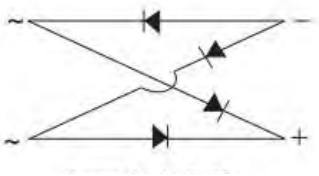
Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 100 and 1000V Forward Current 3.0A



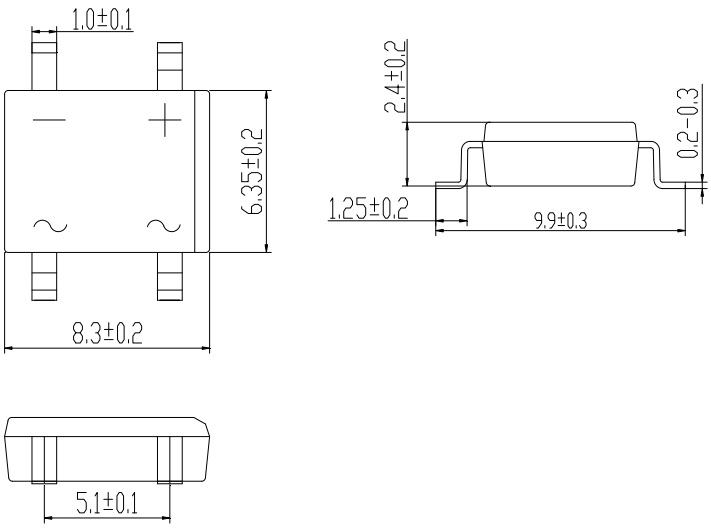
Features

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V- 0
- ◆ Ideal for printed circuit boards
- ◆ High surge current capability

Mechanical Data

- ◆ Case: DBS Molded plastic body
- ◆ Terminals: Plated leads solderable per MIL- STD- 750, Method 2026
- ◆ High temperature soldering guaranteed: 260℃/10 seconds, 0.375 (9.5mm) lead length, 5lbs.(2.3kg) tension

Mounting Position: Any



Dimensions in millimeters

Maximum Ratings & Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Parameter	Symbol	DB301S	DB302S	DB303S	DB304S	DB305S	DB306S	DB307S	Unit
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
Average forward rectified output current	$I_{F(AV)}$	3.0							A
Peak forward surge current single sine- wave superimposed on rated load (JEDEC Method)	I_{FSM}	80							A
Rating for fusig (t<8.3ms)	I^2t	26.5							A^2sec
Maximum instantaneous forward voltage drop per leg at 2.0A	VF	1.00							V
Maximum DC reverse current at Tj=25℃	IR	5.0							mA
rated DC blocking voltage per leg Tj=125℃		500							
Typical thermal resistance per leg (Note 1)	$R_{\theta JA}$	40							℃/W
	$R_{\theta JL}$	15							
Operating junction temperature range	T_J	- 55 to +150							℃
Storage temperature range	T_{STG}	- 55 to +150							℃

Note

(1) Units mounted on PCB with 0.47× 0.47(12× 12mm) Copper Pads

Ratings and Characteristics Curves (TA = 25℃ unless otherwise noted)

