



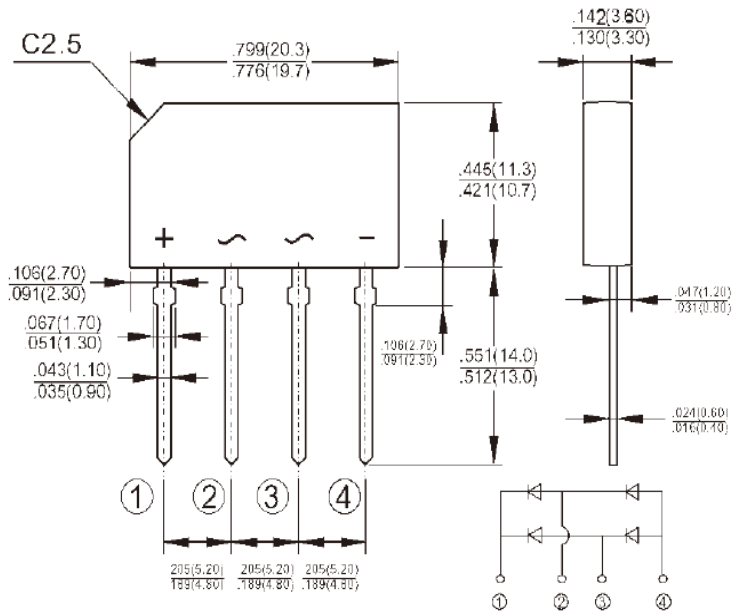
RoHS
COMPLIANCE



GBL

Features

- ✧ UL Recognized 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

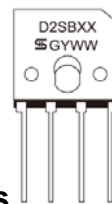


Mechanical Data

- ✧ 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



- D2SBXX = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

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	Unit
Maximum Repetitive 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 @ $T_A=50^\circ C$	$I_{F(AV)}$	2						A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	80						A
Rating of fusing ($t < 8.3ms$) ($t < 10ms$)	I^2T	27 32						A^2S
Maximum Instantaneous Forward Voltage @2.0A	V_F	1.1						V
Maximum DC Reverse Current at Rated DC Block Voltage (Note 1) @ $T_A=25^\circ C$ @ $T_A=125^\circ C$	I_R	10 500						μA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	47 10						$^\circ C/W$
Operating Temperature Range	T_J	- 55 to + 150						$^\circ C$
Storage Temperature Range	T_{STG}	- 55 to + 150						$^\circ C$

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

Note 2 : Units Mounted In Free Air No Heat Sink On PCB 0.5" x 0.5"(12x12mm) Copper Pads, 0.375"(9.5mm) Lead Length.

RATINGS AND CHARACTERISTIC CURVES (D2SB05 THRU D2SB80)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

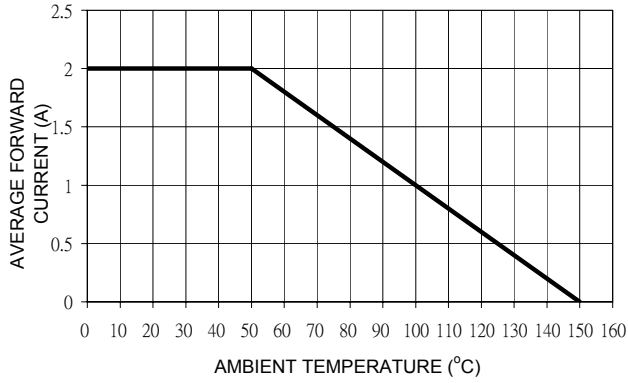


FIG. 2 TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

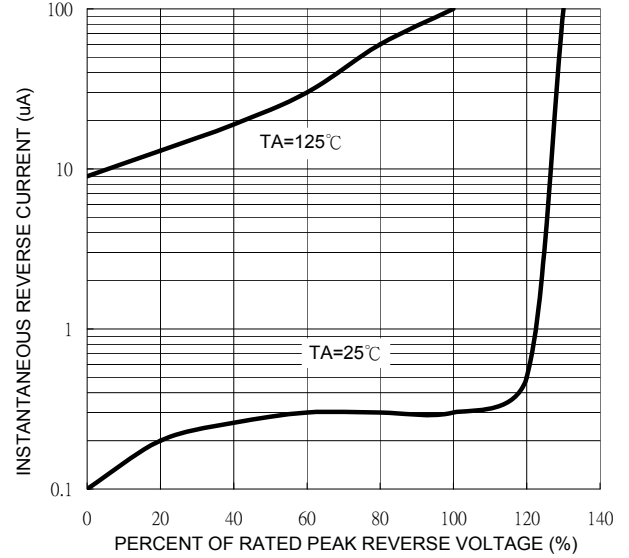


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

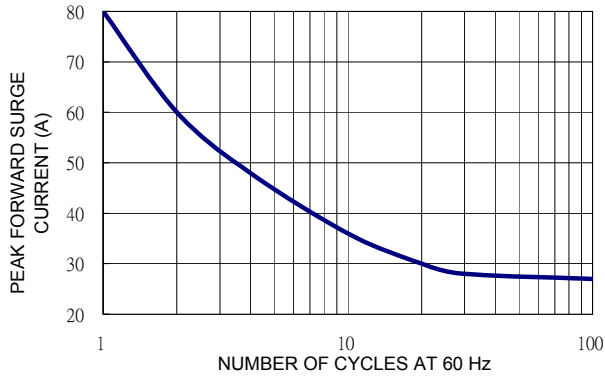


FIG. 4 TYPICAL JUNCTION CAPACITANCE

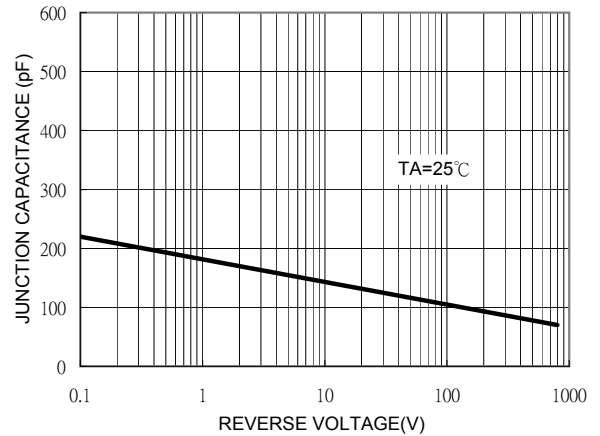


FIG. 5 TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

