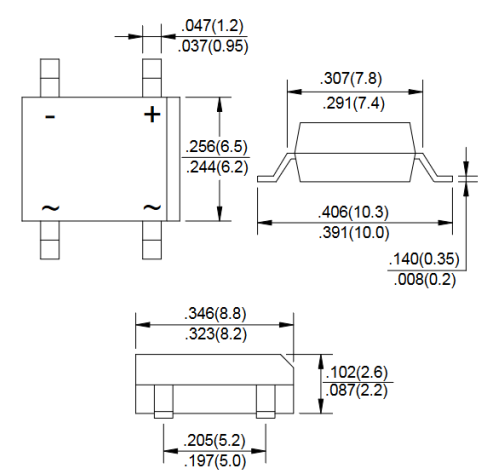


## SMD Glass Passivated Bridge Rectifiers

Primary characteristics		
Parameter	Value	Unit
$V_R$ reverse voltage range nom.	50 ~ 1000	V
$I_F$ forward current	1.0	A

### Features

- **DBS** case for easy automatic insertion
- Pb-Free and **RoHS** Compliant
- Rating to **1000V** peak reverse voltage
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0

Case dimensions
 <p>Top view dimensions: .047(1.2), .037(0.95), .307(7.8), .291(7.4), .256(6.5), .244(6.2), .406(10.3), .391(10.0), .140(0.35), .008(0.2)</p> <p>Side view dimensions: .346(8.8), .323(8.2), .102(2.6), .087(2.2)</p> <p>End view dimensions: .205(5.2), .197(5.0)</p>
<b>DBS</b>
Dimensions in inches and (millimeters) Polarity: as marked on body

Part numbering system		
<b>DB10</b> ↓ Series code	<b>4</b> ↓ Peak Reverse Voltage (see: Characteristics table below)	<b>S</b> ↓ Series code

Characteristics table										
	Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	Unit	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @T <sub>A</sub> =40°C	I <sub>(AV)</sub>	1.0							A	
Peak Forward Surge Current <sup>1)</sup>	I <sub>FSM</sub>	50							A	
Maximum Forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							V	
Maximum DC Reverse Current @Rated DC Blocking Voltage	@T <sub>J</sub> =25°C	I <sub>R</sub>	10							μA
	@T <sub>J</sub> =125°C		500							
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	10.4							A <sup>2</sup> s	
Typical Junction Capacitance Per Element <sup>2)</sup>	C <sub>J</sub>	25							pF	
Typical Thermal Resistance <sup>3)</sup>	R <sub>θJC</sub>	40							°C/W	
Operating Temperature Range	T <sub>J</sub>	-55 to 150							°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to 150							°C	

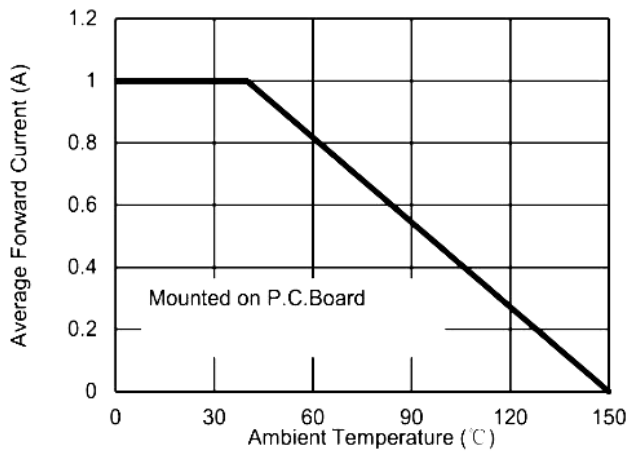
<sup>1)</sup> 8.3ms single half sinewave superimposed on rated load (JEDEC method)

<sup>2)</sup> Measured at 1.0MHz and applied reverse voltage of 4.0V DC

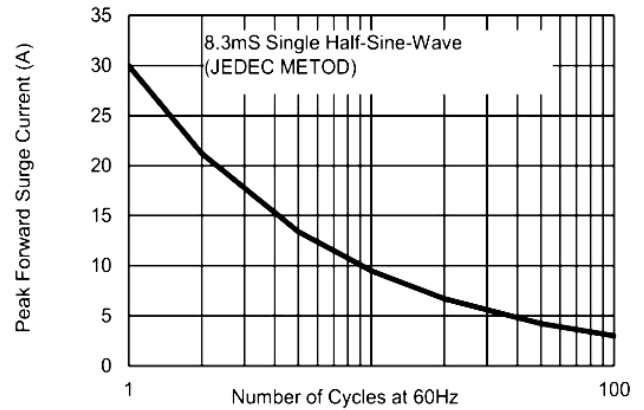
<sup>3)</sup> Thermal resistance from junction to ambient mounted on P.C.B. with 0.5\*0.5" (13\*13mm) copper pads

