

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



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## 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

## Mechanical Data

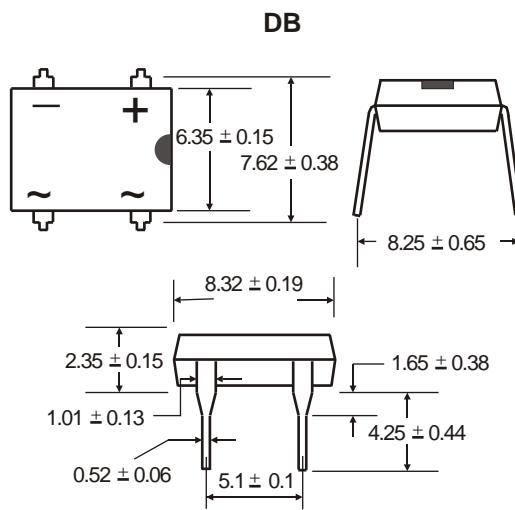
Case: Molded plastic

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

Polarity: Marked on body

Mounting Position: Any

Weight: 0.04 ounce, 1.0 grams (approx)



Dimensions in millimeters ( 1mm = 0.0394" )

## Maximum Ratings & Thermal Characteristics

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

Parameter	Symbol	DB101	DB102	DB103	DB104	DB105	DB106	DB107	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 <sup>2</sup> t					10			A <sup>2</sup> sec
Typical thermal resistance per element(1)	ReJA					110			°C / W
Typical junction capacitance per element (2)	C <sub>j</sub>					25.0			pF
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>TSG</sub>					-55 to + 150			°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	DB101	DB102	DB103	DB104	DB105	DB106	DB107	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				μA

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

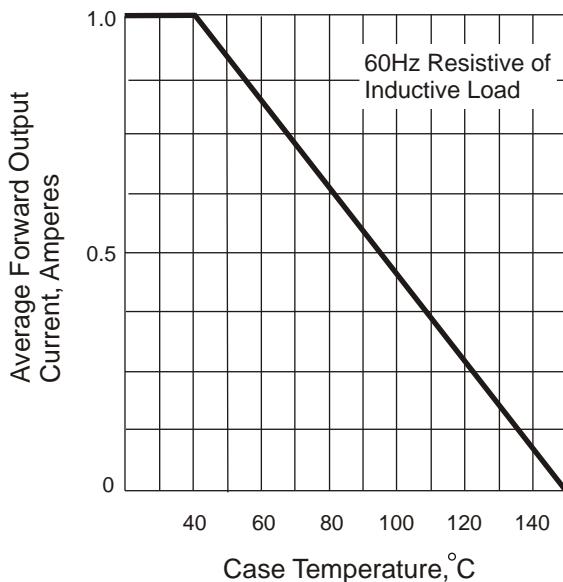
(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

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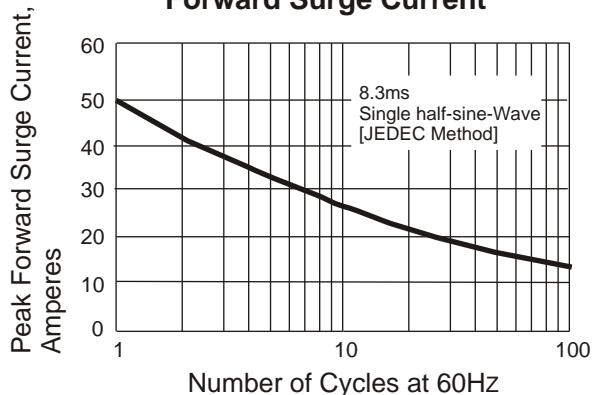
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**Rating and Characteristic Curves (  $T_A=25^\circ\text{C}$  Unless otherwise noted )**

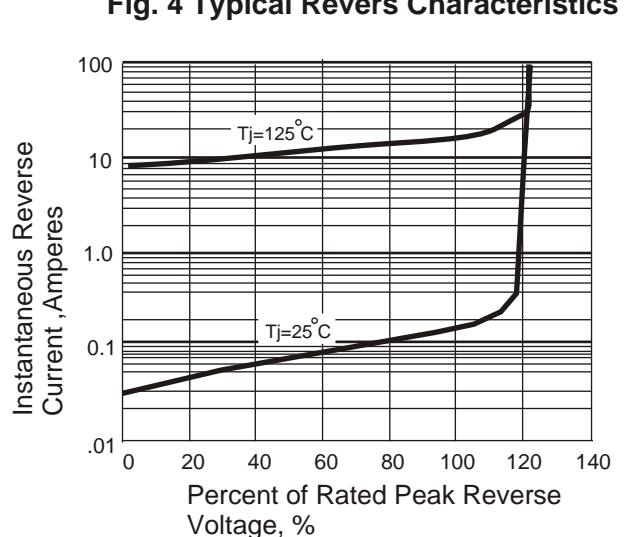
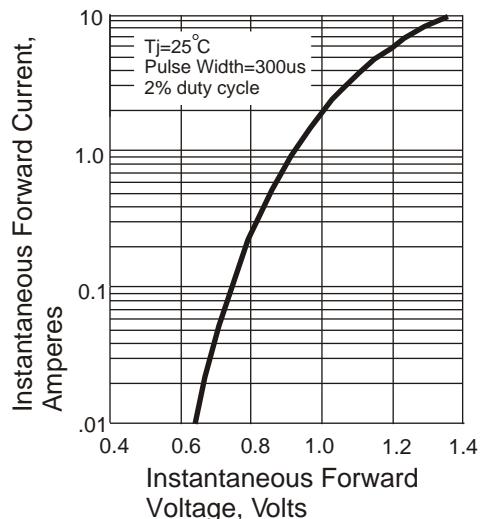
**Fig. 1 Derating Curve for Output Rectified Current**



**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 5 Typical Junction Capacitance**

