

DB201S thru DB207S

Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifier Reverse Voltage 50 and 1000V Forward Current 2.0A

Features

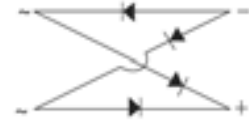
- Ideal for printed circuit boards
- Applicable for automotive insertion
- High surge current capability
- Solder Dip 260°C, 40 seconds



Package: DFS

Mechanical Data

- Case: DFS
- Epoxy meets UL-94V-0 Flammability rating
- Terminals: Matte tin plated (E3 Suffix) leads, solderable per J-STD-002B and JESD22-B102D
- Polarity: As marked on body



Schematic Diagram

Applications

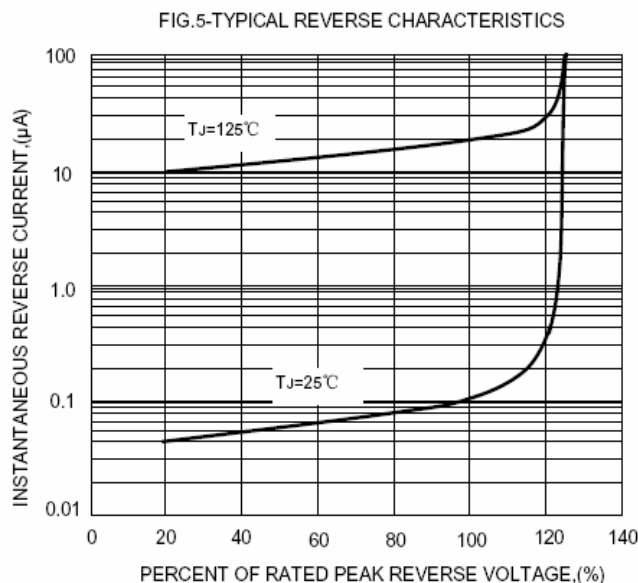
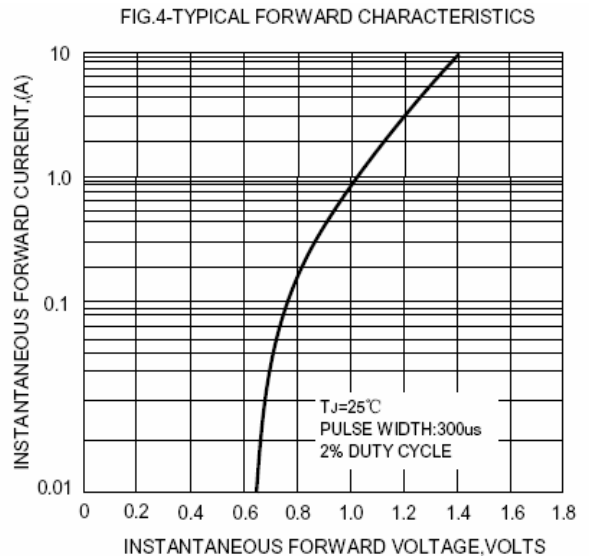
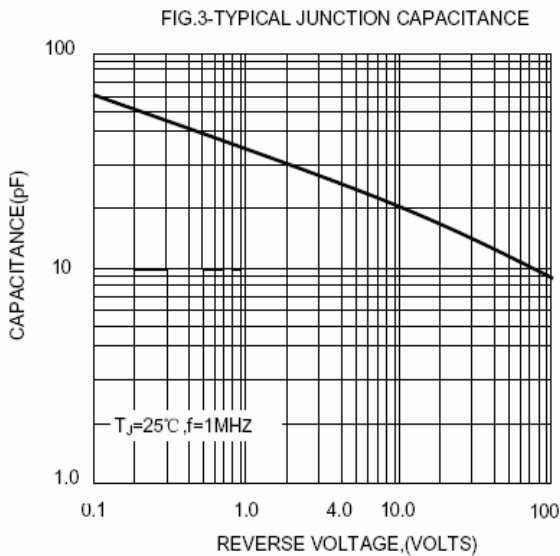
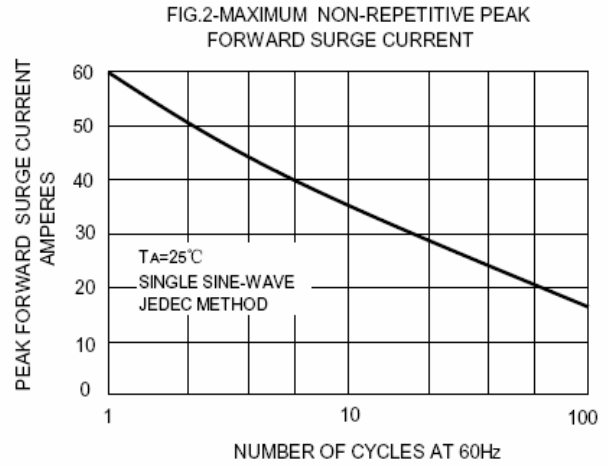
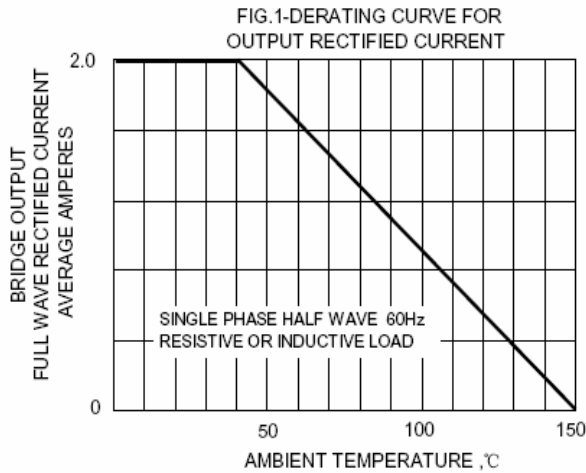
General purpose use in AC-to-DC bridge full wave rectifications for SMPS, lighting ballasters, adapters, battery chargers, home appliances, office equipment and telecommunication applications.

