

## SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS

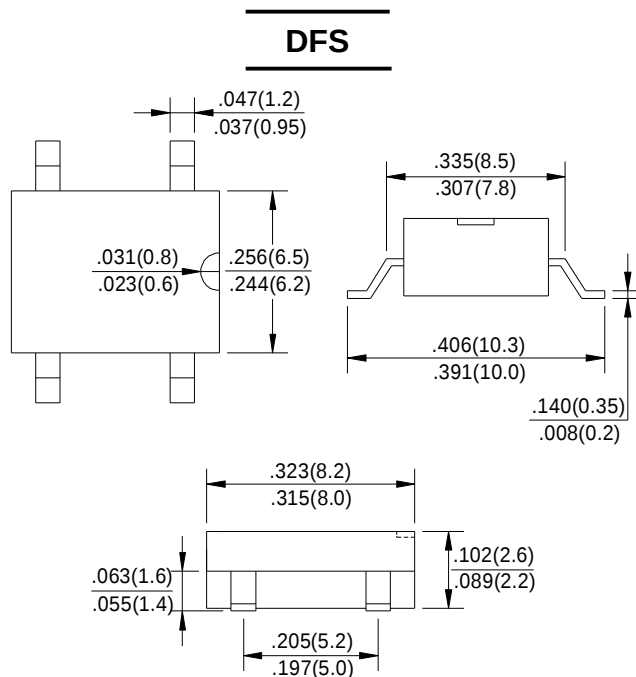
REVERSE VOLTAGE - **50 to 1000Volts**  
FORWARD CURRENT - **1.0 Amperes**

### 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
- Lead tin Pb/Sn copper
- The plastic material has UL flammability classification 94V-0

### MECHANICAL DATA

- Polarit:As marked on Body
- Weight:0.02 ounces,0.38 grams
- mounting position:Any



Dimensions in inches and (millimeters)

### 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                         | DF005S      | DF01S | DF02S | DF04S | DF06S | DF08S | DF10S | 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                                      | I <sub(av)< sub=""></sub(av)<> | 1.0         |       |       |       |       |       |       | A                |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load                   | I <sub>FSM</sub>               | 50          |       |       |       |       |       |       | A                |
| Maximum Forward Voltage at 1.0A DC                                                                   | V <sub>F</sub>                 | 1.1         |       |       |       |       |       |       | V                |
| Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =125°C | I <sub>R</sub>                 | 10<br>500   |       |       |       |       |       |       | uA               |
| I <sup>2</sup> Rating for Fusing(t<8.3ms)                                                            | I <sup>2</sup> <sub>t</sub>    | 10.4        |       |       |       |       |       |       | A <sup>2</sup> s |
| Typical Junction Capacitance Per Element (Note1)                                                     | C <sub>J</sub>                 | 25          |       |       |       |       |       |       | pF               |
| Typical Thermal Resistance (Note2)                                                                   | R <sub>θJC</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               |

Note: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 0.5\*0.5"(13\*13mm) copper pads.

