

2.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE

RECTIFIER Reverse Voltage - 100 to 1000 V

Forward Current – 2.0A

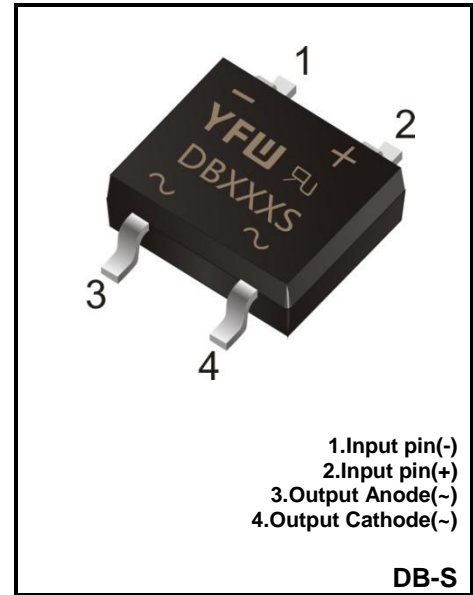


FEATURES

- ◆High current capability
- ◆Low forward voltage drop
- ◆Glass Passivated Chip Junction
- ◆Low power loss, high efficiency
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: DB-S
- ◆Terminals: Solderable per MIL-STD-202, Method 208
- ◆Approx. Weight: 0.4g /0.02oz



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter | Symbols | DB202S | DB203S | DB204S | DB205S | DB206S | DB207S | Units |
|---|-------------------------------|------------|--------|--------|--------|--------|--------|---------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Average Rectified Output Current | $I_{(AV)}$ | 2 | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method) | I_{FSM} | 60 | | | | | | A |
| Forward Voltage per element @ $I_F=2.0A$ and 25°C | V_F | 1.1 | | | | | | V |
| Maximum DC Reverse Current @ $T_A=25^{\circ}C$ at Rated DC Blocking Voltage @ $T_A=125^{\circ}C$ | I_R | 5 500 | | | | | | μA |
| Typical Junction Capacitance ^(Note1) | C_j | 25 | | | | | | pF |
| Typical Thermal Resistance ^(Note2) | $R_{\theta JA} R_{\theta JC}$ | 40/15 | | | | | | °C/W |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55 ~ +150 | | | | | | °C |

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Mounted on glass epoxy PCB board with 4x1.5"x1.5" (3.81x3.81 cm) copper pad.

