# Suntan<sub>®</sub> Su<sub>®</sub>

# **DB101 THRU DB107**

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

### FEATURES

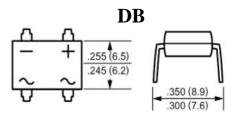
◆Plastic material has Underwriters Laboratory

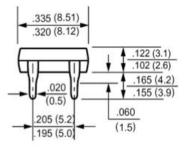
Flammability Classification 94V-0.

- ♦ High surge overload rating of 50 Amperes peak.
- ◆ Ideal for printed circuit board.
- ◆Glass passivated chip junction.

#### Mechanical Data

- ◆Case: Molded plastic, DB.
- 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	DB101	DB102	DB103	DB104	DB105	DB106	DB107	UNIT
Maximum Recurrent 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 at $T_A=40^{\circ}C$	I(AV)	1.0							А
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	Ifsm	30							А
Maximum forward Voltage at 1.0A DC and 25°C	V <sub>F</sub>	1.1							v
Maximum DC Reverse Current at $T_A=25^{\circ}C$ at Rated DC Blocking voltage $T_A=125^{\circ}C$	Ir	5.0 500							μΑ
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	25							pF
Typical Thermal Resistance (Note 2)	Røjc	40							°C/W
Typical Thermal Resistance (Note 2)	Rөл	15							°C/W
Operating and Storage Temperature Range	$T_J$ , Tstg	-55 to +150							°C

Note: 1.Measured at 1.0MHz and applied reversed voltage of 4.0 VDC.

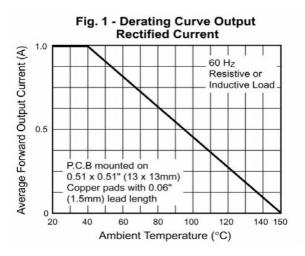
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads.

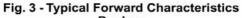
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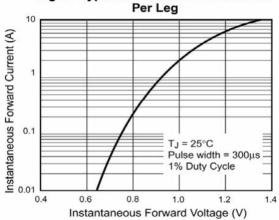
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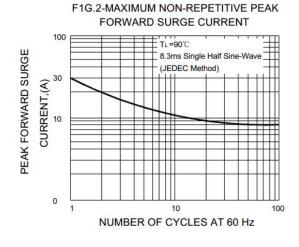
## SINGLE-PHASE GLASS PASSIVATED SILICON SURFACE MOUNT BRIDGE RECTIFIER REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere

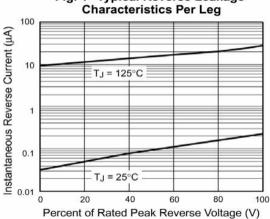
### **RATING AND CHARACTERISTIC CURVES DB101 THRU DB107**

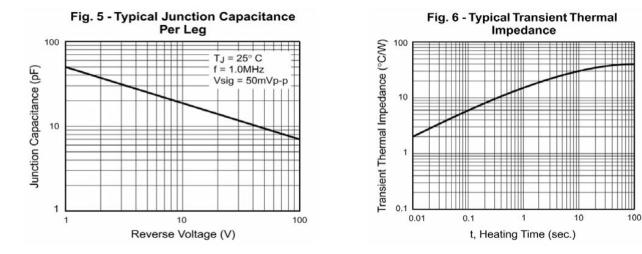












Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

rd Characteristics Fig. 4 - Typical Reverse Leakage Characteristics Per Leg