

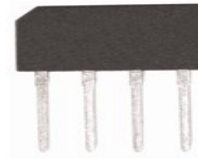
VOLTAGE RANGE: 50 - 800V
CURRENT: 2.0 A

Features

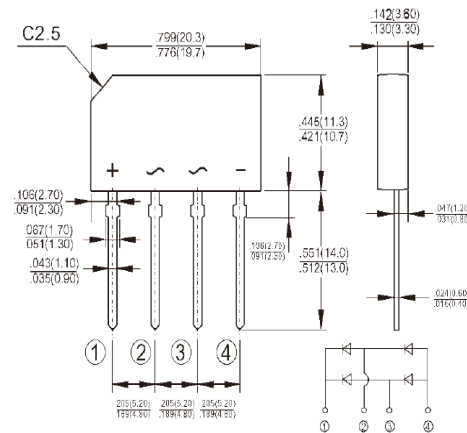
- Glass passivated junction
- Ideal for printed circuit board
- High case dielectric strength
- Plastic material has Underwriters laboratory flammability Classification 94V-0
- High surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds / .375", (9.5mm) lead lengths.

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



GBL



Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	D2SB05	D2SB10	D2SB20	D2SB40	D2SB60	D2SB80	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 @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	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 ($t < 8.3\text{ms}$) ($t < 10\text{ms}$)	I^2T	27 32						A ² S
Maximum Instantaneous Forward Voltage @2.0A	V_F	1.1						V
Maximum DC Reverse Current at Rated DC Block Voltage (Note 1) @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	I_R	10 500						μA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	47 10						$^\circ\text{C/W}$
Operating Temperature Range	T_J	- 55 to + 150						$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 150						$^\circ\text{C}$

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

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.

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

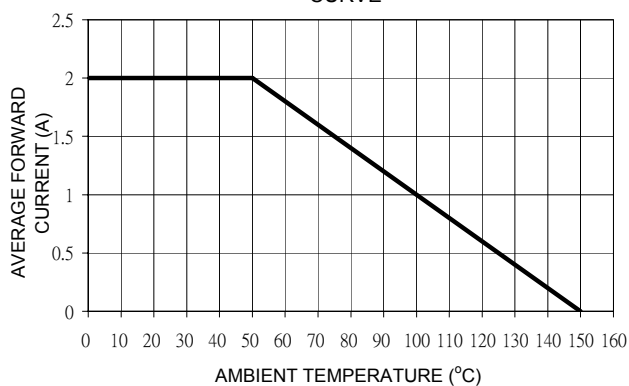


FIG. 2 TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

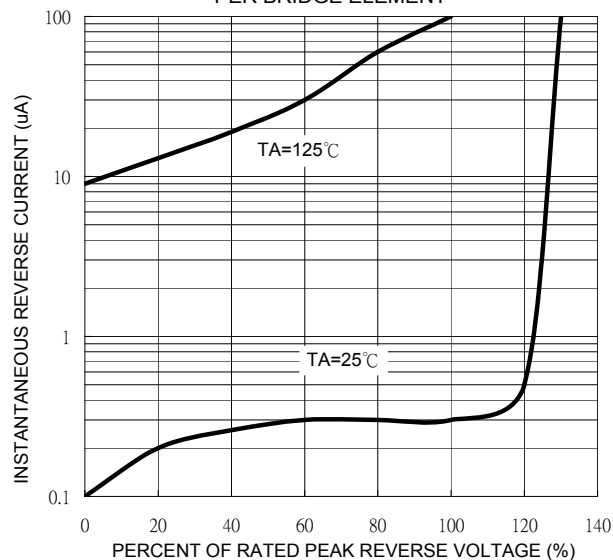


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

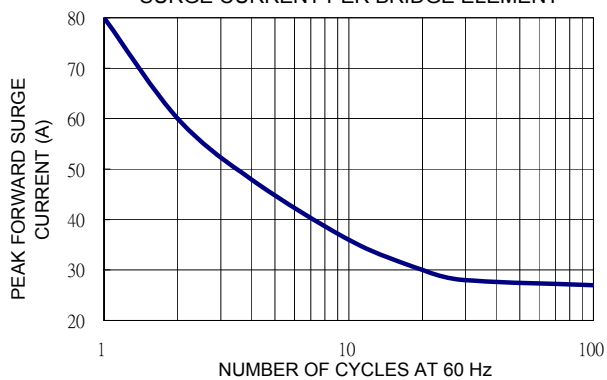


FIG. 4 TYPICAL JUNCTION CAPACITANCE

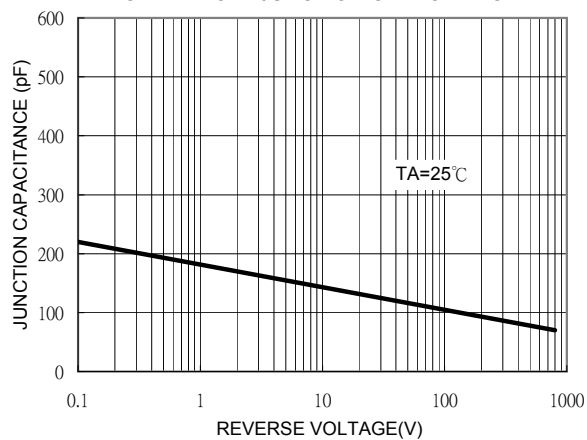


FIG. 5 TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

