

# DB101S THRU DB107S

## Single Phase 1.0 AMPS. Glass Passivated Bridge Rectifiers

Voltage Range 50 to 1000 Volts Current 1.0 Amperes

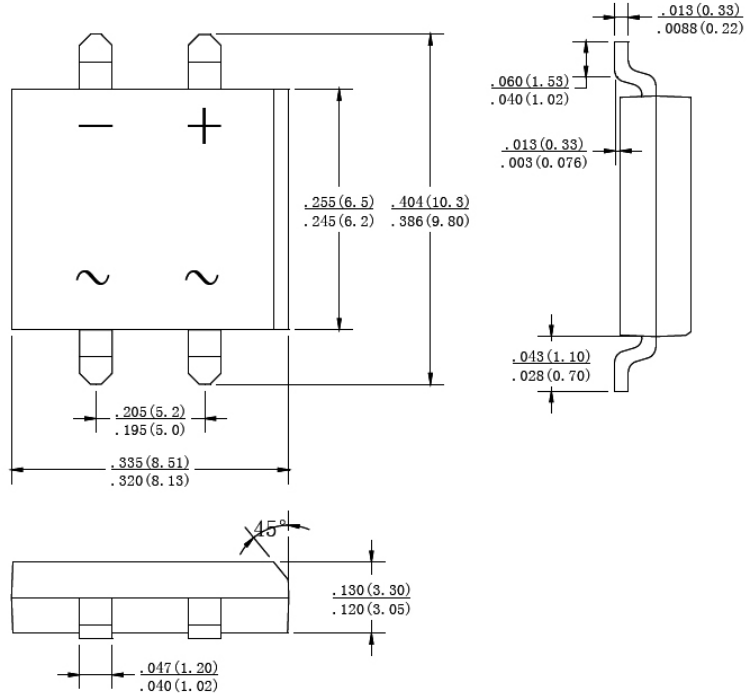
### DBS

#### FEATURES

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction technique results in inexpensive product
- ◆ High temperature soldering guaranteed:  
260°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension
- ◆ UL Recognized File number: E347214

#### MECHANICAL DATA

- ◆ Case: Molded plastic
- ◆ Lead: solder plated
- ◆ Polarity: As marked



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND 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%

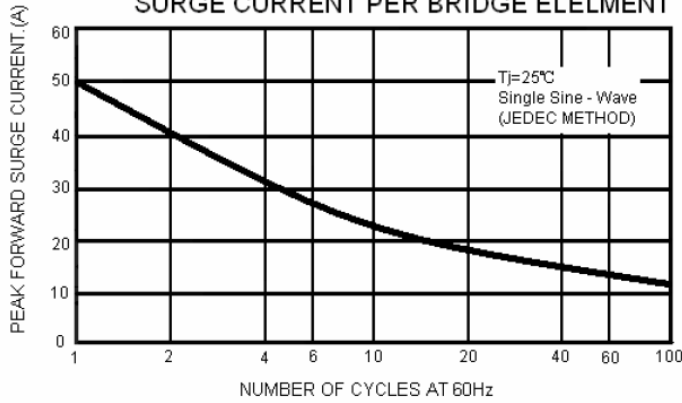
|  | SYMBOLS                              | DB 101S     | DB 102S | DB 103S | DB 104S | DB 105S | DB 106S | DB 107S | UNITS |
|--|--------------------------------------|-------------|---------|---------|---------|---------|---------|---------|-------|
| Maximum Repetitive Peak Reverse Voltage  | V <sub>RRM</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<br>at T <sub>A</sub> =40°C   | I <sub>(AV)</sub>                    | 1.0         |         |         |         |         |         |         | A     |
| Peak Forward Surge Current,<br>8.3ms Single Half Sine-wave Superimposed on<br>Rated Load (JEDEC method )     | I <sub>FSM</sub>                     | 50          |         |         |         |         |         |         | A     |
| Maximum Instantaneous Forward Voltage at 1.0A  | V <sub>F</sub>                       | 1.1         |         |         |         |         |         |         | V     |
| Maximum DC Reverse Current @ T <sub>A</sub> =25°C<br>rated DC blocking voltage per leg T <sub>A</sub> =125°C | I <sub>R</sub>                       | 10<br>500   |         |         |         |         |         |         | μA    |
| Typical Thermal Resistance (Note)  | R <sub>θJA</sub><br>R <sub>θJL</sub> | 40<br>15    |         |         |         |         |         |         | °C/W  |
| Operating Temperature Range  | T <sub>J</sub>                       | -55 to +150 |         |         |         |         |         |         | °C    |
| Storage Temperature Range  | T <sub>STG</sub>                     | -55 to +150 |         |         |         |         |         |         | °C    |

