



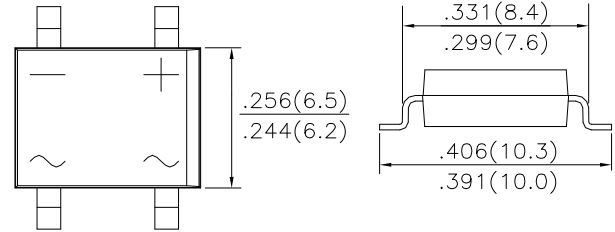
# DB101S THRU DB107S

## 1.0A SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

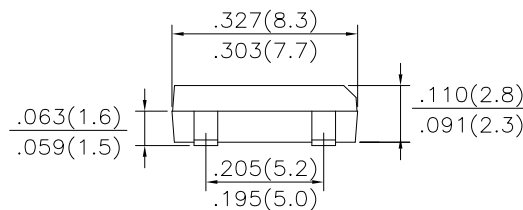
RECTIFIER REVERSE VOLTAGE 50 TO 1000V

### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead tin Pb/Sn copper
- The plastic material has UL flammability classification 94V-0



PACKAGE: THIN DIP



### MECHANICAL DATA

- Polarity: As marked on Body
- Weight: 0.02 ounces, 0.38 grams
- Mounting position: Any

Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	DB 101S	DB 102S	DB 103S	DB 104S	DB 105S	DB 106S	DB 107S	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Input 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 Rectified Output Current @ T <sub>A</sub> = 40°C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	50							A
Maximum Instantaneous Forward Voltage drop per Element at I <sub>F</sub> = 1.0A	V <sub>F</sub>	1.1							V
Maximum Reverse DC Current at Rated @ T <sub>A</sub> = 25°C	I <sub>R</sub>	10							uA
DC Blocking Voltage per Element @ T <sub>A</sub> = 100°C		1.0							mA
Typical Thermal Resistance (Note 1)	R <sub>qJA</sub>	40							K/W
Storage and Operating Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150							°C

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Notes: 1. Thermal resistance from junction to ambient mounted on PC board with 13mm x 13mm copper pads.

2. 60 Hz resistive or inductive load.

3. For capacitive load, derate current by 20%.



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## 1.0A SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

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FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

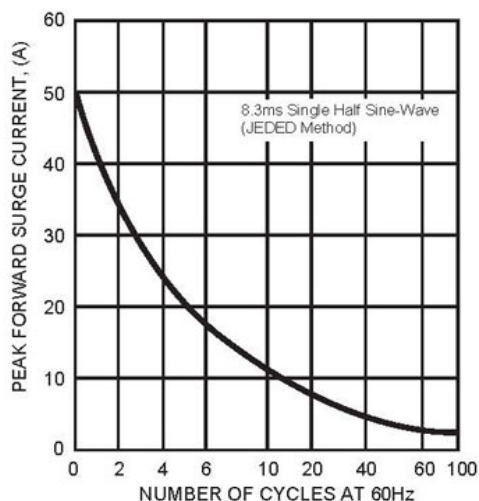


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

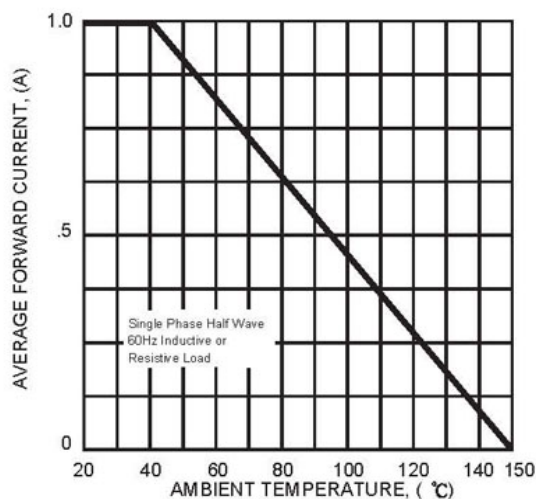


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

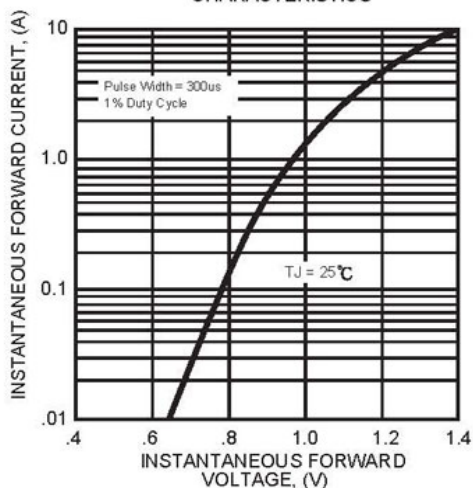


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

