

D2SB05-D2SB80

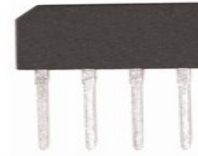
SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE: 50 - 800V

CURRENT: 2.0 A

Features

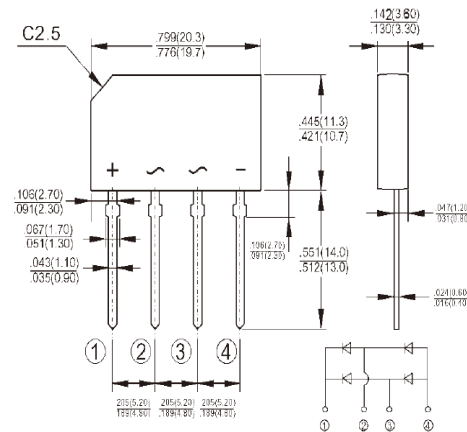
- Glass passivated junction
 - Ideal for printed circuit board
 - High case dielectric strength
 - Plastic material has Underwriters laboratory flammability Classification 94V-0
 - High surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds / .375", (9.5mm) lead lengths.



GBL

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



Maximum Ratings and Electrical Characteristics

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 @ $T_A=50^{\circ}C$	$I_{F(AV)}$	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 ² S
Maximum Instantaneous Forward Voltage @2.0A	V_F	1.1						V
Maximum DC Reverse Current at Rated DC Block Voltage (Note 1) @ $T_A=25^{\circ}C$ @ $T_A=125^{\circ}C$	I_R	10 500						uA
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

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

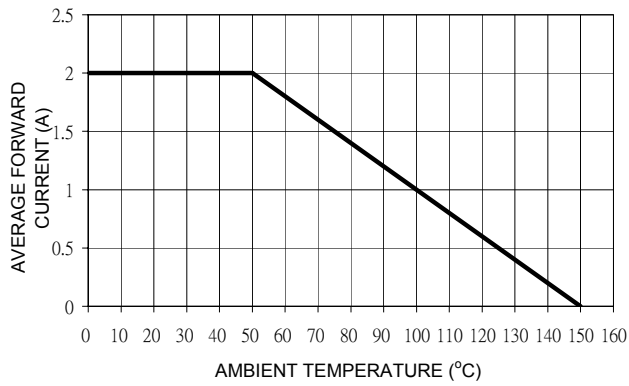


FIG. 2 TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

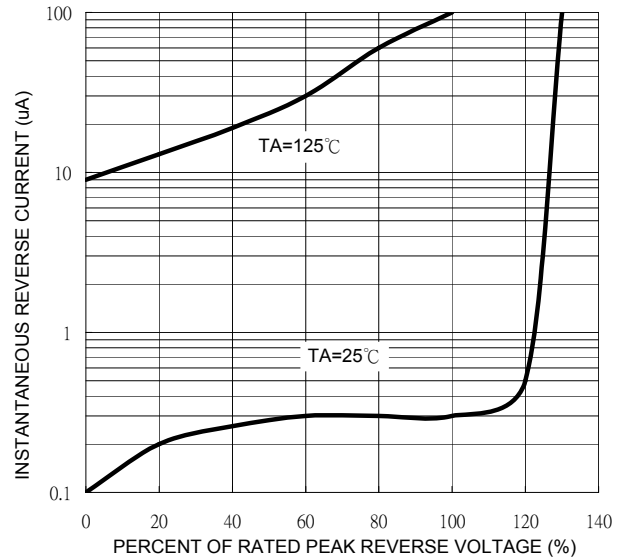


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

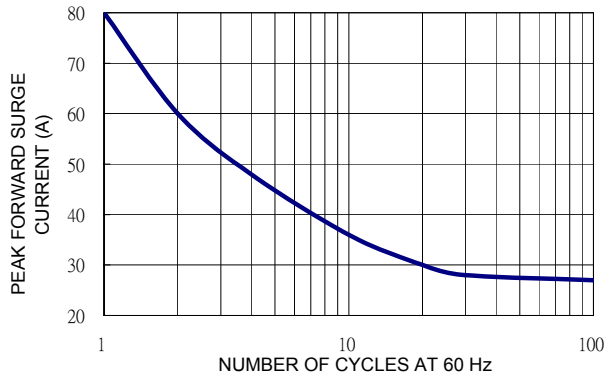


FIG. 4 TYPICAL JUNCTION CAPACITANCE

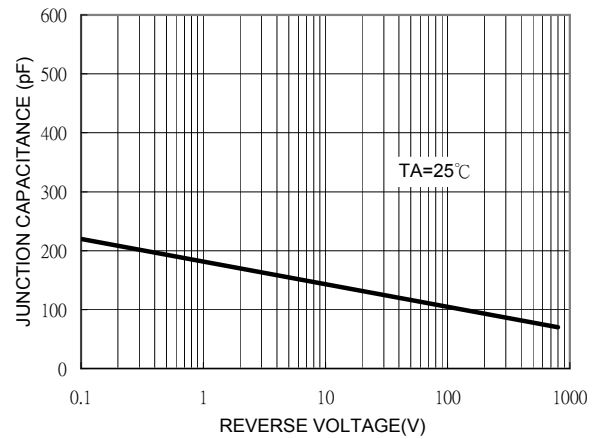


FIG. 5 TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

