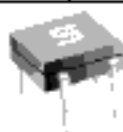




# DBL101G THRU DBL107G

Single Phase 1.0 AMP. Glass Passivated Bridge Rectifiers

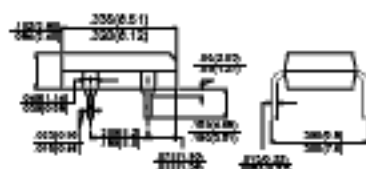


Voltage Range  
50 to 1000 Volts  
Current  
1.0 Ampere

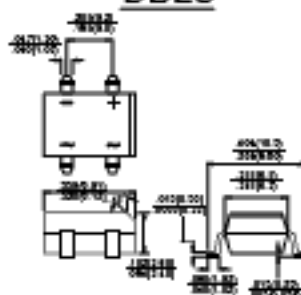
## Features

- UL Recognized File # E-96005
- Glass passivated junction
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed:  
260°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension
- Small size, simple installation  
Leads solderable per MIL-STD-202,  
Method 208
- High surge current capability

### DBL



### DBLS



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

| Type Number                                                                                               | DBL<br>101G  | DBL<br>102G  | DBL<br>103G  | DBL<br>104G  | DBL<br>105G  | DBL<br>106G  | DBL<br>107G  | Units    |
|-----------------------------------------------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------|
|                                                                                                           | DBLS<br>101G | DBLS<br>102G | DBLS<br>103G | DBLS<br>104G | DBLS<br>105G | DBLS<br>106G | DBLS<br>107G |          |
| Maximum Recurrent Peak Reverse Voltage                                                                    | 50           | 100          | 200          | 400          | 600          | 800          | 1000         | V        |
| Maximum RMS Voltage                                                                                       | 35           | 70           | 140          | 280          | 420          | 560          | 700          | V        |
| Maximum DC Blocking Voltage                                                                               | 50           | 100          | 200          | 400          | 600          | 800          | 1000         | V        |
| Maximum Average Forward Rectified Current<br>@ T <sub>A</sub> = 40°C                                      | 1.0          |              |              |              |              |              |              | A        |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated Load<br>(JEDEC method ) | 50           |              |              |              |              |              |              | A        |
| Maximum Instantaneous Forward Voltage<br>@ 1.0A                                                           | 1.1          |              |              |              |              |              |              | V        |
| Maximum DC Reverse Current @ T <sub>A</sub> =25°C<br>at Rated DC Blocking Voltage @ T <sub>A</sub> =125°C | 10<br>500    |              |              |              |              |              |              | uA<br>uA |
| Typical Thermal resistance (Note 1) 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: 1. Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted  
On P.C.B. with 0.47 x 0.47" (12 x 12mm) Copper Pads.

2. DBS for Surface Mount Package.

# RATINGS AND CHARACTERISTIC CURVES (DBL101G THRU DBL107G)

FIG.1- MAXIMUM DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

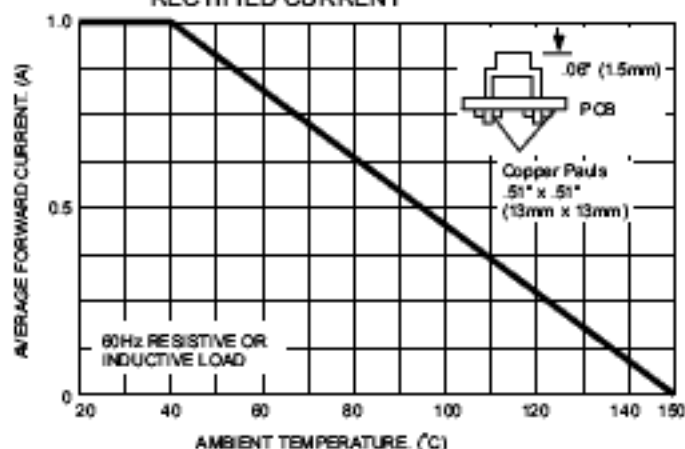


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

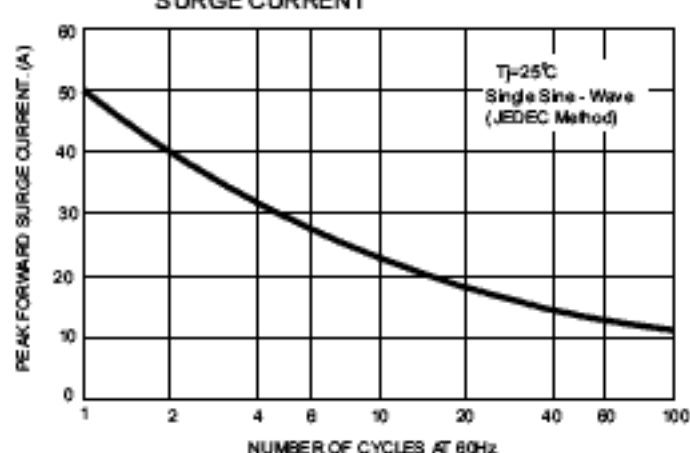


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

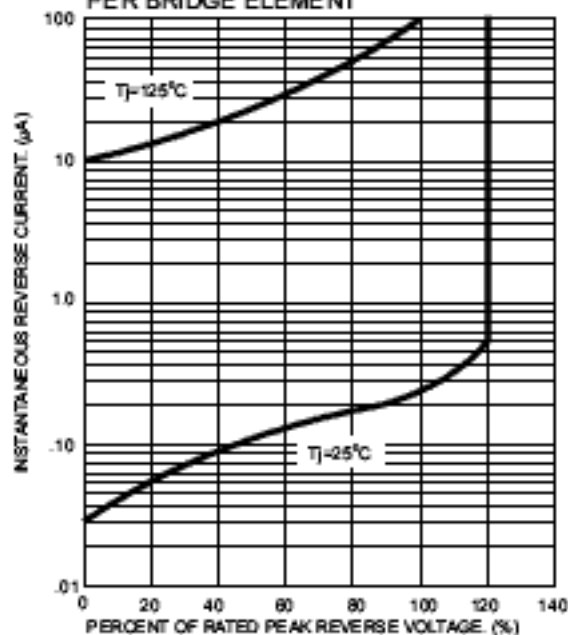


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

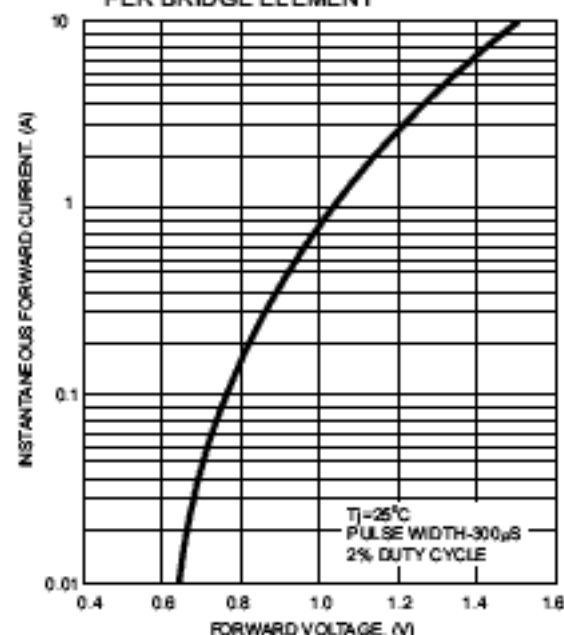


FIG.5- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

