

-WILLAS-

**DB101S
THRU
DB107S**

**SINGLE-PHASE GLASS PASSIVATED
SILICON SURFACE MOUNT BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

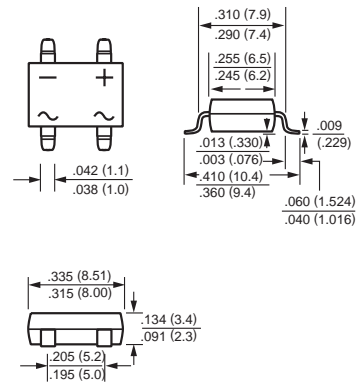
FEATURES

- * 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: 0.378 grams
- * RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"

MECHANICAL DATA

- * Epoxy : Device has UL flammability classification 94V-0
- * UL listed the recognized component directory, file #E195711

DB-S



Dimensions in inches and (millimeters)

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	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at TA = 40℃	I _O	1							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	40							Amps
Rating for fusing (t<8.3ms)	I ² t	6.6							A ² S
Typical Thermal Resistance (Note 2)	R θ _{JA}	40							℃/W
	R θ _{JL}	15							
	R θ _{JC}	10							
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150							℃

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

CHARACTERISTICS	SYMBOL	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	UNITS
Element at 1.0A DC Maximum Forward Voltage Drop per Bridge	V_F	1.1							Volts
Maximum Reverse Current at rated	I_R	5							uAmps
DC Blocking Voltage per element		0.5							mAmps

NOTE: 1. Suffix "-s" Surface Mount for Dip Bridge.

2. Units mounted on P.C.B. with 0.5x0.5" (13x13mm) copper pads.

RATING AND CHARACTERISTIC CURVES (DB101S THRU DB107S)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

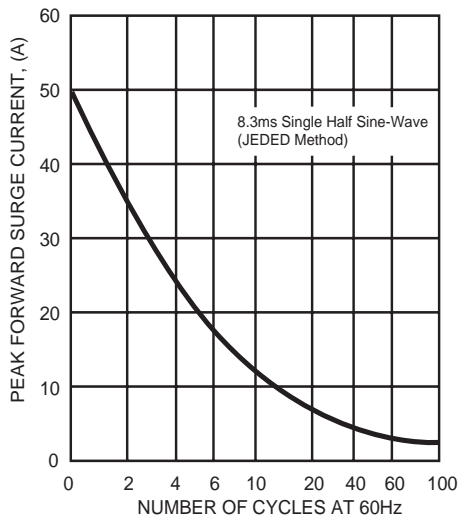


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

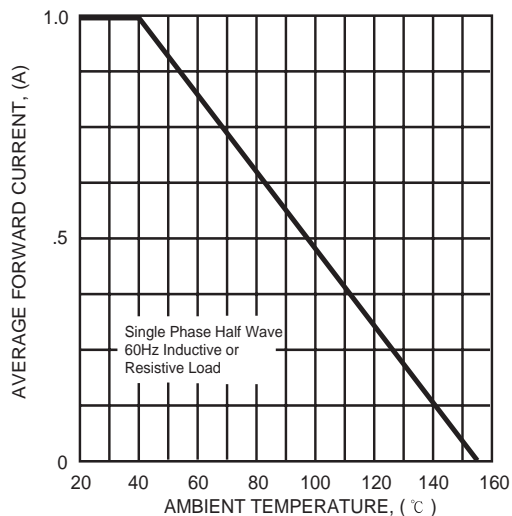


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

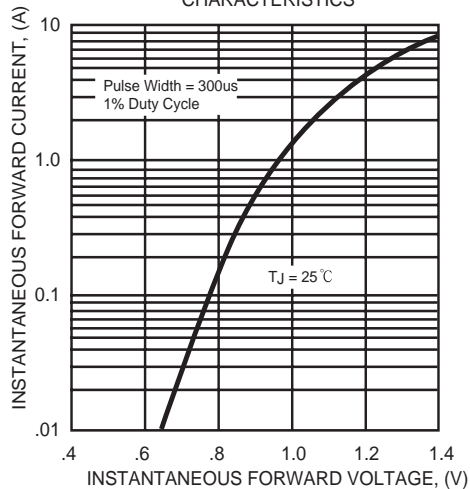


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

