



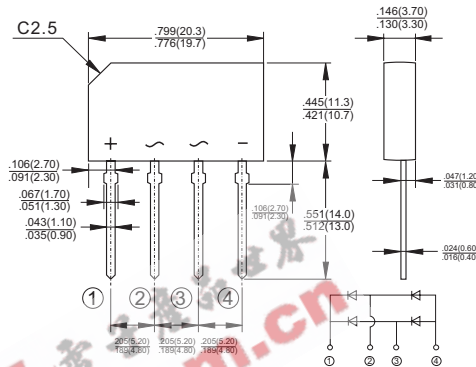
# D2SB05 - D2SB80

## Single Phase 1.5 AMPS. Glass Passivated Bridge Rectifiers

### GBL

### Features

- ✦ Glass passivated chip junction
- ✦ Ideal for printed circuit board
- ✦ High case dielectric strength
- ✦ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✦ Typical IR less than 0.1μA
- ✦ High surge current capability
- ✦ High temperature soldering guaranteed: 260°C / 10 seconds / .375", (9.5mm) lead lengths.



### Mechanical Data

- ✦ Case: Molded plastic body.
- ✦ Terminals: Pure tin plated, Lead free, leads solderable per MIL-STD-750, Method 2026.
- ✦ Weight: 0.071 ounce, 2.0 grams
- ✦ Mounting position: Any

Dimensions in inches and (millimeters)

### 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 05      | D2SB 10 | D2SB 20 | D2SB 40 | D2SB 60 | D2SB 80 | Units              |
|---|------------------------------------|--------------|---------|---------|---------|---------|---------|--------------------|
| Maximum Recurrent Peak Reverse Voltage  | $V_{RRM}$                          | 50           | 100     | 200     | 400     | 600     | 800     | V                  |
| Maximum RMS Voltage   | $V_{RMS}$                          | 35           | 70      | 140     | 280     | 420     | 560     | V                  |
| Maximum DC Blocking Voltage   | $V_{DC}$                           | 50           | 100     | 200     | 400     | 600     | 800     | V                  |
| Maximum Average Forward Rectified Current @ $T_A = 50^\circ\text{C}$  | $I_{(AV)}$                         | 1.5          |         |         |         |         |         | A                  |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )           | $I_{FSM}$                          | 80           |         |         |         |         |         | A                  |
| Rating for fusing (t<8.3ms)<br>(t<10ms)   | $I^2t$                             | 27<br>32     |         |         |         |         |         | A <sup>2</sup> sec |
| Maximum Instantaneous Forward Voltage @ 0.75A   | $V_F$                              | 1.05         |         |         |         |         |         | V                  |
| Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$<br>at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$ | $I_R$                              | 10<br>500    |         |         |         |         |         | μA<br>μA           |
| Typical Thermal Resistance Per Leg (Note )  | $R_{\theta JA}$<br>$R_{\theta JL}$ | 47<br>10     |         |         |         |         |         | °C/W               |
| Operating Temperature Range   | $T_J$                              | -55 to +150  |         |         |         |         |         | °C                 |
| Storage Temperature Range   | $T_{STG}$                          | -55 to + 150 |         |         |         |         |         | °C                 |

Notes 1: Units Mounted In Free Air No Heat Sink On PCB 0.5x0.5 " (12x12mm) Copper Pads, 0.375"(9.5mm) Lead Length.

### RATINGS AND CHARACTERISTIC CURVES (D2SB05 THRU D2SB80)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

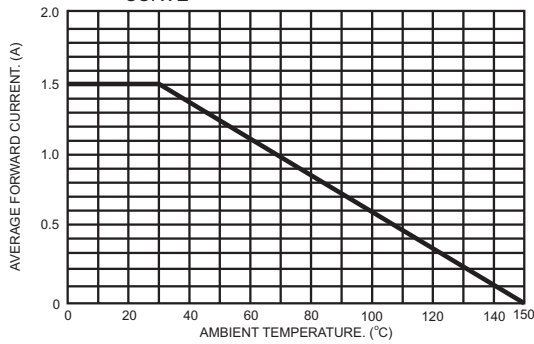


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

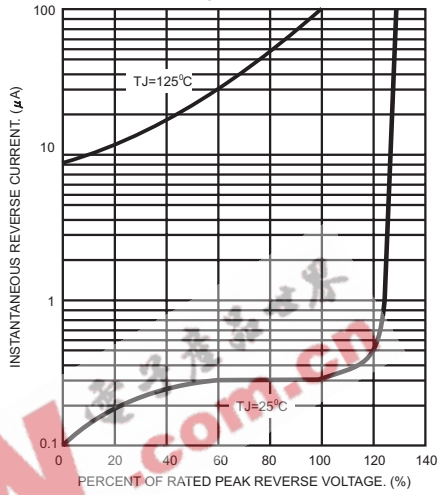


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

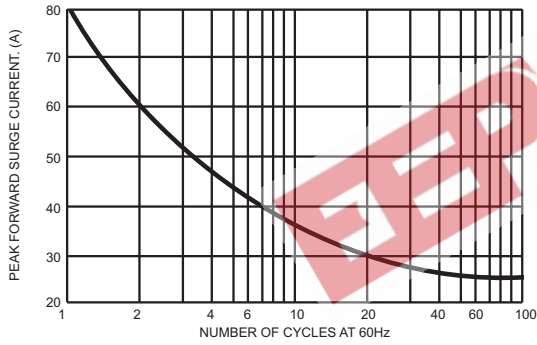


FIG.4- TYPICAL JUNCTION CAPACITANCE

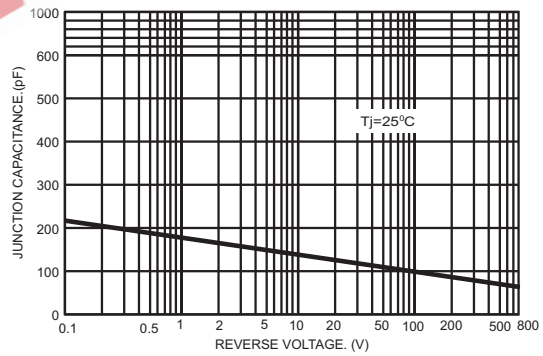


FIG.5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

