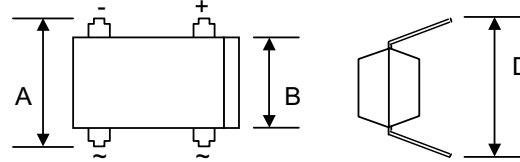


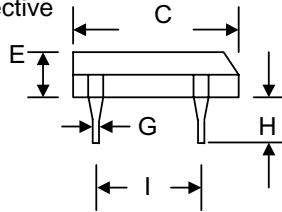
**Features**

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-O
- UL Recognized File # E223064
- Green Products in Compliance with the RoHS Directive



**Mechanical Data**

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.38 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



\*Low profile models (E = 2.20~2.50mm) are available.  
Please consult factory.

| DIL |       |      |         |       |
|-----|-------|------|---------|-------|
| Dim | Min   | Max  | Min     | Max   |
| A   | 7.40  | 7.90 | 0.291   | 0.311 |
| B   | 6.20  | 6.50 | 0.244   | 0.256 |
| C   | 8.13  | 8.51 | 0.320   | 0.335 |
| D   | 7.60  | 8.90 | 0.299   | 0.350 |
| E*  | 3.20  | 3.40 | 0.126   | 0.134 |
| G   | 0.41  | 0.51 | 0.016   | 0.020 |
| H   | 3.90  | 4.20 | 0.154   | 0.165 |
| I   | 5.0   | 5.20 | 0.197   | 0.205 |
|     | In mm |      | In inch |       |

**Maximum Ratings and Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

| Characteristic                                                                                                        | Symbol                                                 | DF005-G     | DF01-G | DF02-G | DF04-G | DF06-G | DF08-G | DF10-G | Unit |
|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------|--------|--------|--------|--------|--------|--------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | V <sub>RRM</sub><br>V <sub>RWM</sub><br>V <sub>R</sub> | 50          | 100    | 200    | 400    | 600    | 800    | 1000   | V    |
| RMS Reverse Voltage                                                                                                   | V <sub>R(RMS)</sub>                                    | 35          | 70     | 140    | 280    | 420    | 560    | 700    | V    |
| Average Rectified Output Current @T <sub>A</sub> = 40°C                                                               | I <sub>o</sub>                                         | 1.0         |        |        |        |        |        |        | A    |
| Non-Repetitive Peak Forward Surge Current 8.3ms<br>Single half sine-wave superimposed on rated load<br>(JEDEC Method) | I <sub>FSM</sub>                                       | 30          |        |        |        |        |        |        | A    |
| Forward Voltage per element @I <sub>F</sub> = 1.0A                                                                    | V <sub>FM</sub>                                        | 1.1         |        |        |        |        |        |        | V    |
| Peak Reverse Current @T <sub>A</sub> = 25°C<br>At Rated DC Blocking Voltage @T <sub>A</sub> = 125°C                   | I <sub>RM</sub>                                        | 10<br>500   |        |        |        |        |        |        | μA   |
| Typical Junction Capacitance per element (Note 1)                                                                     | C <sub>j</sub>                                         | 25          |        |        |        |        |        |        | pF   |
| Typical Thermal Resistance (Note 2)                                                                                   | R <sub>θJA</sub>                                       | 40          |        |        |        |        |        |        | K/W  |
| Operating and Storage Temperature Range                                                                               | T <sub>j</sub> , T <sub>STG</sub>                      | -55 to +150 |        |        |        |        |        |        | °C   |

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
2. Thermal resistance junction to ambient mounted on PC board with 13mm<sup>2</sup> copper pad.

