



# SMD General Purpose Bridge Rectifier

## DF15005S-G thru DF1510S-G

**Glass Passivated Type**

**Reverse Voltage: 50 ~ 1000 Volts**

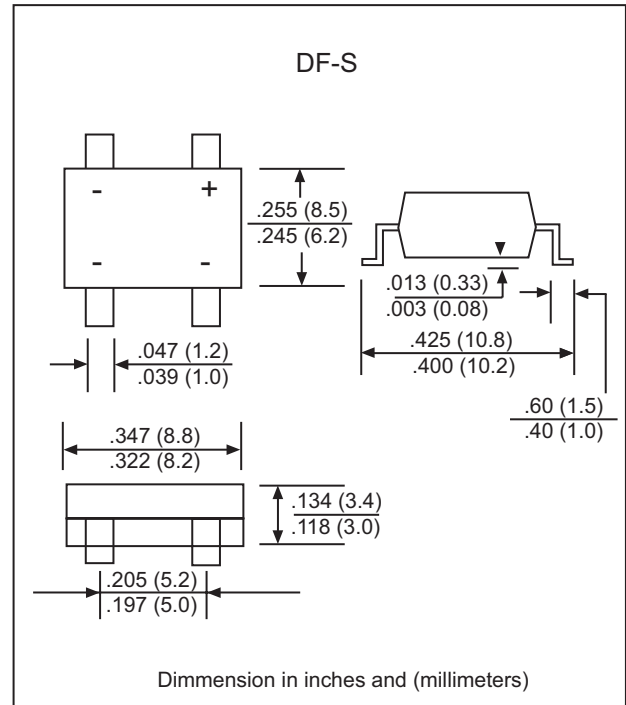
**Forward Current: 1.5 Amp**

### Features:

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Low forward voltage drop
- Glass passivated junction

### Mechanical Data:

- Case: Molded plastic, DF-S
- Terminals: solderable per MIL-STD-750, Method 2026
- Polarity: Marked on body
- Mounting position: Any
- Approx. Weight: 1.0 gram



## Maximum Ratings and Electrical Characteristics

| Parameter  | Symbol          | DF15005S<br>-G | DF1501S<br>-G | DF1502S<br>-G | DF1504S<br>-G | DF1506S<br>-G | DF1508S<br>-G | DF1510S<br>-G | Unit          |
|--|-----------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Max. Repetitive Peak Reverse Voltage   | $V_{RRM}$       | 50             | 100           | 200           | 400           | 600           | 800           | 1000          | V             |
| Max. DC Blocking Voltage   | $V_{DC}$        | 50             | 100           | 200           | 400           | 600           | 800           | 1000          | V             |
| Max. RMS Voltage   | $V_{RMS}$       | 35             | 70            | 140           | 280           | 420           | 560           | 700           | V             |
| Peak Surge Forward Current<br>8.3ms single half sine-wave<br>superimposed on rate load<br>(JEDEC method) | $I_{FSM}$       | 50             |               |               |               |               |               |               | A             |
| Max. Average Forward Current   | $I_o$           | 1.5            |               |               |               |               |               |               | A             |
| Max. Instantaneous Forward Current<br>at 1.5A  | $V_F$           | 1.1            |               |               |               |               |               |               | V             |
| Max. DC Reverse Current at Rated DC<br>Blocking Voltage<br>$T_a=25^{\circ}C$<br>$T_a=125^{\circ}C$       | $I_R$           | 10<br>500      |               |               |               |               |               |               | $\mu A$       |
| Max. Thermal Resistance (Note 1)   | $R_{\theta JA}$ | 40             |               |               |               |               |               |               | $^{\circ}C/W$ |
| Operating Junction Temperature   | $T_j$           | -55 to +150    |               |               |               |               |               |               | $^{\circ}C$   |
| Storage Temperature  | $T_{STG}$       | -55 to +150    |               |               |               |               |               |               | $^{\circ}C$   |

Note1: Thermal resistance from junction to ambient.

"-G" suffix designated RoHS compliant version



## Rating and Characteristic Curves (DF15005S-G thru DF1510S-G)

Fig. 1 - Reverse Characteristics

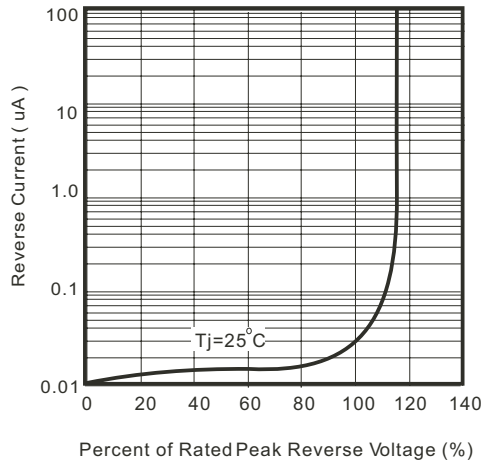


Fig.2 - Forward Characteristics

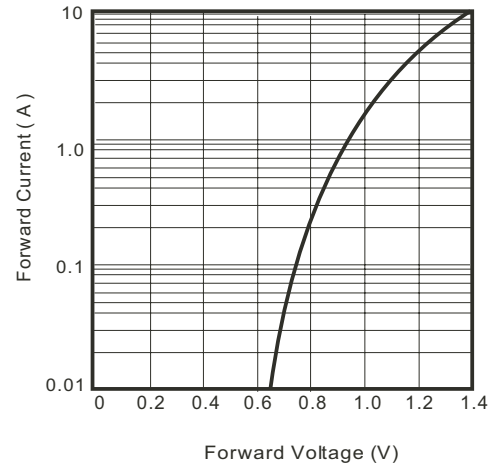


Fig. 3 - Non Repetitive Forward Surge Current

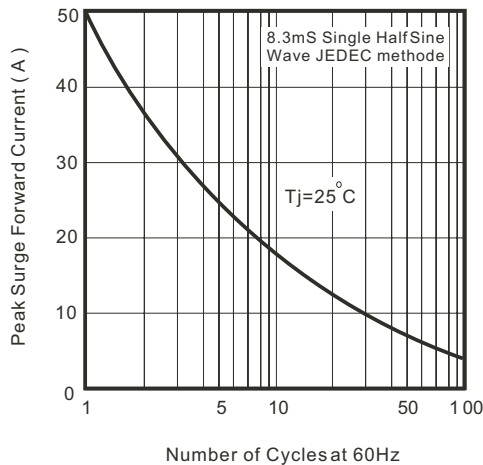


Fig. 4 - Current Derating Curve

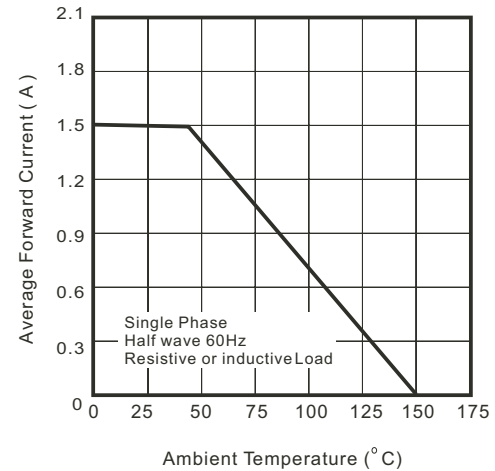


Fig. 5 - Typical Junction Capacitance

