

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

FEATURES

- * Good for automation insertion
- * Surge overload rating - 40 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

FEATURES

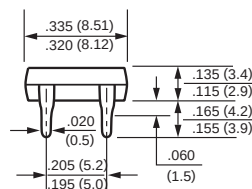
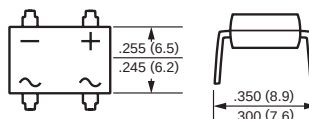
- * Epoxy : UL flammability classification 94V-0
- * UL listed under the recognized component directory, file #E94233.

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%.



DB-1



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	DB101	DB102	DB103	DB104	DB105	DB106	DB107	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 T _A = 40°C	I _O	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	40							Amps
Typical Thermal Resistance (Note 1)	R θ _{JA}	68							°C/W
	R θ _{JL}	15							
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150							°C

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

CHARACTERISTICS	SYMBOL	DB101	DB102	DB103	DB104	DB105	DB106	DB107	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	VF	1.1							Volts
Maximum Forward Voltage Drop per Bridge	IR	5.0							uAmps
DC Blocking Voltage per element		0.5							mAmps

NOTE: 1. Mounted on P.C.B. with 0.5x0.5" (13x13mm) copper pads.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)."

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REV:B

RATING AND CHARACTERISTIC CURVES (DB101 THRU DB107)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

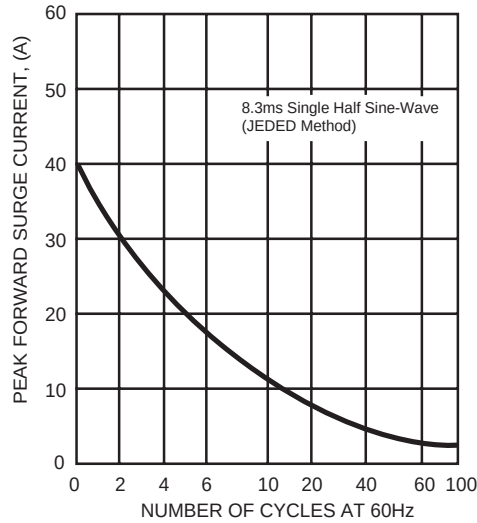


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

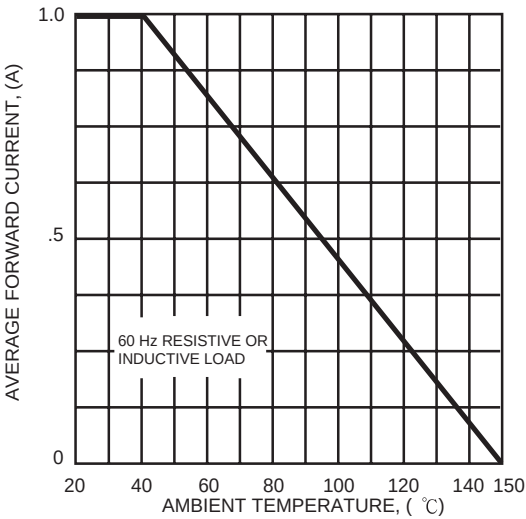


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

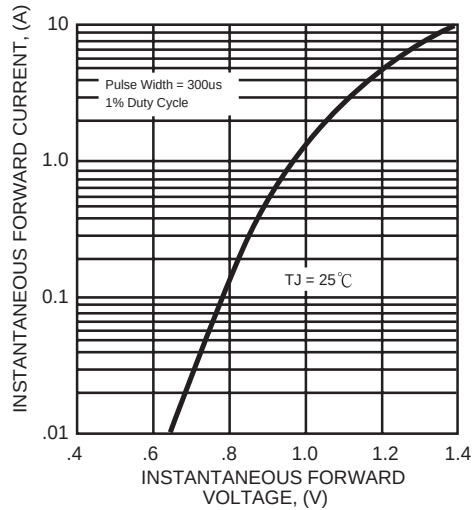


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

