

**GLASS PASSIVATED BRIDGE RECTIFIERS**

REVERSE VOLTAGE - **50 to 1000** Volts  
FORWARD CURRENT - **1.0** Amperes

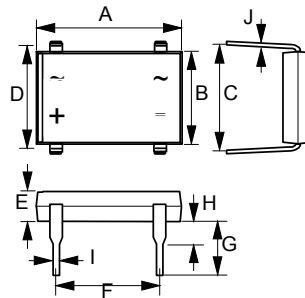
**FEATURES**

- 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
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- UL recognized file # E95060

**MECHANICAL DATA**

- Polarity : As marked on Body
- Weight : 0.02 ounces, 0.38 grams
- Mounting position : Any

**DF**



| DF   |      |      |
|------|------|------|
| DIM. | MIN. | MAX. |
| A    | 8.20 | 8.50 |
| B    | 6.20 | 6.50 |
| C    | 7.60 | 8.90 |
| D    | 7.40 | 7.60 |
| E    | 2.40 | 2.60 |
| F    | 5.00 | 5.20 |
| G    | 4.10 | 4.60 |
| H    | 1.27 | 2.03 |
| I    | 0.46 | 0.56 |
| J    | 0.22 | 0.30 |

All Dimensions in millimeter

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

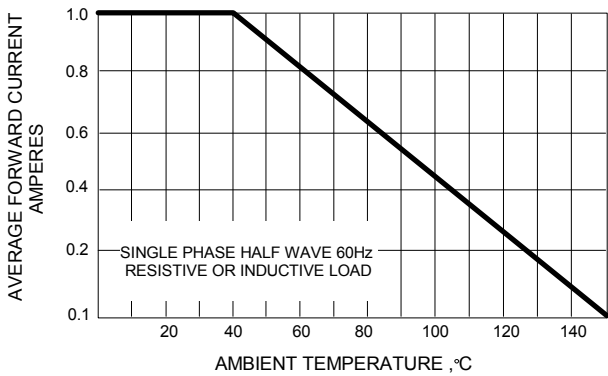
Ratings at 25°C ambient temperature unless otherwise specified.

| CHARACTERISTICS  | SYMBOL            | DF005M      | DF01M | DF02M | DF04M | DF06M | DF08M | DF10M | UNIT             |
|--|-------------------|-------------|-------|-------|-------|-------|-------|-------|------------------|
| Maximum Recurrent Peak Reverse Voltage   | V <sub>RRM</sub>  | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V                |
| Maximum RMS Voltage  | V <sub>RMS</sub>  | 35          | 70    | 140   | 280   | 420   | 560   | 700   | V                |
| Maximum DC Blocking Voltage  | V <sub>DC</sub>   | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V                |
| Maximum Average Forward Rectified Current @T <sub>A</sub> =40°C @T <sub>C</sub> =120°C               | I <sub>(AV)</sub> | 1.0         |       |       |       |       |       |       | A                |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)     | I <sub>FSM</sub>  | 50          |       |       |       |       |       |       | A                |
| Maximum forward Voltage at 1.0A DC   | V <sub>F</sub>    | 1.1         |       |       |       |       |       |       | V                |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =125°C | I <sub>R</sub>    | 10<br>500   |       |       |       |       |       |       | uA               |
| I <sup>2</sup> t Rating for fusing (t < 8.3ms)   | I <sup>2</sup> t  | 10.4        |       |       |       |       |       |       | A <sup>2</sup> S |
| Typical Junction Capacitance per element (Note 1)  | C <sub>J</sub>    | 25          |       |       |       |       |       |       | pF               |
| Typical Thermal Resistance (Note 2)  | R <sub>θJA</sub>  | 40          |       |       |       |       |       |       | °C/W             |
| Operating Temperature Range  | T <sub>J</sub>    | -55 to +150 |       |       |       |       |       |       | °C               |
| Storage Temperature Range  | T <sub>STG</sub>  | -55 to +150 |       |       |       |       |       |       | °C               |

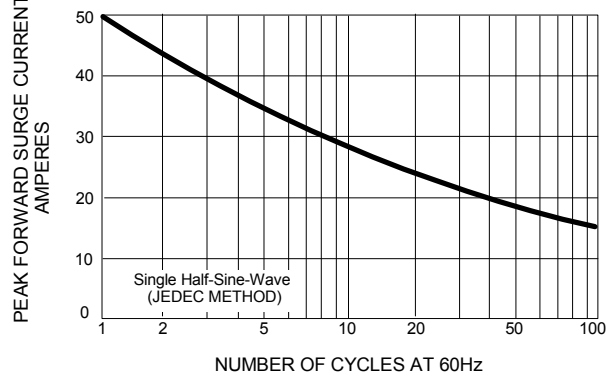
NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2.Thermal resistance from junction to ambient mounted on P.C.B with 0.5x0.5"(13x13mm) copper pads.