**Note:** Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.47×0.47" (12×12mm) Copper Pads.

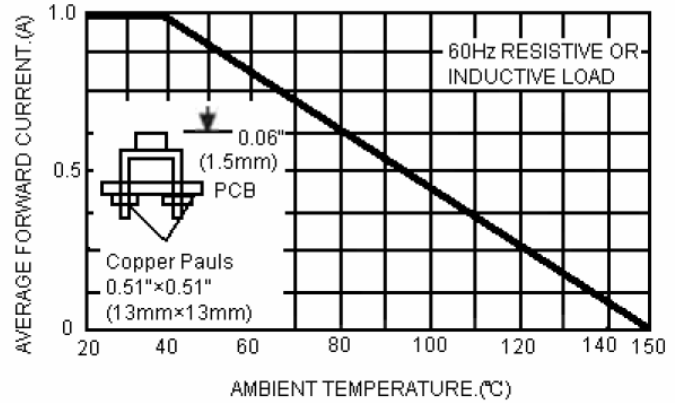
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## RATING AND CHARACTERISTIC CURVES DB101S THRU DB107S

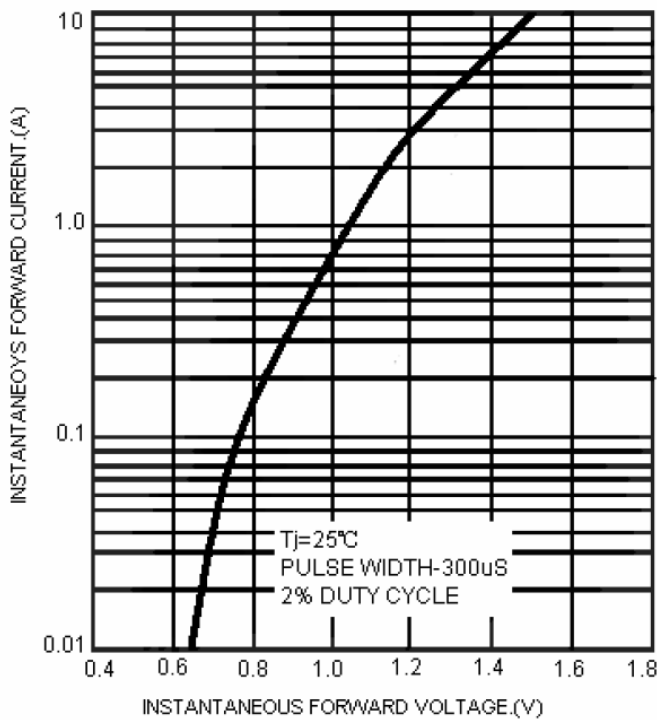
**FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMNT**



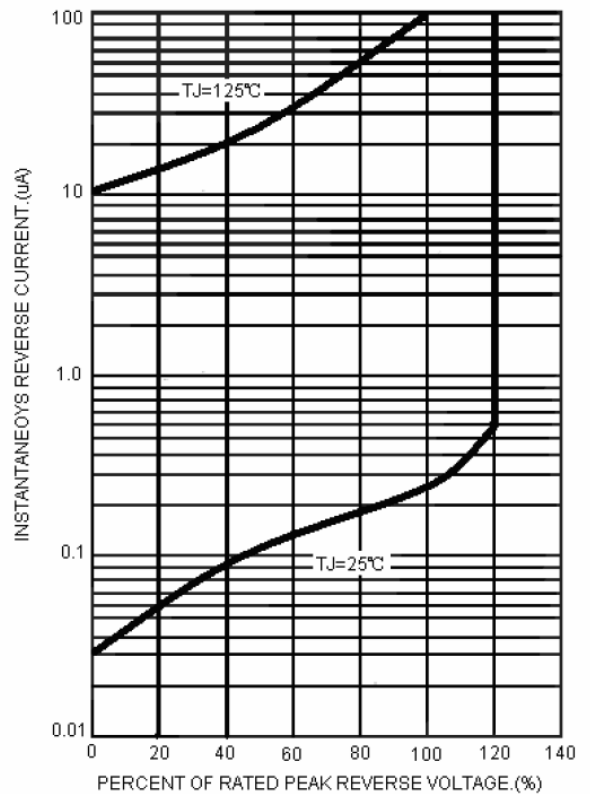
**FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE**



**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**



Note: Specifications are subject to change without notice.