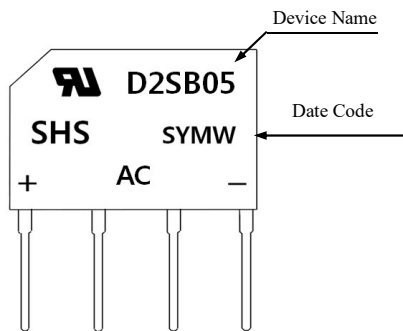## Glass Passivated Bridge Rectifiers
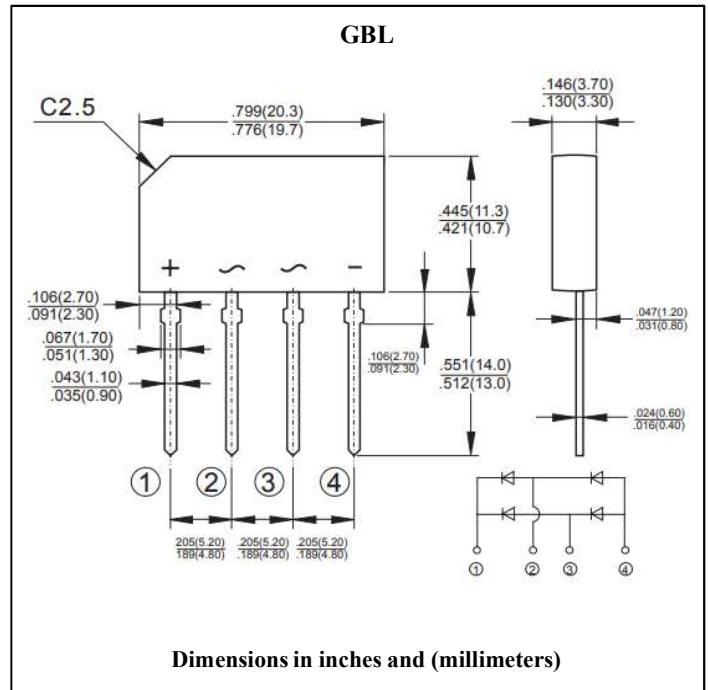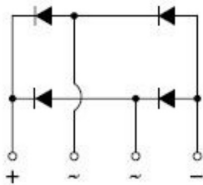## Reverse Voltage 50 to 1000 Volts Forward Current 1.5 Amperes

### Features
• Glass passivated junction
• Superior thermal chip junctions
• Plastic package has Underwriters Laboratory Flammability
  Classification 94V-0
• High current capacity with small package

### Marking

### Equivalent Circuit



**GBL**

Dimensions in inches and (millimeters)

### Maximum Ratings & Electrical Characteristics

Ratings 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%

| Parameter | Symbol | D2S B05 | D2S B10 | D2S B20 | D2S B40 | D2S B60 | D2S B80 | D2S B100 | Unit | Remark |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 Rectified Current (60Hz Sine Wave, R-load) | $I_O$ | 1.5 | | | | | | | A | $T_A$=50℃ |
| Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 60 | | | | | | | A | |
| Maximum Instantaneous Forward Voltage @ 1.5A | $V_F$ | 1.1 | | | | | | | V | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $I_R$ | 10.0 | | | | | | | uA | Ta=25°C |
| | | 1.0 | | | | | | | mA | Ta=125℃ |
| Rating For Fusing (t<8.3ms) | $I^2t$ | 15 | | | | | | | $A^2S$ | |
| Typical Thermal Resistance | Rth(j-c) | 3.5 | | | | | | | ℃/W | |
| | Rth(j-a) | 40 | | | | | | | | |
| Operating Temperature Range | $T_J$ | -55 to +150 | | | | | | | ℃ | |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | | | | | | | ℃ | |

Note 1. Unit case mounted on 1.6*1.6*0.06"thick (5.1*5.1*0.15cm) Al plate
Note 2. Unit mounted on P.C.B. with 0.5*0.5"(1.27*1.27mm)copper pads and 0.375" (9.5mm) lead length