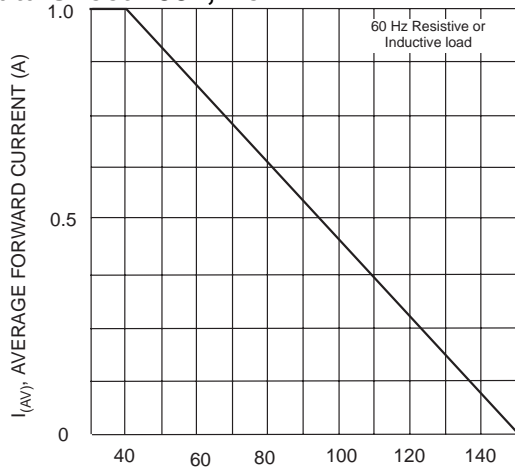
**SENSITRON**  
**SEMICONDUCTOR**

Data Sheet 1387, Rev.A

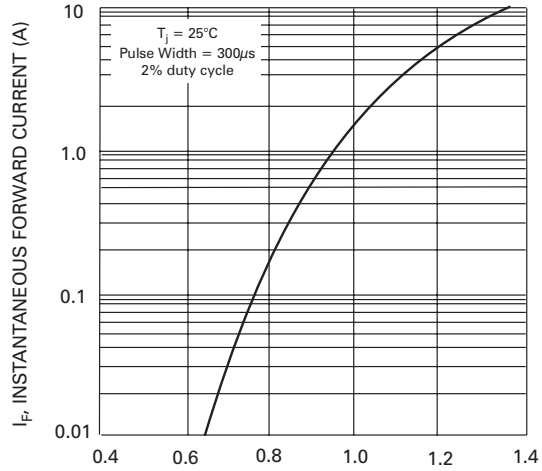
**DF005-G – DF10-G**

**1.0A GLASS PASSIVATED BRIDGE RECTIFIER**

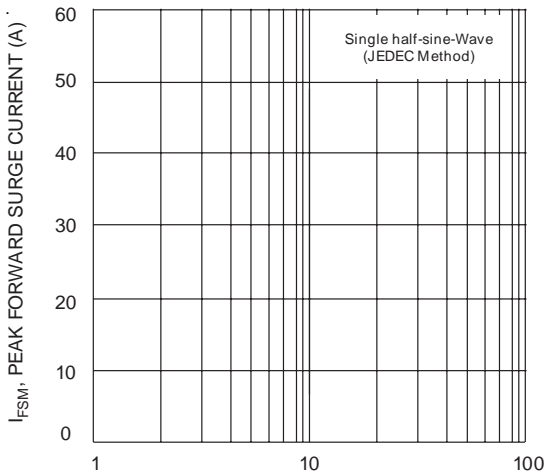
**Green Products**



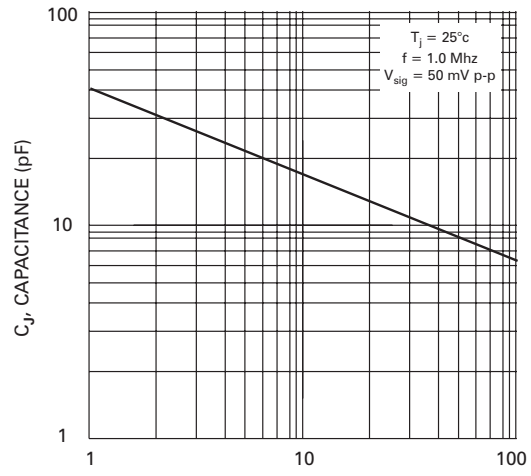
$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1 Output Current Derating Curve



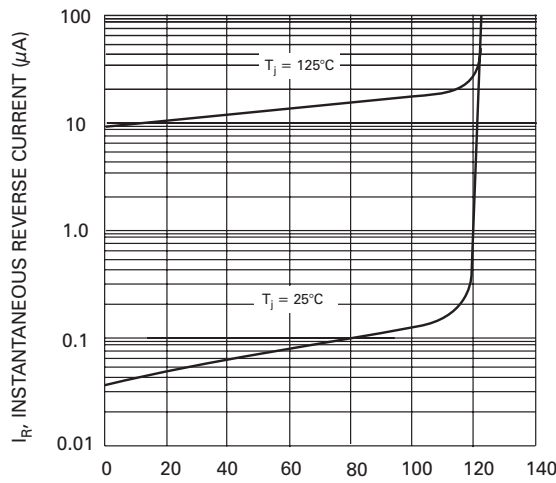
$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typ Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz  
Fig. 3 Max Non-Repetitive Peak Forward Surge Current



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typ Junction Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)  
Fig. 5 Typ Reverse Characteristics (per element)

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