



# THE DATASHEET OF DB101STR



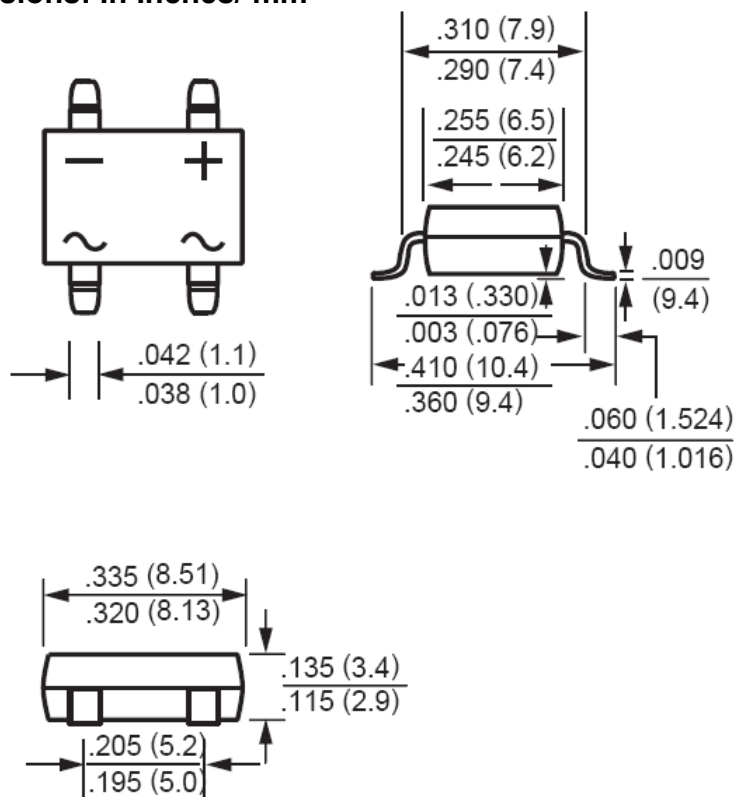
## DB101S THRU DB107S SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIERS

**Features:**

- Surge overload rating - 50 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded
- Glass passivated device
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

**Mechanical Data:**

- Polarity symbols molded on body
- Mounting position: Any
- Weight: 1.0 gram
- Epoxy : Device has UL flammability classification 94V-0
- UL listed the recognized component directory, file #E94233

**Mechanical Dimensions: In Inches/ mm**

**DB-S**

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - [sales@smc-diodes.com](mailto:sales@smc-diodes.com) •



## DB101S THRU DB107S

Technical Data  
Data Sheet N1459, Rev. -

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**Maximum Ratings and Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified  
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</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 Average Forward Output Current @ T <sub>A</sub> = 40°C	I <sub>F(AV)</sub>	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50							A
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	V <sub>F</sub>	1.1							V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 125°C	I <sub>R</sub>	5 500							μ A
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55+150							°C

NOTE: Suffix "-s" Surface Mount for Dip Bridge.

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FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

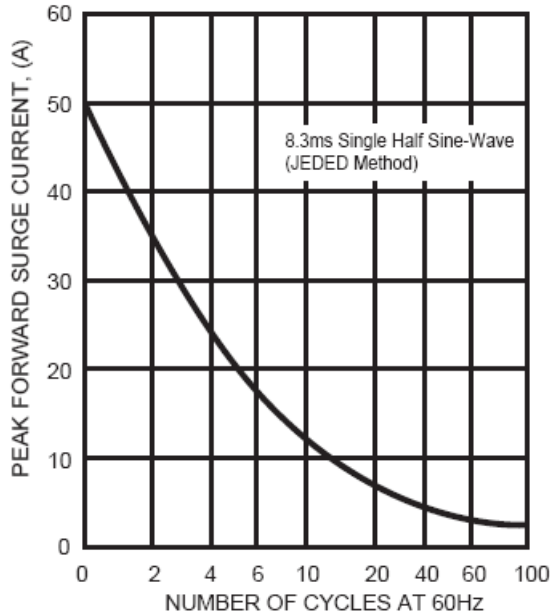


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

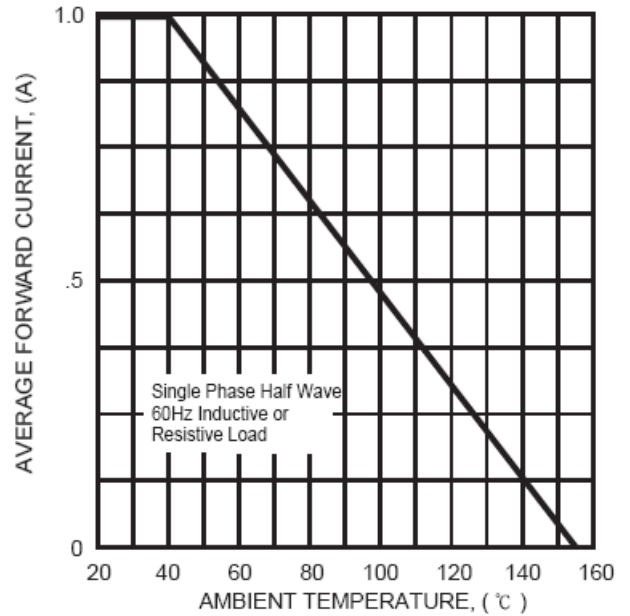


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

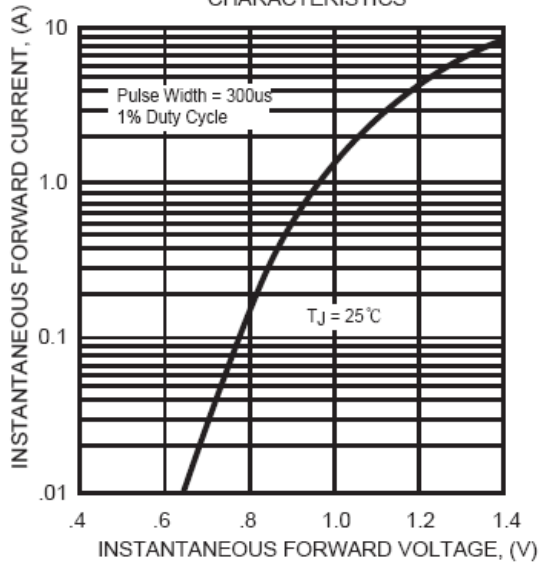
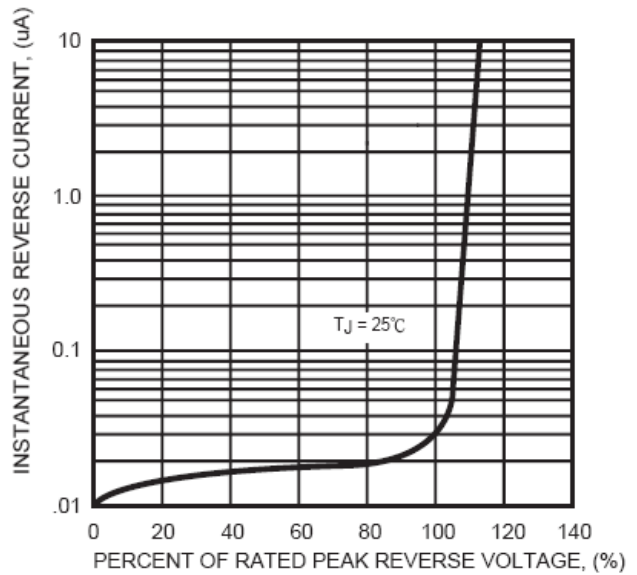


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS





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