Maximum Ratings & Electrical Characteristics

($T_A=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | DB201S | DB202S | DB203S | DB204S | DB205S | DB206S | DB207S | Unit |
|---|-------------|-------------|--------|--------|--------|--------|--------|--------|------------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Output Rectified Current at $T_A=40$ | $I_{F(AV)}$ | 2.0 | | | | | | | A |
| Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method) | I_{FSM} | 60 | | | | | | | A |
| Rating for Fusig ($t<8.3\text{ms}$) | I^2t | 10 | | | | | | | A^2sec |
| Maximum Instantaneous Forward Voltage Drop per Leg at 2A | V_F | 1.20 | | | | | | | V |
| Maximum DC Reverse Current at $T_A=25^\circ\text{C}$ Rated DC Blocking Voltage per Leg $T_A=125^\circ\text{C}$ | I_R | 5 500 | | | | | | | μA |
| Typical Junction Capacitance per Element at 4.0V, 1MHz | C_j | 25 | | | | | | | pF |
| Operating Junction Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

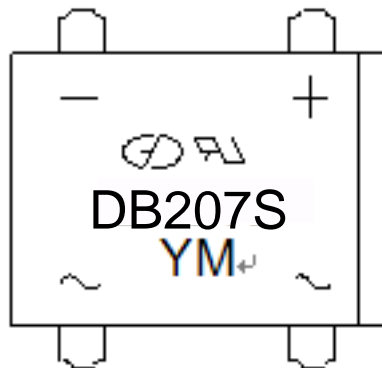
Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)



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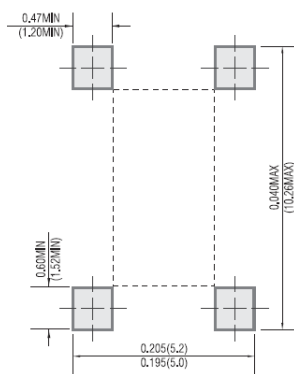
Marking



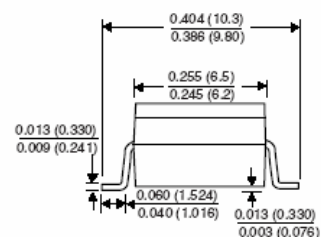
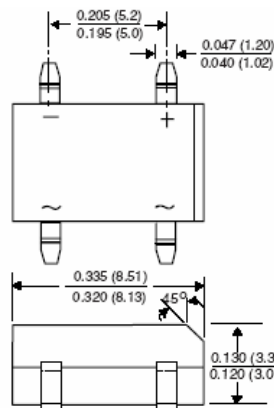
DATE CODE

| Year | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| Code | 9 | A | B | C | D | E | F | G | H | J | K | 0 |
| Month | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | O | N | D |

Package Outline Dimensions



Mounting Pad Layout



Dimensions in inches and (in millimeters)