

**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 - 30 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

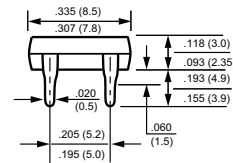
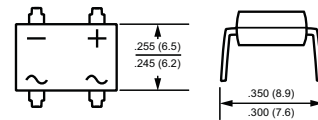
- * Epoxy: Device has UL flammability classification 94V-O
- * UL listed under the recognized component directory, file #E94233.

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 $T_A = 25^\circ\text{C}$ 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}	30							Amps
Typical Current Squared Time	I ² T	3.74							A ² S
Typical Thermal Resistance (Note 2)	R _{θJA}	40							°C/W
	R _{θJL}	15							
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	DB101	DB102	DB103	DB104	DB105	DB106	DB107	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	V_F	1.0							Volts
Maximum Reverse Current at Rated	I_R	1.0							μAmps
DC Blocking Voltage per element		0.05							mAmps

Note: 1."ROHS compliant".

2. Thermal Resistance: PCB mounted.

2021-07
REV:B

RATING AND CHARACTERISTICS CURVES (DB101 THRU DB107)

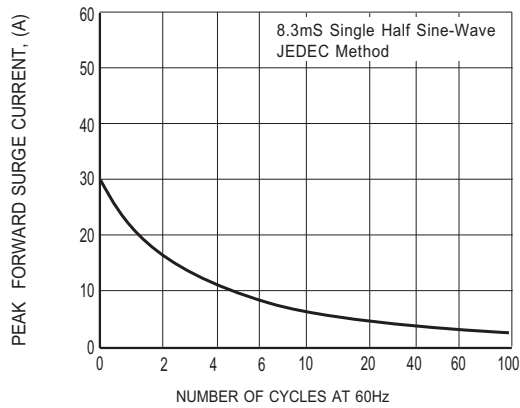


FIG.1 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

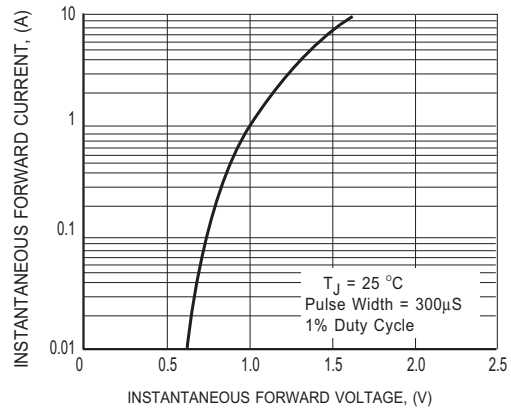


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

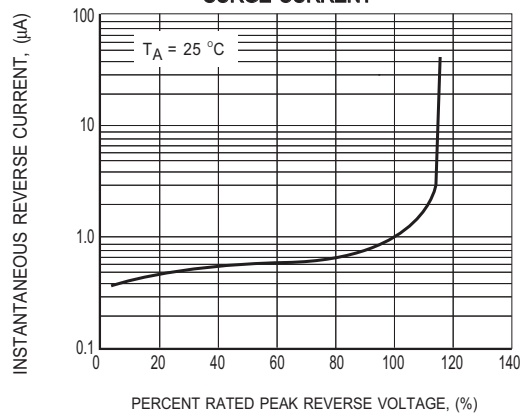


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

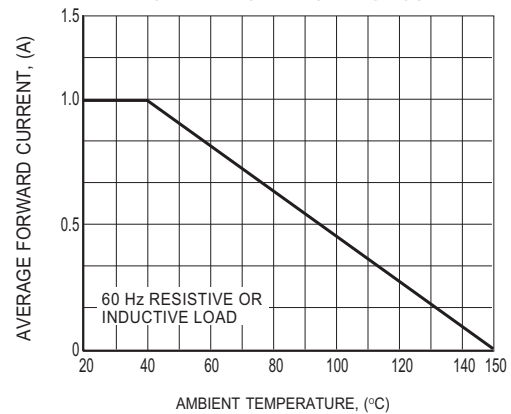


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE



1. Internal Circuit



**CUSTOMER
TYPE
LOT NO.
QUANTITY
Q.A.
DATE**

[illegible]

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
DB-1	-C	2,500	440*130*65	460*290*150	10,000	6.80

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