

**TSC**  
**D2SB05 THRU D2SB80**  
Single Phase 1.5 AMPS. Glass Passivated Bridge Rectifiers



Voltage Range  
50 to 800 Volts  
Current  
1.5 Amperes

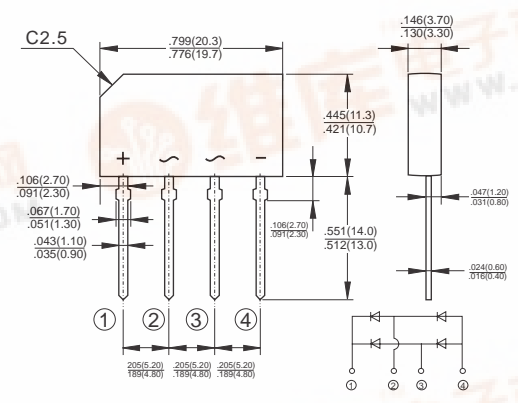
**Features**

- ✧ 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: Plated leads solderable per MIL-STD-750, Method 2026.
- ✧ Weight: 0.071 ounce, 2.0 grams
- ✧ Mounting position: Any

**GBL**



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 <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 <sub>A</sub> = 50°C	I <sub>(AV)</sub>	1.5						A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	80						A
Maximum Instantaneous Forward Voltage @ 0.75A	V <sub>F</sub>	1.05						V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C at Rated DC Blocking Voltage @ T <sub>A</sub> =125°C	I <sub>R</sub>	10.0 500						µA µA
Typical Thermal Resistance Per Leg (Note)	R <sub>θJA</sub> R <sub>θJL</sub>	47.0 10.0						°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150						°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150						°C

Notes 1: Units Mounted In Free Air No Heat Sink On PCB 0.4" x 0.4" (10mm x 10mm) Copper Pads, 0.375"(9.5mm) Lead Length.





## RATINGS AND CHARACTERISTIC CURVES (D2SB05 THRU D2SB80)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

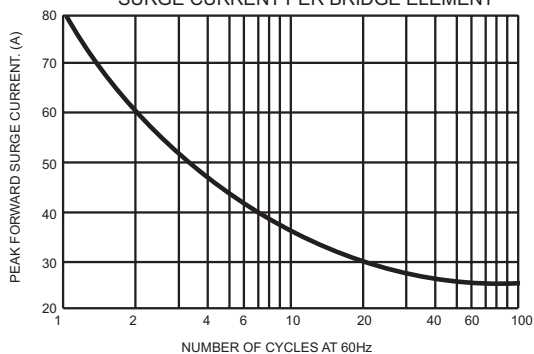


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

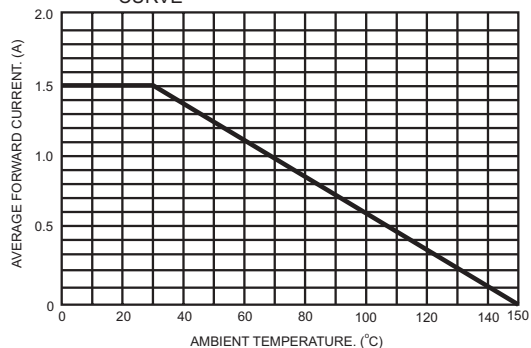


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

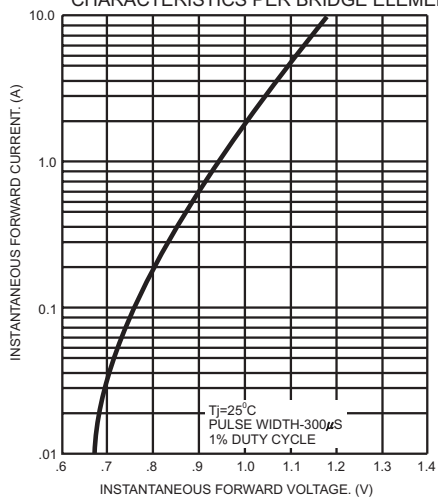


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

