# Suntan<sub>®</sub> Su<sub>®</sub>

## **DB101S THRU DB107S**

### SINGLE-PHASE GLASS PASSIVATED SILICON SURFACE MOUNT BRIDGE RECTIFIER REVERSE VOLTAGE 50 to 1000 Volts RORWARD CURRENT 1.0 Ampere

#### FEATURES

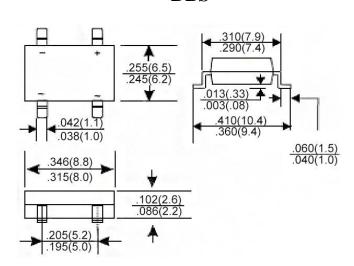
- ◆Plastic material has Underwriters Laboratory
- ◆Flammability Classification 94V-0
- ♦ High surge overload rating of 50 Amperes peak
- ◆Ideal for printed circuit board
- ◆Glass passivated chip junction

#### Mechanical Data

- ◆Case: Molded plastic, DB-S
- ◆Epoxy: UL 94V-O rate flame retardant
- ◆ Terminals: Leads solderable per MIL-STD-202, method 208

guaranteed

- Mounting position: Any
- ♦ Weight: 0.02ounce, 0.4gram



#### **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%

PARAMETER		SYMBOL	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	UNIT
Maximum Recurrent Peak Reverse Voltage		V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward		I(AV)	1.0							Amps
Rectified Current at $T_A=40^{\circ}C$ (Note 2)										
Peak Forward Surge Current 8.3ms single half sine-wave		IFSM	30							Amps
superimposed on rated load (JEDEC method)		IFSM								
Maximum Forward Voltage at 1.0A DC and 25 $^\circ\!\!\!^\circ$		$\mathbf{V}_{\mathrm{F}}$	1.1							Volts
Maximum Reverse Current	$T_A=25^\circ\!\mathrm{C}$	Ir	5.0							uA
at Rated DC Blocking Voltage	$T_A = 125 ^{\circ}C$	IR	500							
Typical Junction Capacitance (Note 1)		Сл	25							pF
Typical Thermal Resistance (Note 2)		Rөја	40							°C/W
Typical Thermal Resistance (Note 2)		Rojl	15							°C/W
Operating and Storage Temperature Range		TJ,Tstg	-55 to +150							°C

Note: 1- Measured at 1 MHZ and applied reverse voltage of 4.0 VDC.

2- Units mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads.

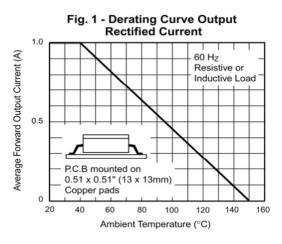
### DBS

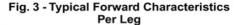
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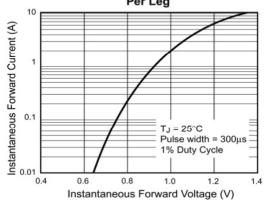
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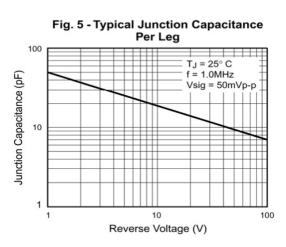
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### **RATING AND CHARACTERISTIC CURVES DB101S THRU DB107S**









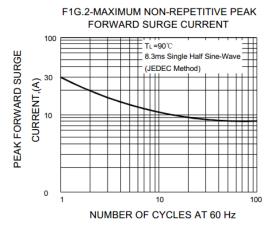
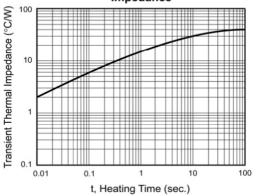


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

Fig. 6 - Typical Transient Thermal Impedance



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.