

## Surface Mount Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts  
Forward Current - 2.0 Amperes

### Features

- Glass passivated chip
- Ideal for automatic placement
- High surge forward current capability
- Reliable low cost construction utilizing molded plastic technique
- Lead tin plated copper

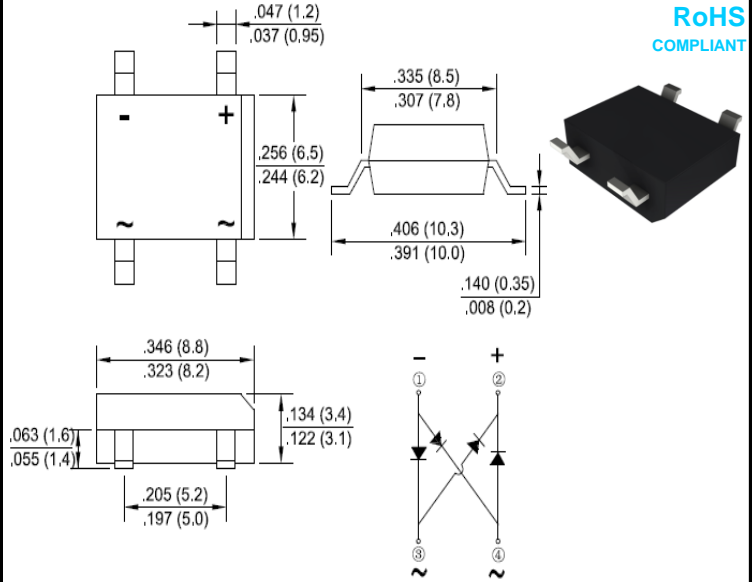
### Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any

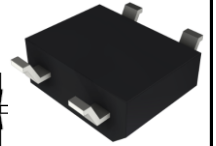
### Applications

- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

### DBS



RoHS COMPLIANT



Package Outline Dimensions in Inches (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                         | DB201S      | DB202S | DB203S | DB204S | DB205S | DB206S | DB207S | Unit             |
|--|--------------------------------|-------------|--------|--------|--------|--------|--------|--------|------------------|
| Maximum Repetitive 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)<> | 2.0         |        |        |        |        |        |        | A                |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | I <sub>FSM</sub>               | 60          |        |        |        |        |        |        | A                |
| I <sup>2</sup> t Rating for Fusing (t<8.3mS)   | I <sup>2</sup> t               | 14.9        |        |        |        |        |        |        | A <sup>2</sup> s |
| Peak Forward Voltage per Diode at 2.0A DC  | V <sub>F</sub>                 | 1.1         |        |        |        |        |        |        | V                |
| Maximum DC Reverse Current at Rated @T <sub>J</sub> =25 °C   | I <sub>R</sub>                 | 10          |        |        |        |        |        |        | μA               |
| DC Blocking Voltage per Diode @T <sub>J</sub> =125 °C  |                                | 500         |        |        |        |        |        |        |                  |
| Typical Junction Capacitance (Note1)   | C <sub>J</sub>                 | 25          |        |        |        |        |        |        | pF               |
| Typical Thermal Resistance Junction to Ambient (Note2)   | R <sub>θJA</sub>               | 40          |        |        |        |        |        |        | °C/W             |
| Operating Junction 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 1.0 MHz 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.

3.The typical data above is for reference only .