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

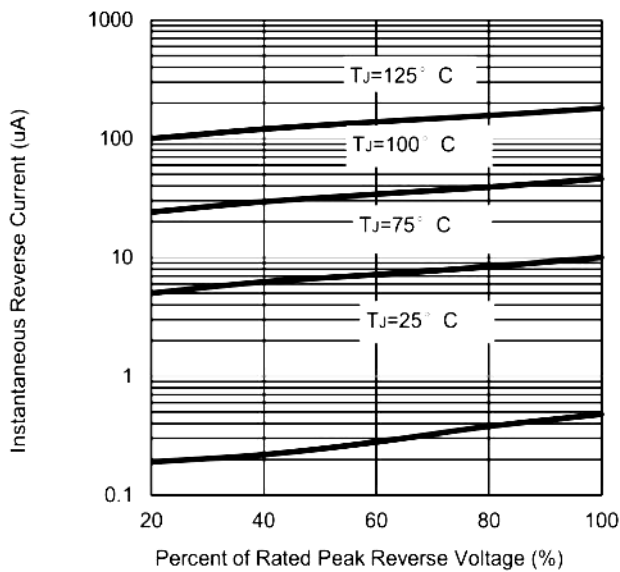
**Forward current derating curve**



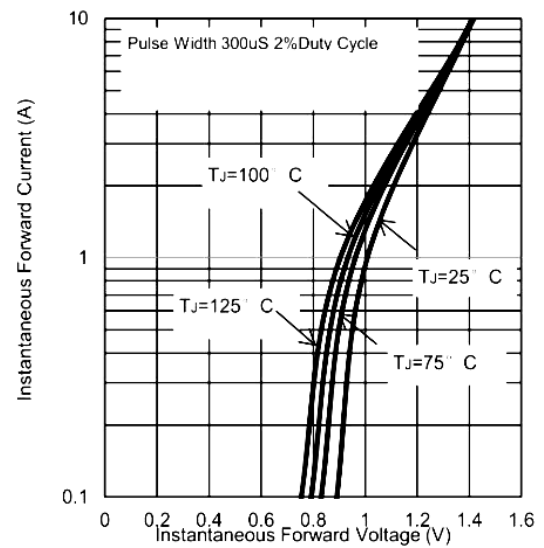
**Maximum non-repetitive surge current**



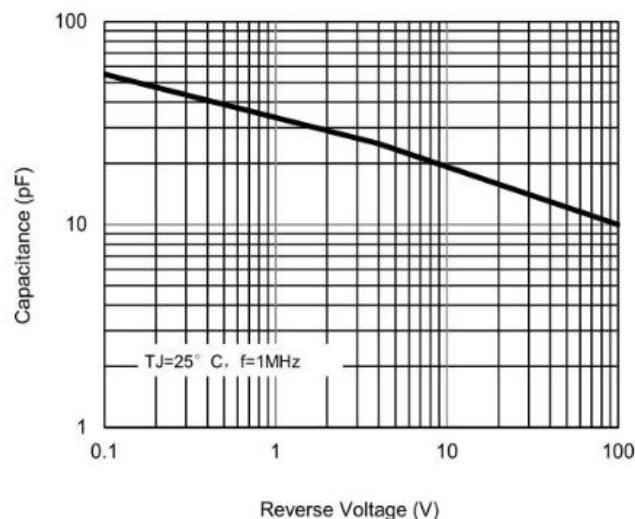
**Typical reverse characteristics**



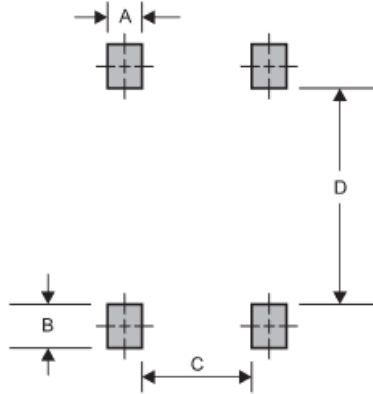
**Typical forward characteristics**



**Typical junction capacitance**



## Suggested soldering pad layout



**DBS**

## Pad dimensions

Unit	A	B	C	D
mm	1.50	1.20	4.00	7.40

## Ordering information

Part Number	Package	Shipping Quantity	Dimensions
DB101S ~ DB107S	DBS	1500 pcs / reel	---

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