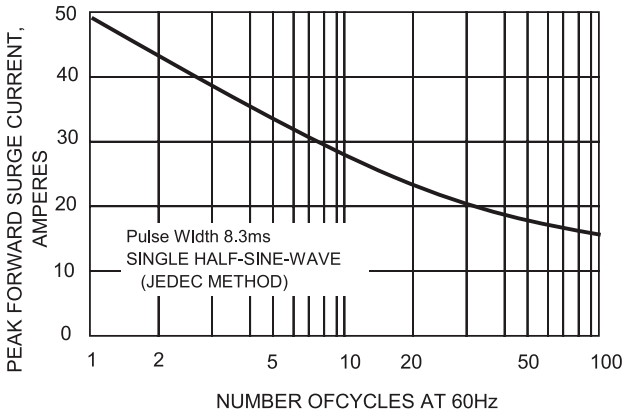


FIG.2-DERATING CURVE OUTPUT RECTIFIED CURRENT

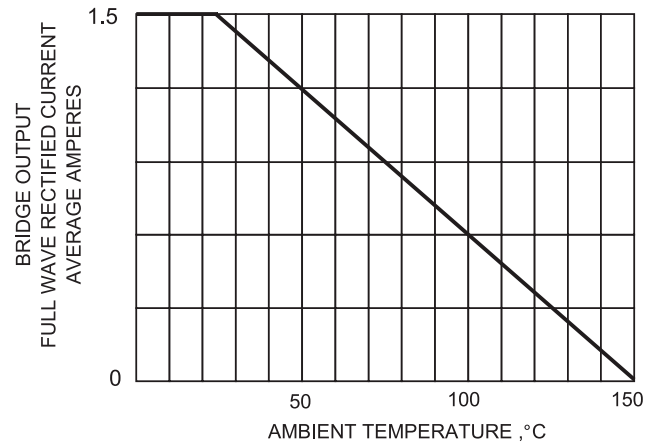


FIG.3-TYPICAL FORWARD CHARACTERISTICS

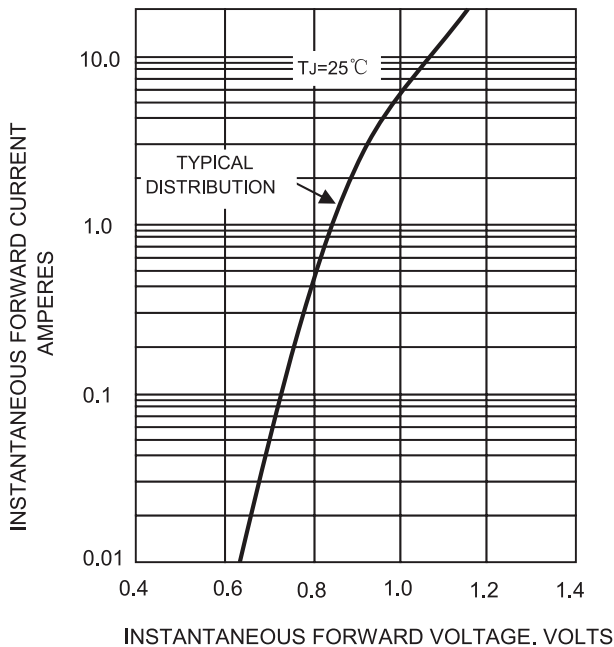
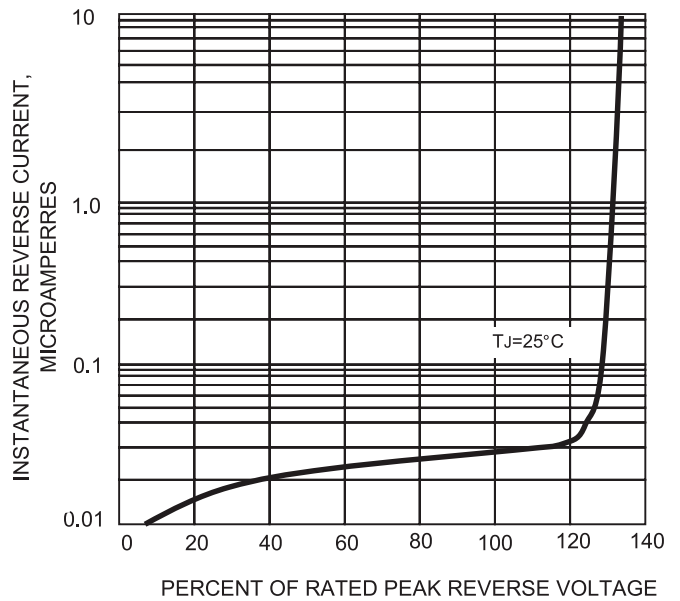


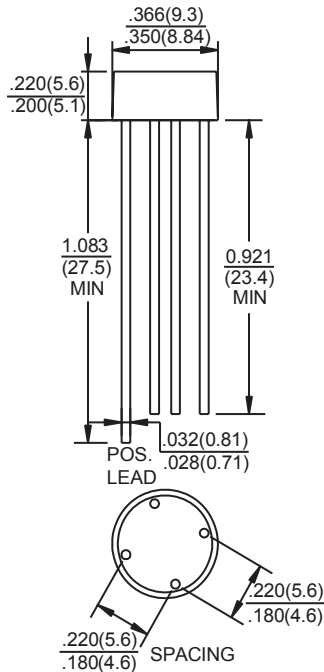
FIG.4-TYPIACL REVERSE CHARACTERISTICS



# Silicon Bridge Rectifier



## Dimensions:



Dimensions : Inches (Millimetres)

## Part Number Table

| Description                                       | Part Number |
|---|-------------|
| Bridge Rectifier, Single Phase, 1.5A, 50V, RB-15  | W005        |
| Bridge Rectifier, Single Phase, 1.5A, 100V, RB-15 | W01         |
| Bridge Rectifier, Single Phase, 1.5A, 200V, RB-15 | W02         |
| Bridge Rectifier, Single Phase, 1.5A, 400V, RB-15 | W04         |
| Bridge Rectifier, Single Phase, 1.5A, 600V, RB-15 | W06         |
| Bridge Rectifier, Single Phase, 1.5A, 800V, RB-15 | W08         |

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