DB20\*S-13/U-00/99-00/01

Rev. 9, 22-Apr-2019

Fig. 1 - Forward Current Derating Curve

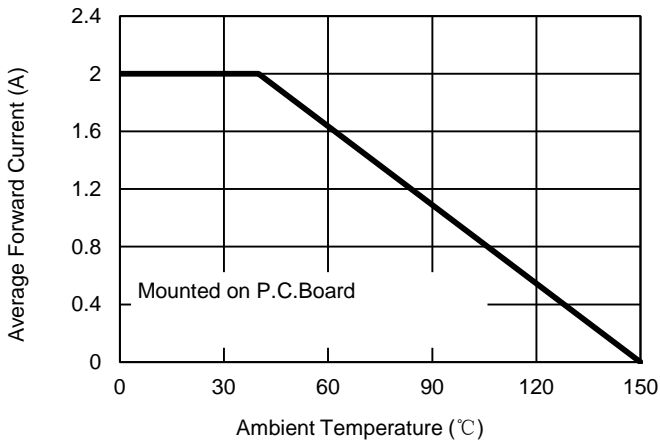


Fig. 2 - Maximum Non-Repetitive Surge Current

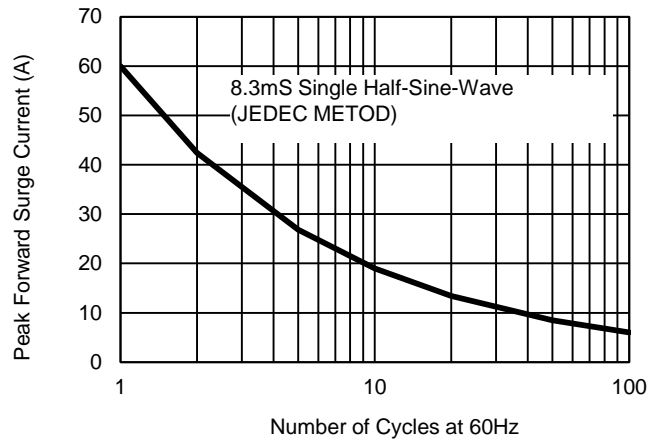


Fig. 3 - Typical Reverse Characteristics

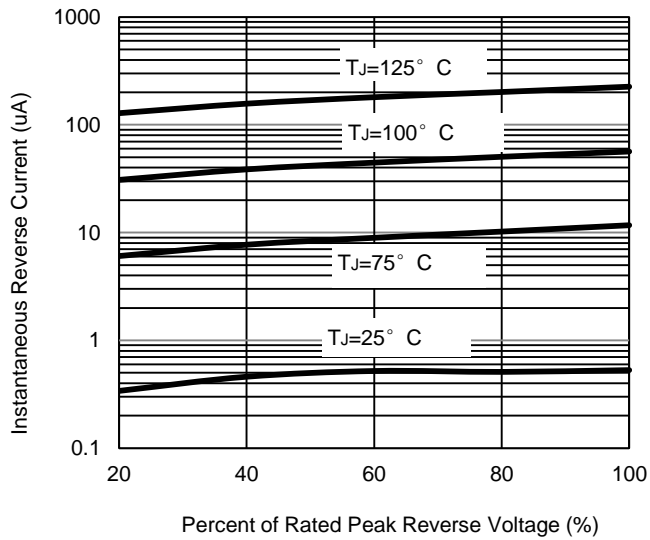


Fig. 4 - Typical Forward Characteristics

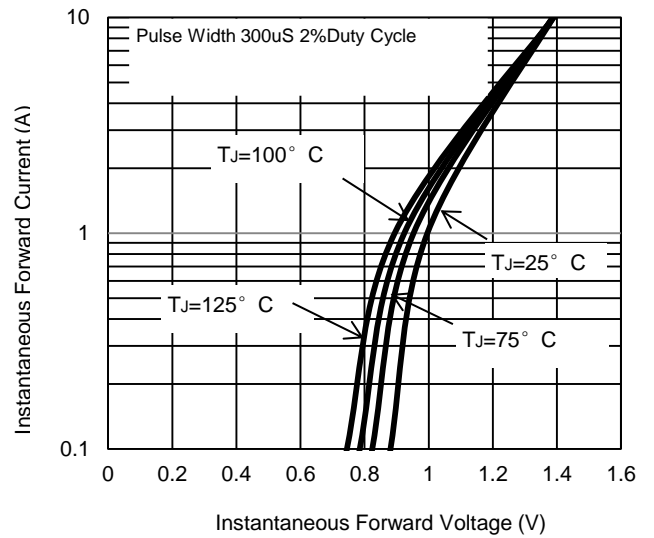
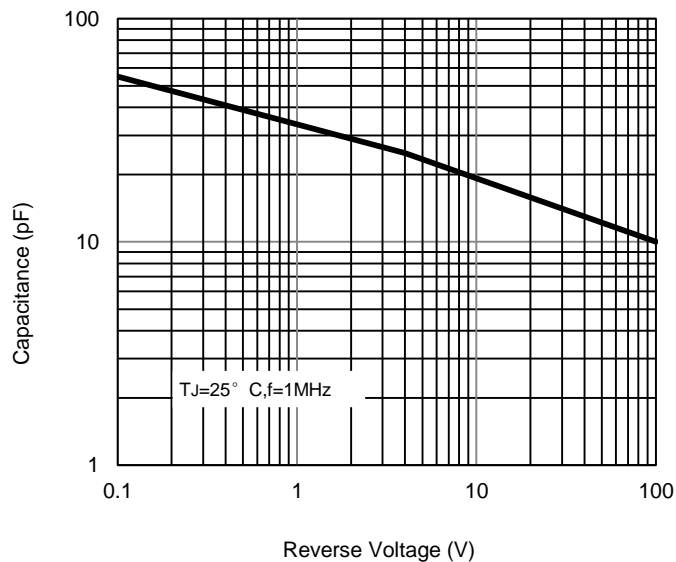


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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