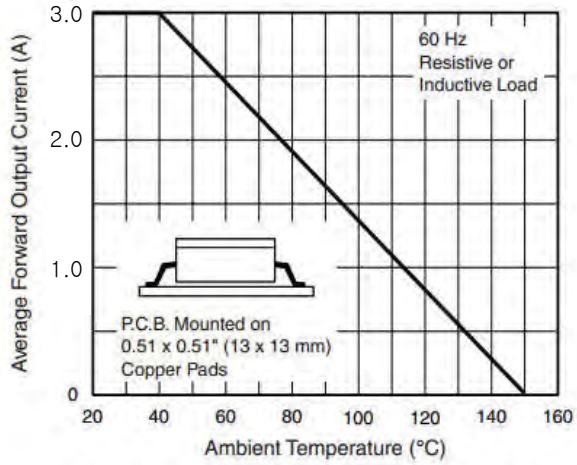


Fig. 1 - Derating Curve Output Rectified Current

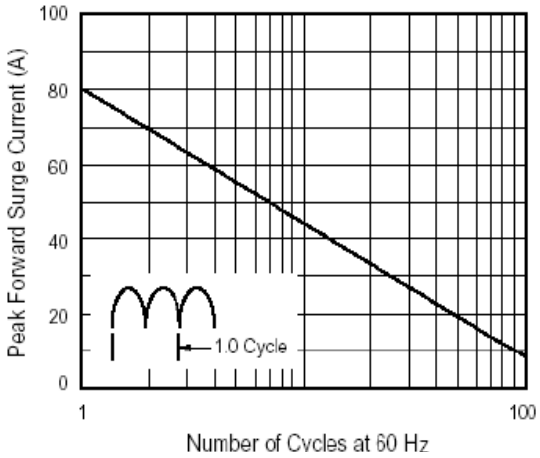


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

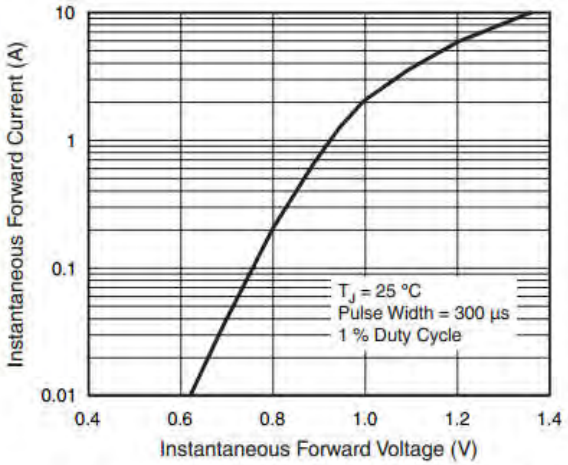


Fig. 3 - Typical Forward Characteristics Per Diode

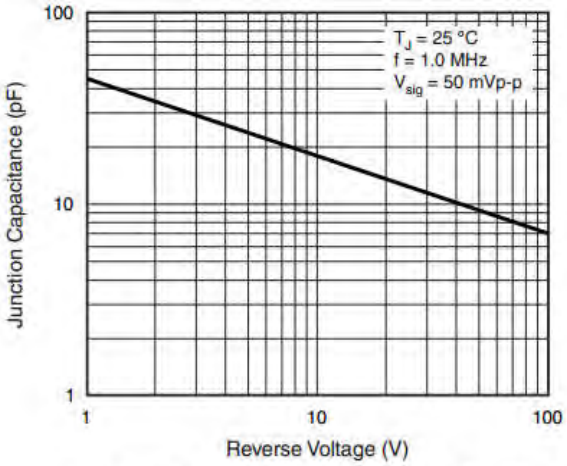


Fig. 5 - Typical Junction Capacitance Per Diode

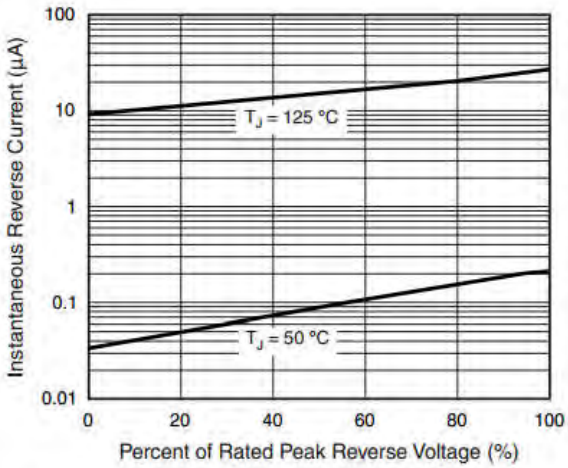


Fig. 4 - Typical Reverse Leakage Characteristics Per Diode

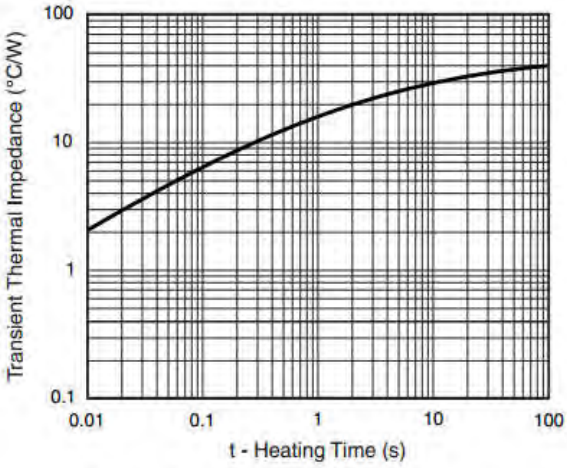


Fig. 6 - Typical Transient Thermal Impedance