

GSDF005S thru GSDF10S

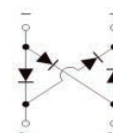
Surface Mount Glass Passivated Bridge Rectifiers
 Reverse Voltage 50V to 1000V Forward Current 1.0A

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 2015/863/EU



Package: DBS



Schematic Diagram

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	GSDF 005S	GSDF 01S	GSDF 02S	GSDF 04S	GSDF 06S	GSDF 08S	GSDF 10S	Unit
Maximum Reverse 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 _{F(AV)}	1							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed On Rated Load (JEDEC Method)	I _{FSM}	45							A
Maximum Instantaneous Forward Voltage at 1.0A DC	V _F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage, T _A =25°C	I _R	5							μA
Maximum DC Reverse Current at Rated DC Blocking Voltage, T _A =125°C		100							
Typical Thermal Resistance ¹	R _{θJA}	40							°C/W
Operating Junction Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

Notes:

- Thermal resistance junction to ambient mounted on P.C.B. with 0.5*0.5 inches (1.3*1.3mm) copper pads.

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Typical Electrical Characteristic Curves

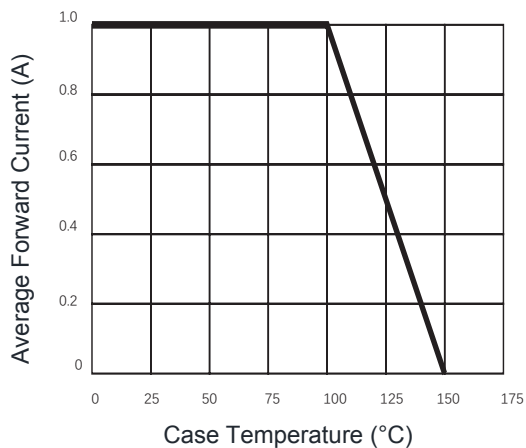


Figure 1. Typical Forward Current Derating Curve

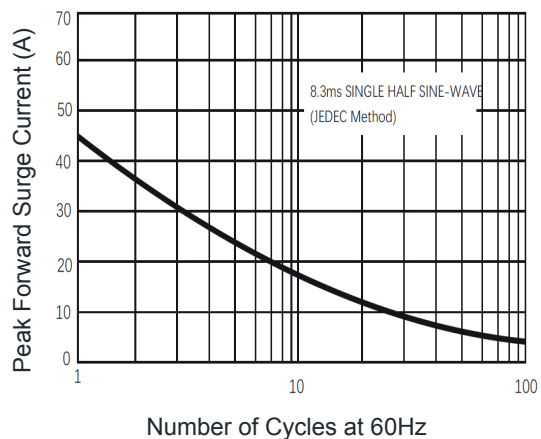


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

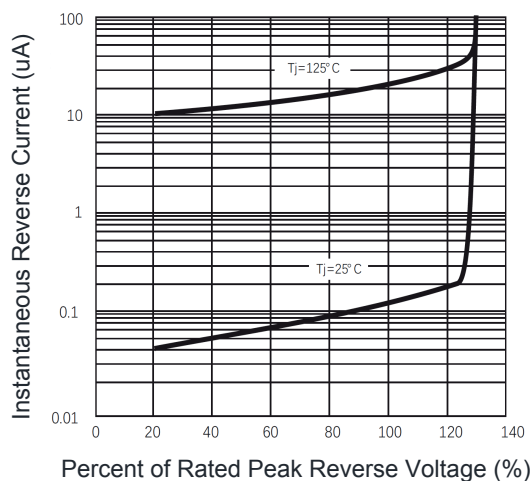


Figure 3. Typical Reverse Characteristics

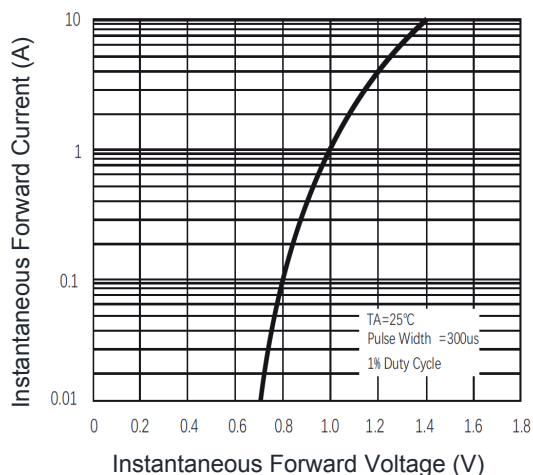
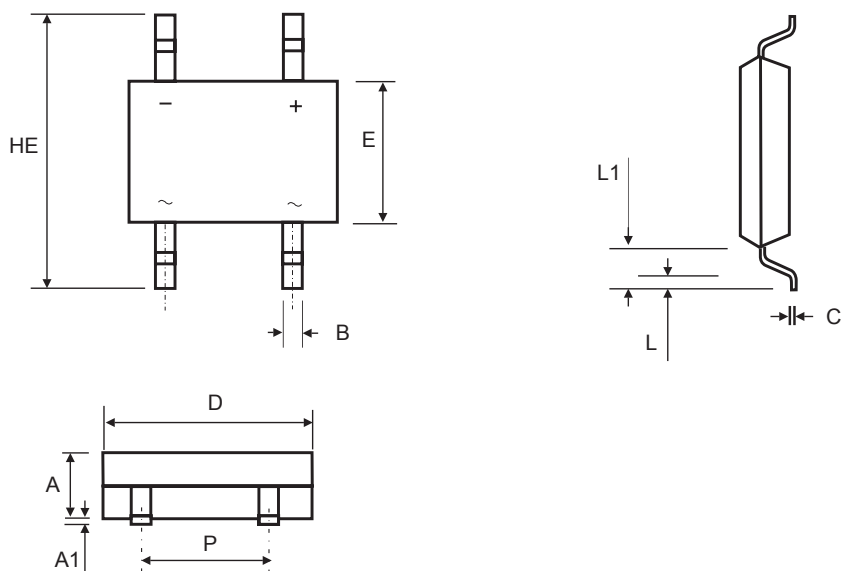


Figure 4. Typical Forward Characteristics

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Package Outline Dimensions (DBS)



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	2.10	3.40	0.083	0.134
A1	0.08	0.33	0.003	0.013
B	0.90	1.20	0.035	0.047
C	0.15	0.33	0.006	0.013
D	7.95	8.80	0.313	0.346
E	6.10	6.50	0.240	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

Order Information

Device	Package	Marking	Carrier	Quantity
GSDF005S	DBS	DF005S	Tape & Reel	1,500 pcs / Reel
GSDF01S	DBS	DF01S	Tape & Reel	1,500 pcs / Reel
GSDF02S	DBS	DF02S	Tape & Reel	1,500 pcs / Reel
GSDF04S	DBS	DF04S	Tape & Reel	1,500 pcs / Reel
GSDF06S	DBS	DF06S	Tape & Reel	1,500 pcs / Reel
GSDF08S	DBS	DF08S	Tape & Reel	1,500 pcs / Reel
GSDF10S	DBS	DF10S	Tape & Reel	1,500 pcs / Reel