Fig.1 Average Rectified Output Current Derating Curve

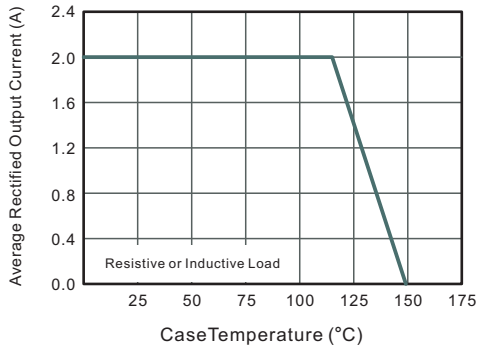


Fig.2 Typical Reverse Characteristics

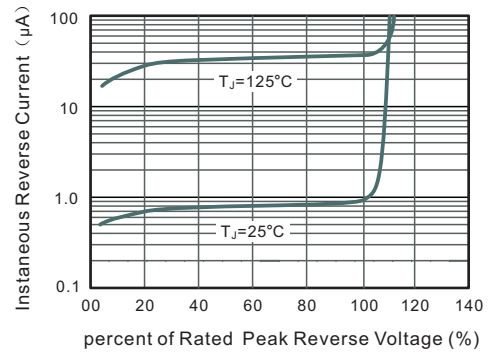


Fig.3 Typical Instantaneous Forward Characteristics

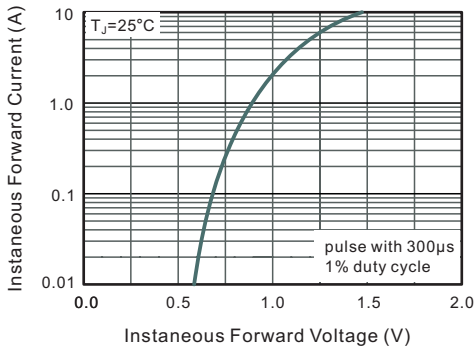


Fig.4 Typical Junction Capacitance

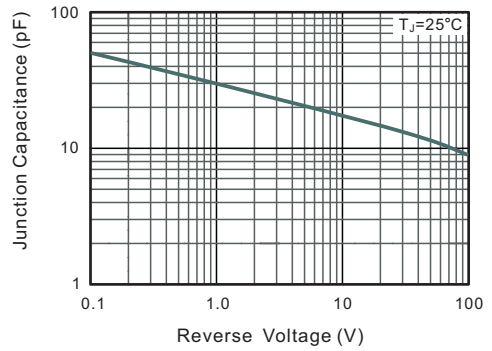
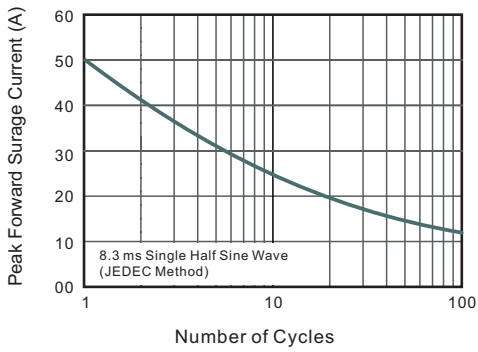
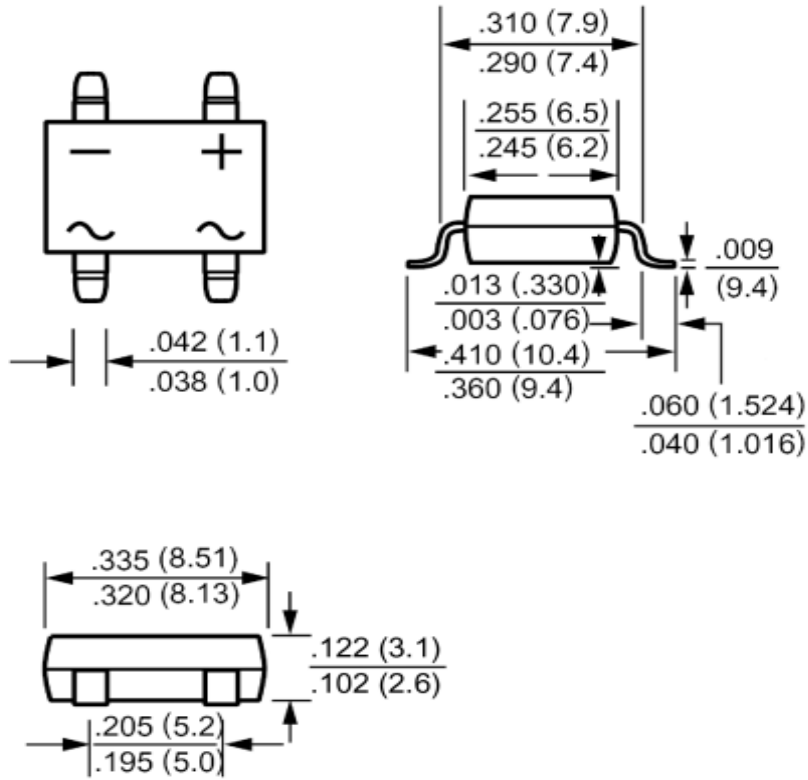


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Outline DB-S

Plastic surface mounted package; 4 leads



Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| DB-S | Tape/Reel, 13" reel | 1500 | EIA-481-1 |