**Ratings and Characteristics Curves** (Ta=25℃ unless otherwise noted)
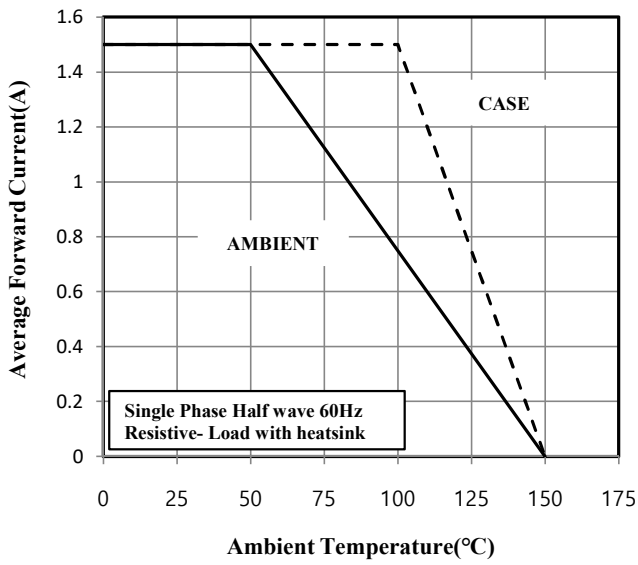
**Fig.1 Forward Current Derating Curve**



**Fig.2 Maximum Non-Repetitive Peak Forward Surge
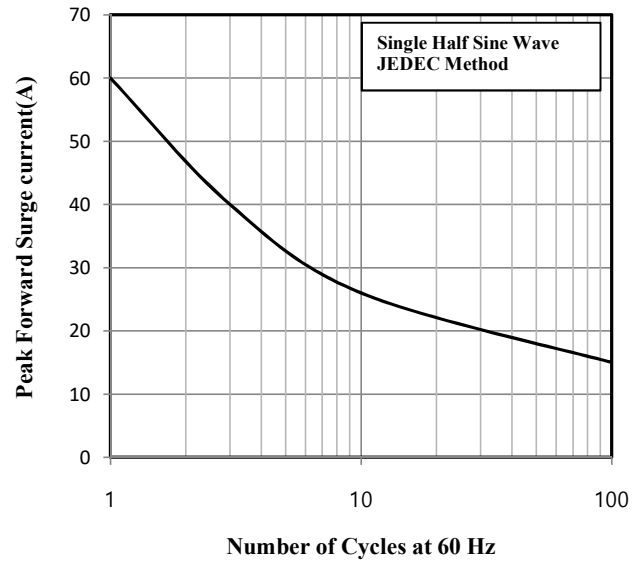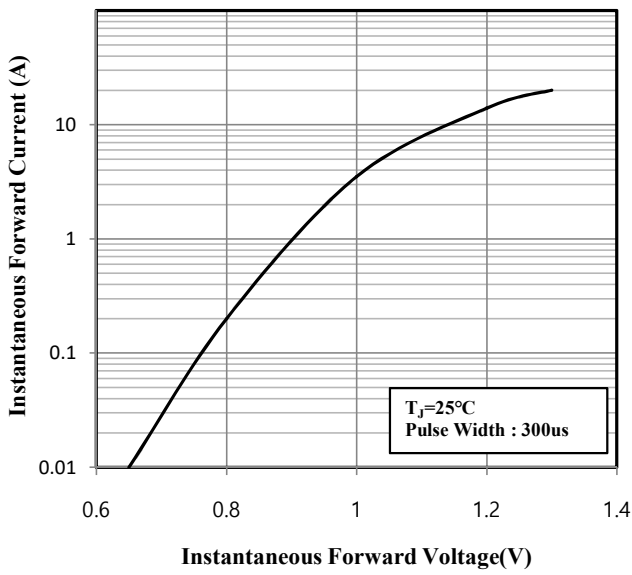Current Per Bridge Element**



**Fig.3 Typical Instantaneous Forward
Characteristics Per Bridge Element**



**Fig.4 Typical Reverse Charateristics**