FIG.1-FORWARD CURRENT DERATING CURVE

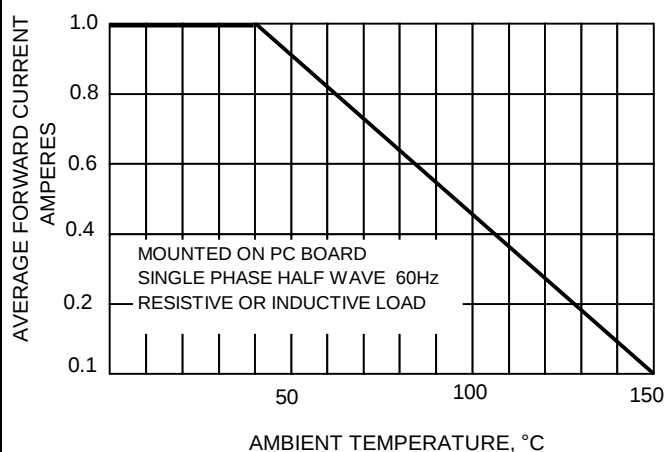


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

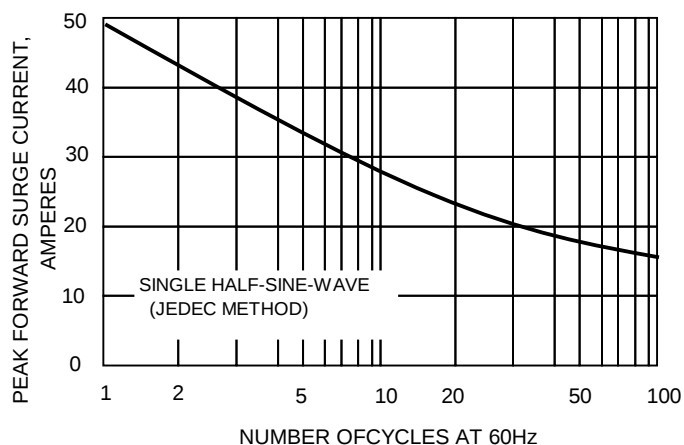


FIG.3-TYPICAL JUNCTION CAPACITANCE

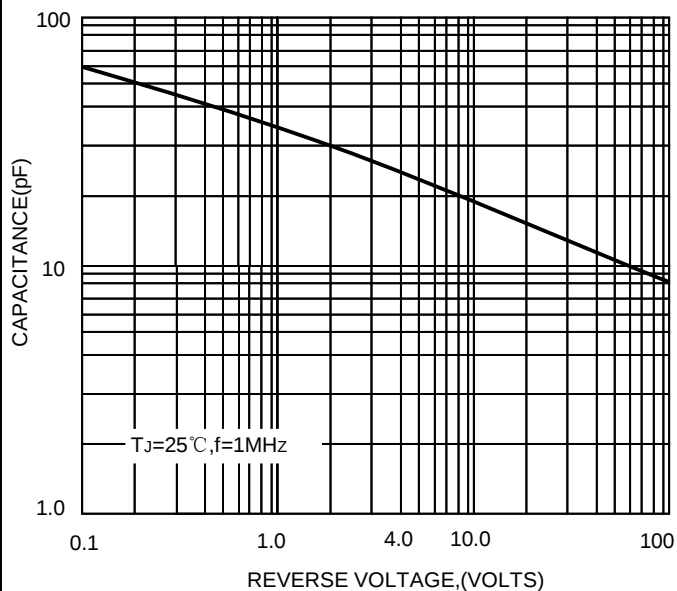


FIG.4-TYPICAL FORWARD CHARACTERISTICS

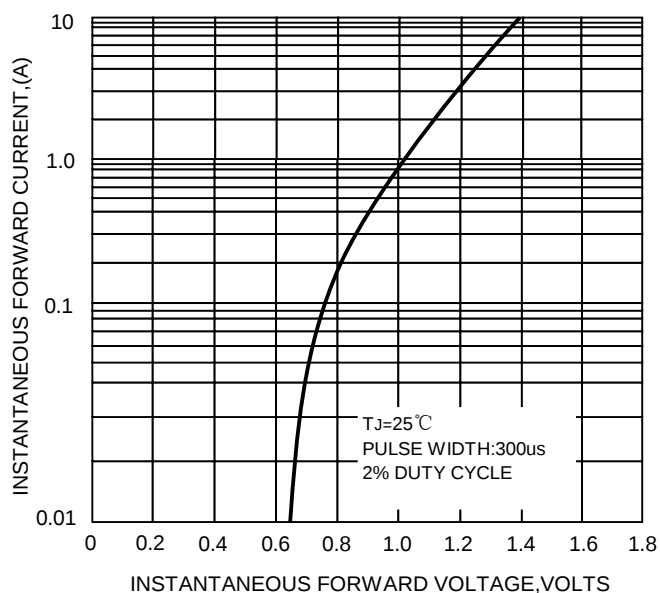


FIG.5-TYPICAL REVERSE CHARACTERISTICS

