

DB101S THRU DB107S

# SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

## VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

### **FEATURES**

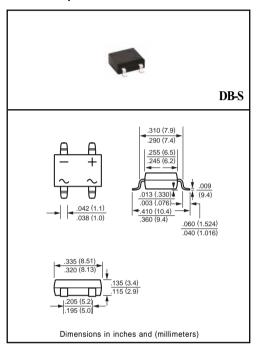
- \* Surge overload rating 50 amperes peak
- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded
- \* Glass passivated device
- \* Polarity symbols molded on body
- \* Mounting position: Any
- \* Weight: 1.0 gram

#### **MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-0
- \* UL listed the recognized component directory, file #E94233

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.



#### MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at TA = 40°C	lo	1.0						Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	50						Amps	
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150							۰c

#### ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	UNITS
Maximum Forward Voltage Drop per Bridge		VF	1.1							Volts
Element at 1.0A DC		VF								
Maximum Reverse Current at rated	@TA = 25°C	l <sub>R</sub>	5.0							uAmps
DC Blocking Voltage per element	@Ta = 125°C		0.5							mAmps

### RATING AND CHARACTERISTIC CURVES (DB101S THRU DB107S)

SURGE CURRENT PEAK FORWARD SURGE CURRENT, (A) 8.3ms Single Half Sine-Wave (JEDED Method) 

20 40

NUMBER OF CYCLES AT 60Hz

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD

