



## DB101S thru DB107S

### Features

- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 50 amperes
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265 °C /10 seconds at 5 lbs (2.3kg) tension

**1.0 A Single-Phase Glass Passivated Bridge Rectifiers**  
Rectifier Reverse Voltage  
50 to 1000V

### Mechanical Data

Case: Molded plastic

Terminals: Plated leads solderable per MIL-STD-202,  
Method 208

Polarity: Marked on body

Weight: 0.04 ounce, 1.0 grams (approx)

### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60Hz.  
For Capacitive load derate current by 20%.

Parameter	Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=40°C	IF(AV)				1.0				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM				50				A
Rating for fusing ( $t < 8.3ms$ )	$I^2 t$				10				$\frac{A}{sec}$
Typical thermal resistance per element (1)	ReJA				110				$^{\circ}C/W$
Typical junction capacitance per element(2)	Cj				25.0				pF
Operating junction and storage temperature range	TJ, TSTG				-55 to + 150				$^{\circ}C$

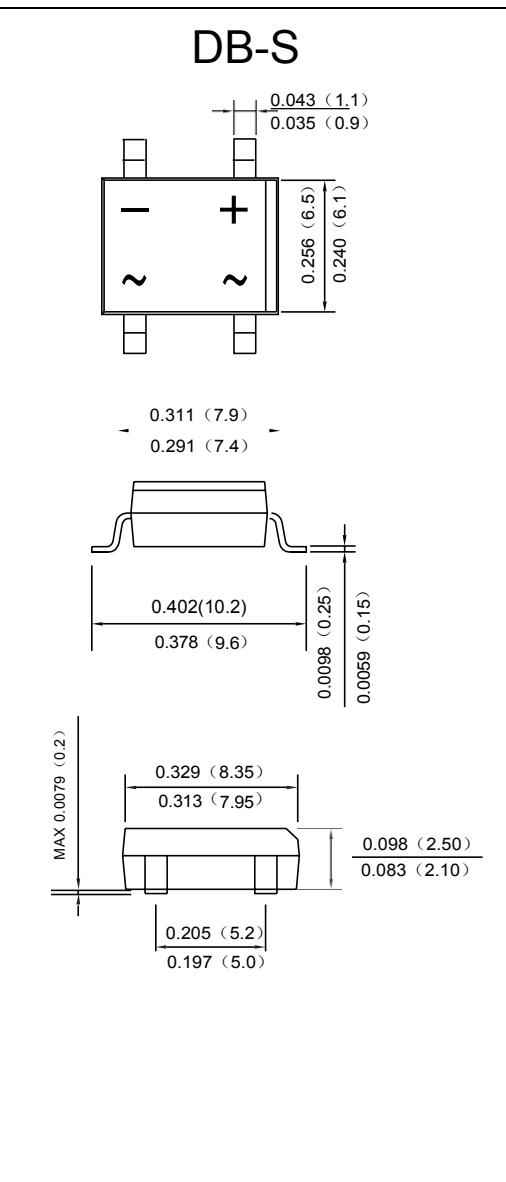
### Electrical Characteristics

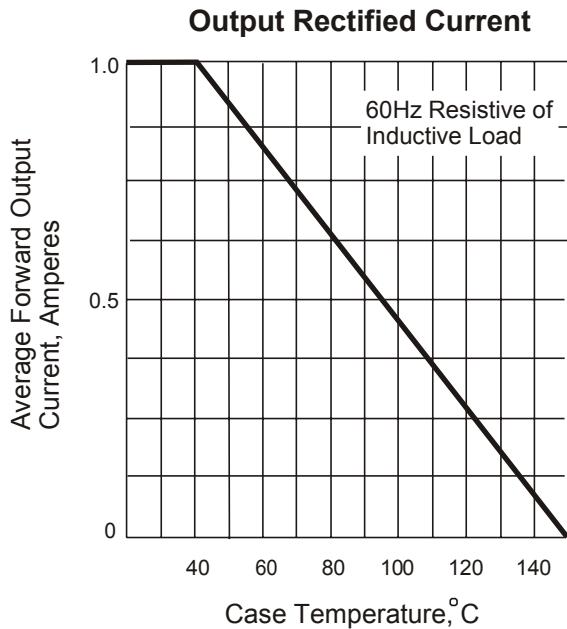
Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
For Capacitive load derate by 20 %.

Parameter	Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	Unit
Maximum instantaneous forward voltage drop per leg at 1.0A	VF				1.1				V
Maximum DC reverse current at rated TA=25°C DC blocking voltage per element TA=125°C	IR				10 500				A

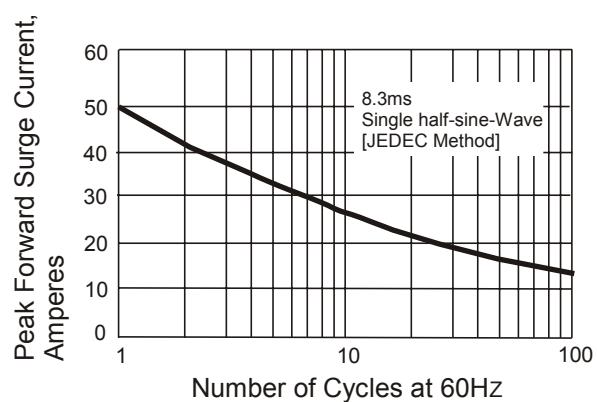
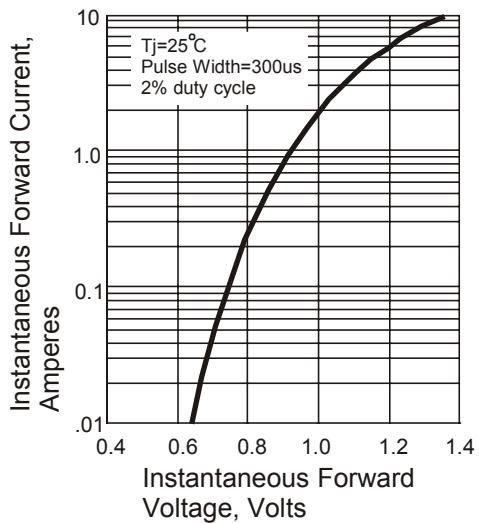
Notes: (1)Thermal resistance from Junction to Ambient on P.C.board mounting.

(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

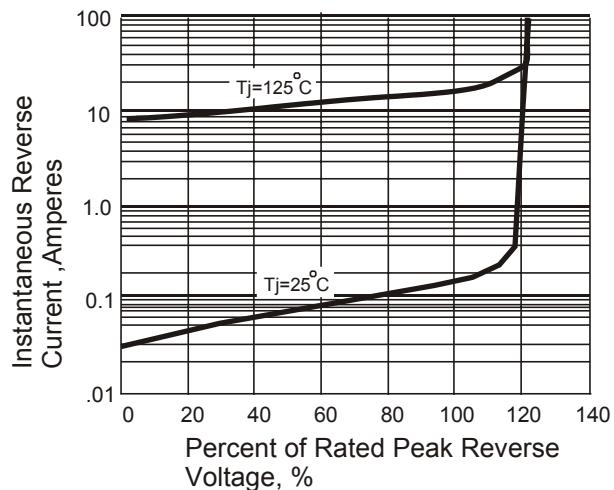




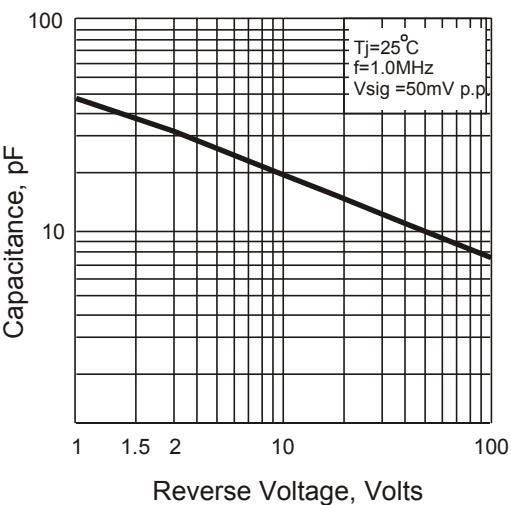
**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Revers Characteristics**



**Fig. 5 Typical Junction Capacitance**



**注意事项**

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3. 在电路设计时请不要超过器件的绝对最大额定值，否则会影响整机的可靠性。
4. 本说明书如有版本变更不另外告知

**NOTE**

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2. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.
3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Shenzhen Huatianwei Electronics co., Ltd reserves the right to make changes in this specification sheet and is subject to change without prior notice.

**联系方式**

深圳市华天微电子有限公司

公司地址：广东省深圳市龙华清湖硅谷动力清湖园A14栋3楼

电话：86-755-82047720

网址：[www.htwdz.com.cn](http://www.htwdz.com.cn)

邮箱：[grf@htwdz.com.cn](mailto:grf@htwdz.com.cn)

**CONTACT**

SHENZHEN HUATIANWEI ELECTRONICS CO., LTD.

ADD: Floor 3, Building A14, Qinghu Power park,  
Qinghu Silicon Valley, Longhua,  
Shenzhen, China

TEL: 86-755-82047720

Web Site: [www.htwdz.com.cn](http://www.htwdz.com.cn)

邮箱：[grf@htwdz.com.cn](mailto:grf@htwdz.com.cn)