

# Glass Passivated Bridge Rectifier



## Features:

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0

## Mechanical Data:

|                   |                           |
|-------------------|---------------------------|
| Polarity          | : As marked on body       |
| Weight            | : 0.02 ounces, 0.38 grams |
| Mounting Position | : Any                     |
| Reverse Voltage   | : 400 Volts               |
| Forward Current   | : 1 Ampere                |

## 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          | Values      | Unit                      |
|---|-----------------|-------------|---------------------------|
| Max. Recurrent Peak Reverse Voltage   | $V_{RRM}$       | 400         | V                         |
| Max. RMS Voltage  | $V_{RMS}$       | 280         |                           |
| Max. DC Blocking Voltage  | $V_{DC}$        | 400         |                           |
| Max. Average Forward Rectified Current<br>at $T_A = 40^\circ\text{C}$   | $I_{(AV)}$      | 1           | A                         |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load                            | $I_{FSM}$       | 30          |                           |
| Max. Instantaneous Forward Voltage at 1A DC   | $V_F$           | 1.1         | V                         |
| Max. DC Reverse Current at<br>Rated DC Blocking Voltage at<br>$T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$ | $I_R$           | 10<br>500   | $\mu\text{A}$             |
| $I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )   | $I^2t$          | 3.735       | $\text{A}^2\text{s}$      |
| Typical Junction Capacitance per Element (Note 1)   | $C_J$           | 25          | $\text{pF}$               |
| Typical Thermal Resistance (Note 2)   | $R_{\theta JA}$ | 40          | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range   | $T_J$           | -55 to +150 | $^\circ\text{C}$          |
| Storage Temperature Range   | $T_{STG}$       | -55 to +150 | $^\circ\text{C}$          |

## Notes:

1. Measured at 1MHz and applied reverse voltage of 4V DC.
2. Thermal resistance from junction to ambient mounted on P.C.B , with 0.5"×0.5" (13mm×13mm) copper pads.
3. The typical data above is for reference only

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## Ratings and Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

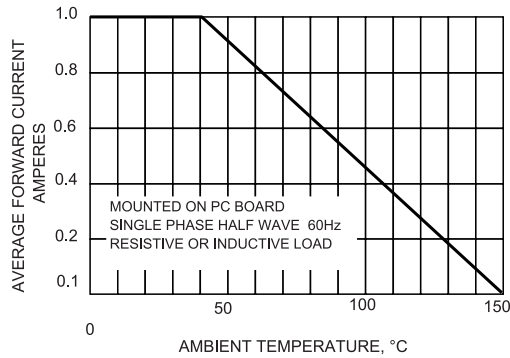


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

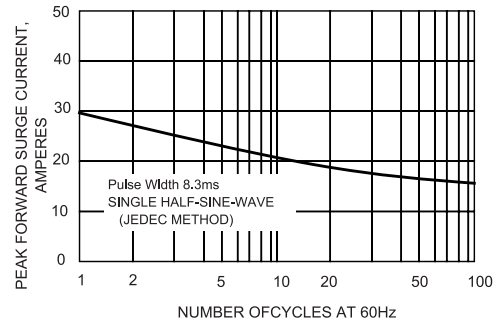


FIG.3-TYPICAL JUNCTION CAPACITANCE

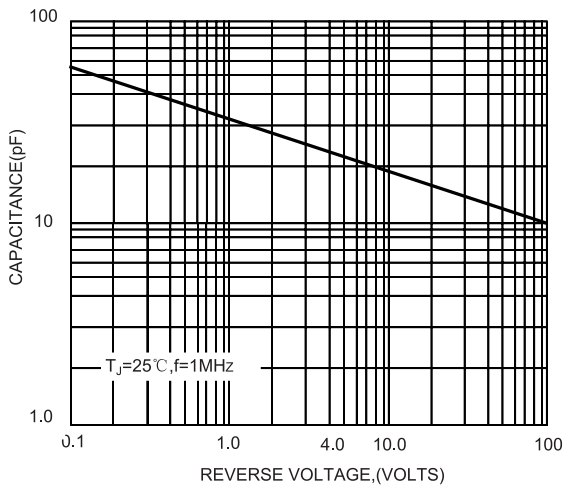


FIG.4-TYPICAL FORWARD CHARACTERISTICS

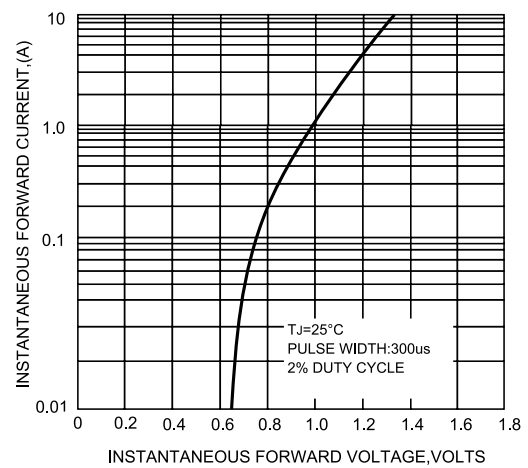
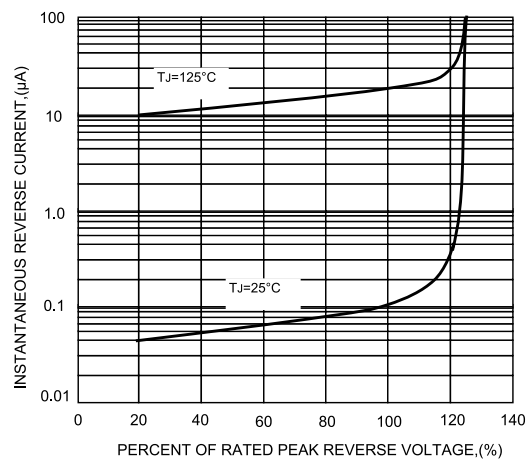


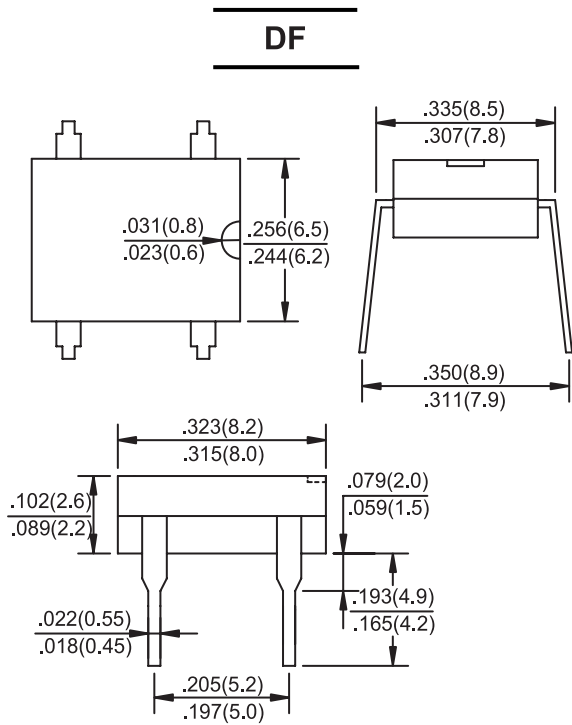
FIG.5-TYPICAL REVERSE CHARACTERISTICS



# Glass Passivated Bridge Rectifier



## Dimensions:



Dimensions : Inches (Millimetres)

## Part Number Table

| Description               | Part Number |
|---------------------------|-------------|
| Bridge Rectifier, 1A 400V | DF04+       |

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