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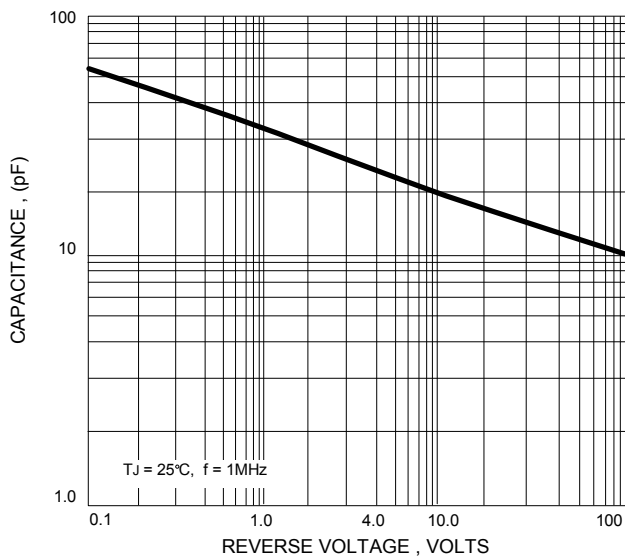
**FIG.1 - FORWARD CURRENT DERATING CURVE**



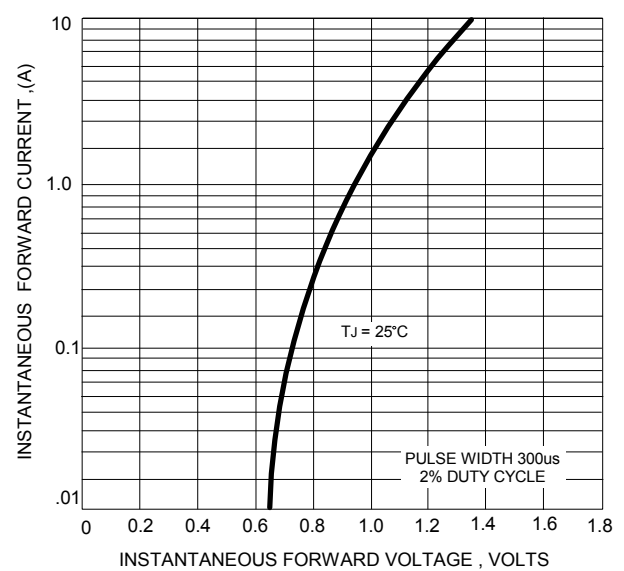
**FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT**



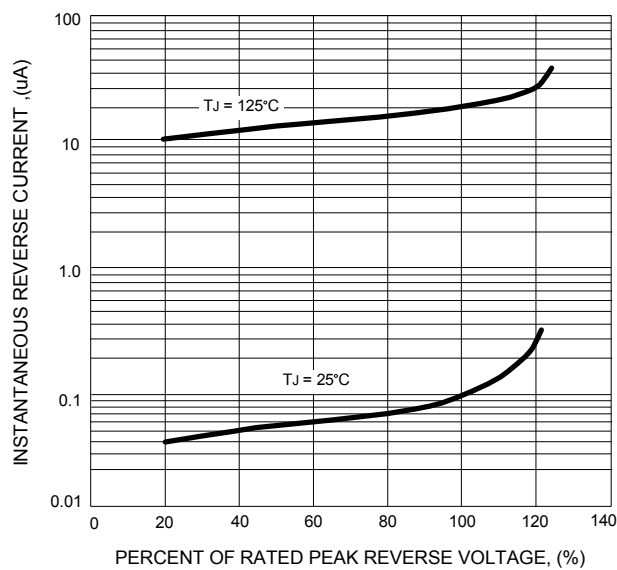
**FIG.3 - TYPICAL JUNCTION CAPACITANCE**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**



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