



# DB101G THRU DB107G

Single Phase 1.0 AMP. Glass Passivated Bridge Rectifiers



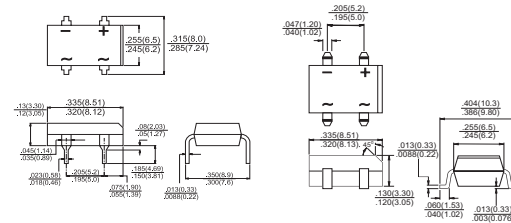
Voltage Range  
50 to 1000 Volts  
Current  
1.0 Ampere

## 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

**DB**

**DBS**



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	Symbol	DB	DB	DB	DB	DB	DB	DB	Units
		101G	102G	103G	104G	105G	106G	107G	
		DBS	DBS	DBS	DBS	DBS	DBS	DBS	
		101G	102G	103G	104G	105G	106G	107G	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A = 40^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50							A
Maximum Instantaneous Forward Voltage @ 1.0A	$V_F$	1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$ $\mu\text{A}$
Typical Thermal Resistance (Note 1)	$R\theta_{JA}$ $R\theta_{JL}$	40 15							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

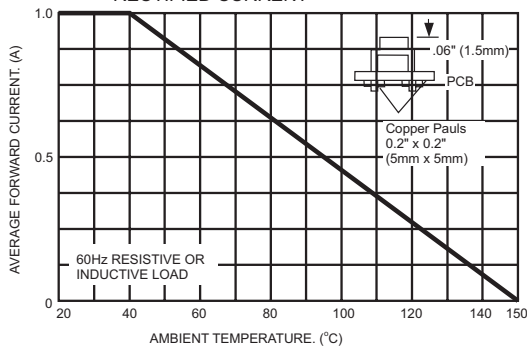
Note: 1. Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted

On P.C.B. with 0.2" x 0.2" (5mm x 5mm) Copper Pads.

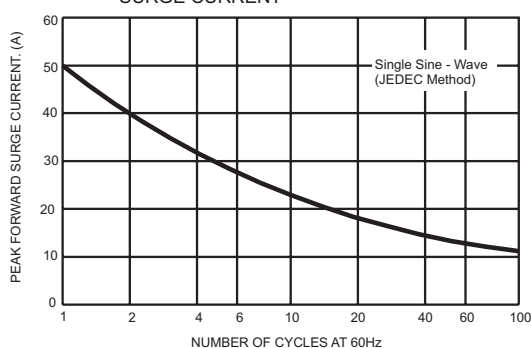
2. DBS for Surface Mount Package.

## RATINGS AND CHARACTERISTIC CURVES (DB101G THRU DB107G)

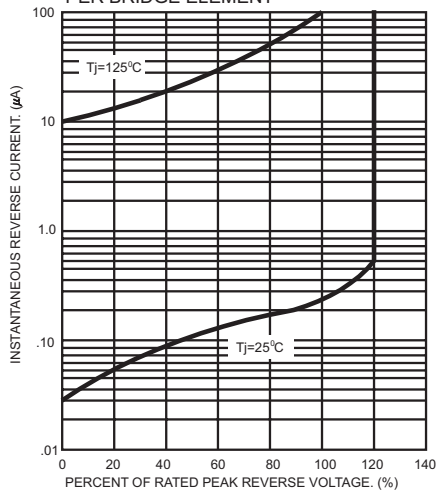
**FIG.1- MAXIMUM DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



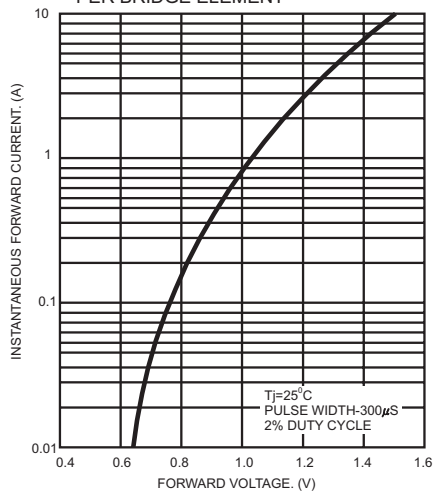
**FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**



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



**FIG.5- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT**

