

GSDB201S thru GSDB207S

Surface Mount Glass Passivated Bridge Rectifiers
 Reverse Voltage 50 to 1000V Forward Current 2.0A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Rating to 1000V PRV
- Ideal for printed circuit board
 High temperature soldering guaranteed: 260°C/10 seconds at terminals
 Component in accordance to RoHS 2011/65/EU



Package: DBS

Mechanical Data

- Case: DBS molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting Position: Any

Absolute Maximum Ratings & Electrical Characteristics

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

Parameter	Symbol	GSDB 201S	GSDB 202S	GSDB 203S	GSDB 204S	GSDB 205S	GSDB 206S	GSDB 207S	Unit
Maximum Recurrent 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
Maximum Average Forward Rectified Current	$I_{(AV)}$	2							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed On Rated Load (JEDEC Method)	I_{FSM}	60							A
Maximum Instantaneous Forward Voltage at 2.0A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage, $T_A=25^\circ\text{C}$	I_R	10							μA
Maximum DC Reverse Current at Rated DC Blocking Voltage, $T_A=125^\circ\text{C}$		500							
Typical Thermal Resistance ²	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
Junction Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0 Volts.
2. Mounted on P.C.B. With 0.5*0.5 inches (13*13mm) copper pads.

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Typical Electrical Characteristic Curves

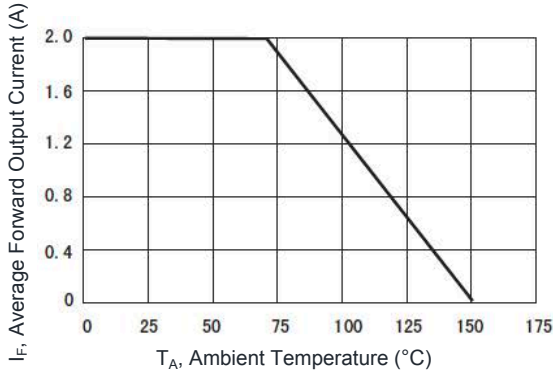


Figure 1. Typical Forward Current Derating Curve

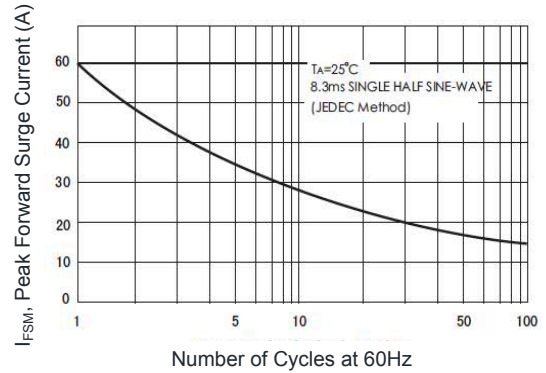


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

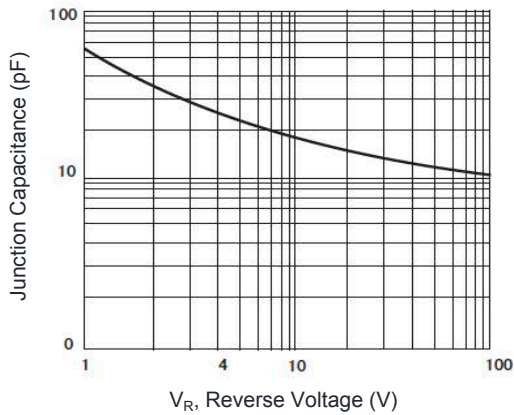


Figure 3. Typical Junction Capacitance

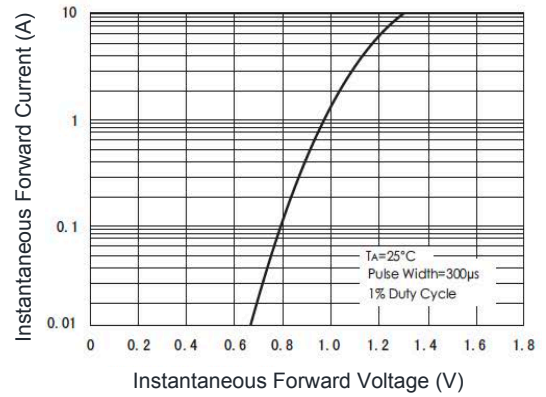


Figure 4. Typical Forward Characteristics

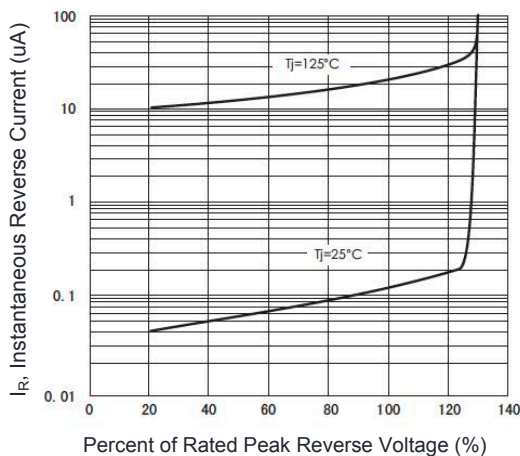
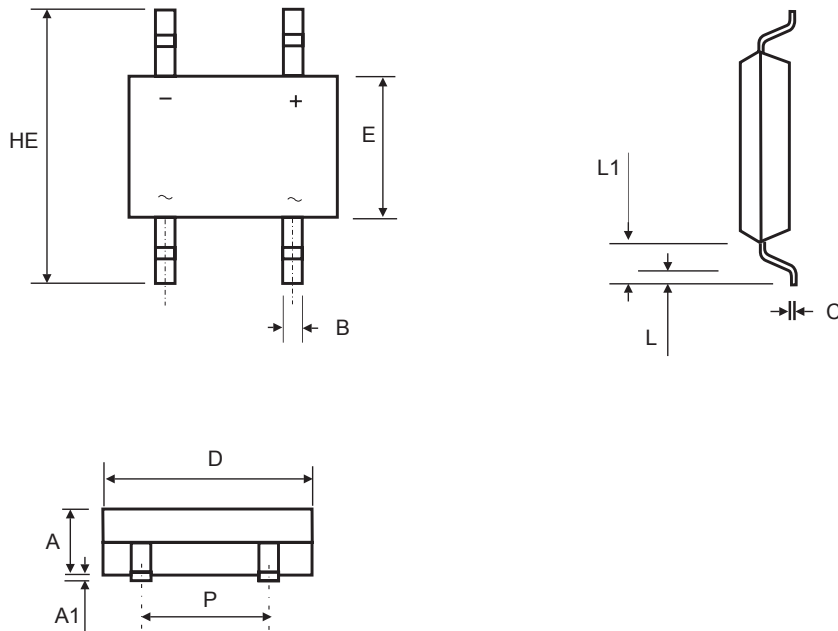


Figure 5. Typical Reverse Characteristics

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Package Outline Dimensions (DBS)



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	2.15	3.40	0.085	0.134
A1	0.08	0.33	0.003	0.013
B	0.90	1.20	0.035	0.047
C	0.22	0.33	0.009	0.013
D	8.00	8.50	0.315	0.335
E	6.20	6.50	0.244	0.256
HE	9.30	10.30	0.366	0.406
L	1.02	1.53	0.040	0.060
L1	1.80	2.10	0.071	0.083
P	5.00	5.20	0.197	0.205