

**SURFACE MOUNT  
GLASS PASSIVATED  
BRIDGE RECTIFIERS**

REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 1.5 Amperes

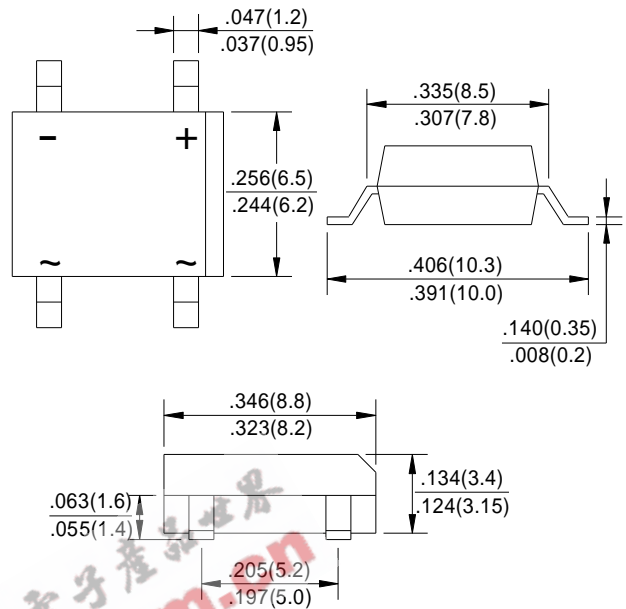
**FEATURES**

- 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**

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

**DBS**



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            | DB151S      | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S | 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> | 1.5         |        |        |        |        |        |        | A                |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)      | I <sub>FSM</sub>  | 50          |        |        |        |        |        |        | A                |
| Maximum Forward Voltage at 1.5A 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> t Rating for Fusing (t<8.3ms)   | I <sup>2</sup> t  | 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>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               |

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

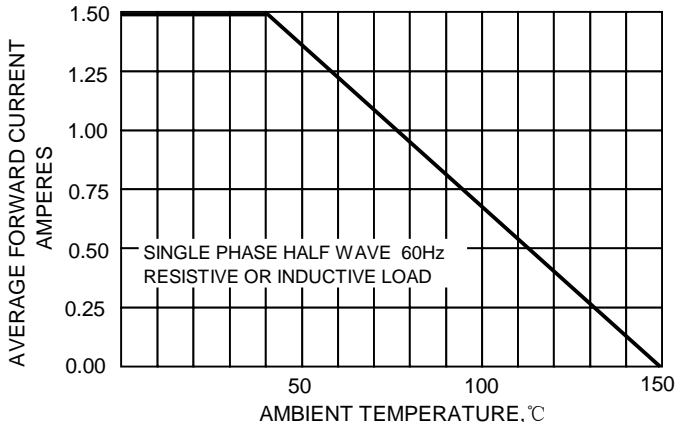


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

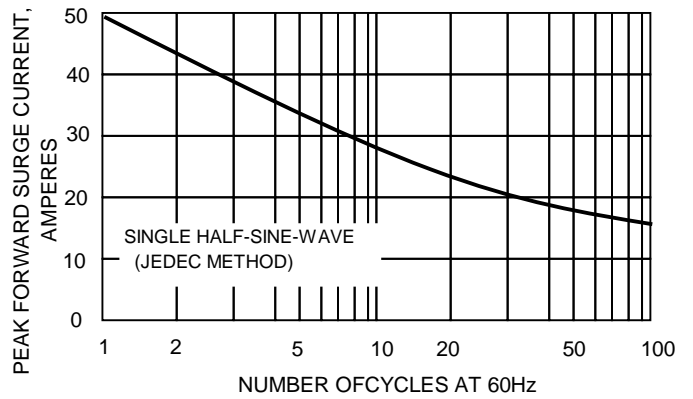


FIG.3-TYPICAL JUNCTION CAPACITANCE

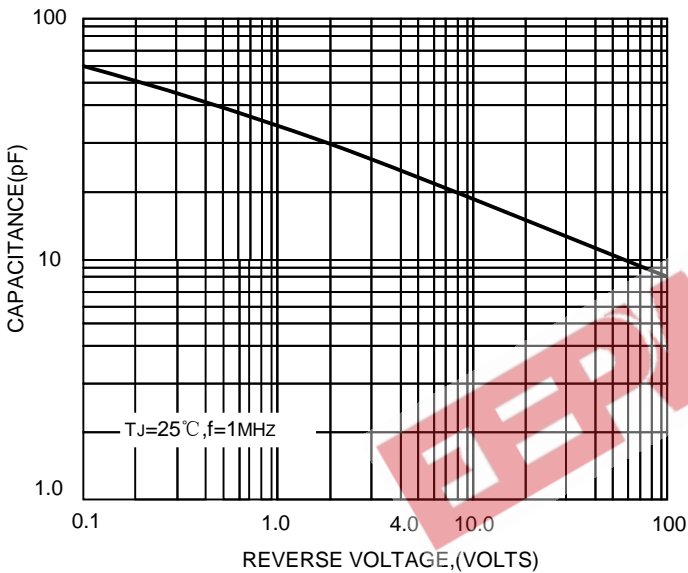


FIG.4-TYPICAL FORWARD CHARACTERISTICS

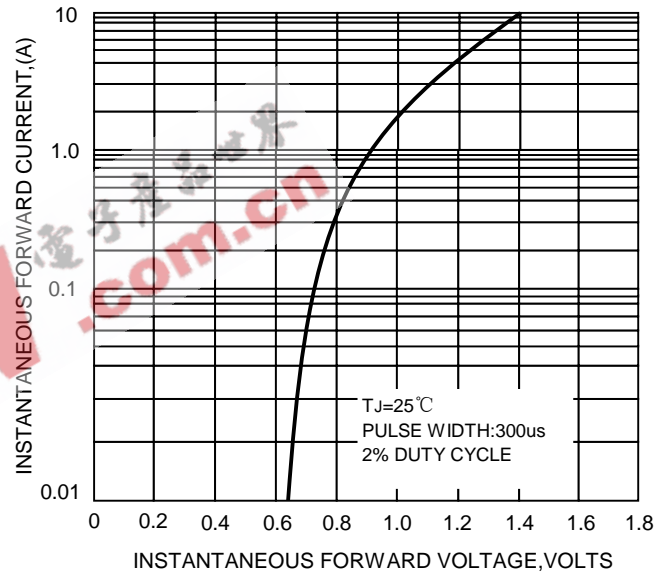


FIG.5-TYPICAL REVERSE CHARACTERISTICS

