

Single Phase 2.0AMPS. Glass Passivated Bridge Rectifiers



#### **Features**

- ∻ UL Recoganized File # E-326243
- ∻ Glass passivated junction
- Ideal for printed circuit board ∻
- ∻ High case dielectric strength
- ∻ Plastic material has Underwriters laboratory flammability Classification 94V-0
- ∻ High surge current capability
- High temperature soldering guaranteed: ∻ 260°C/10 seconds / .375", (9.5mm) lead lengths.
- ♦ Green compound with suffix "G" on packing code & prefix "G" on datecode

## Mechanical Data

- Case: Molded plastic body ∻
- ∻ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208
- Weight: 2.0 grams ∻
- Mounting position: Any ∻



### **Dimensions in inches and (millimeters)**

#### **Marking Diagram**



# **Maximum Ratings and Electrical Characteristics**

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

| Type Number   | Symbol                               | D2SB<br>05    | D2SB<br>10 | D2SB<br>20 | D2SB<br>40 | D2SB<br>60 | D2SB<br>80 | Unit             |
|---|--------------------------------------|---------------|------------|------------|------------|------------|------------|------------------|
| Maximum Repetitive Peak Reverse Voltage   | V <sub>RRM</sub>                     | 50            | 100        | 200        | 400        | 600        | 800        | V                |
| Maximum RMS Voltage   | V <sub>RMS</sub>                     | 35            | 70         | 140        | 280        | 420        | 560        | V                |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>                      | 50            | 100        | 200        | 400        | 600        | 800        | V                |
| Maximum Average Forward Rectified Current @ T_A=50 $^\circ\!$ | I <sub>F(AV)</sub>                   | 2             |            |            |            |            |            | А                |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-<br>wave Superimposed on Rated Load (JEDEC method)                              | I <sub>FSM</sub>                     | 80            |            |            |            |            |            | А                |
| Rating of fusing ( t<8.3ms)<br>(t<10ms)   | I <sup>2</sup> T                     | 27<br>32      |            |            |            |            |            | A <sup>2</sup> S |
| Maximum Instantaneous Forward Voltage (Note 1)<br>@ 2 A   | $V_{F}$                              | 1.1           |            |            |            |            |            | V                |
| Maximum DC Reverse Current at Rated DC Block<br>Voltage @T₄=25℃<br>@T₄=125℃   | I <sub>R</sub>                       | 10<br>500     |            |            |            |            |            | uA               |
| Typical Thermal Resistance  | R <sub>θjA</sub><br>R <sub>θjL</sub> | 47<br>10      |            |            |            |            | °C/W       |                  |
| Operating Temperature Range   | TJ                                   | - 55 to + 150 |            |            |            |            | OO         |                  |
| Storage Temperature Range   | T <sub>STG</sub>                     | - 55 to + 150 |            |            |            |            |            | °C               |

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle



## RATINGS AND CHARACTERISTIC CURVES (D2SB05 THRU D2SB80)











FIG. 4 TYPICAL JUNCTION CAPACITANCE

10

REVERSE VOLTAGE(V)

100

1000

0.1

1