

# SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

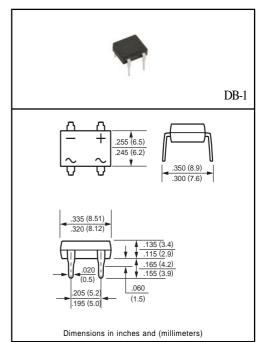
VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.5 Ampere

### 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

#### **MECHANICAL DATA**

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



#### 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	DB151	DB152	DB153	DB154	DB155	DB156	DB157	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	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	Ifsm	40							Amps
Typical Thermal Resistance	RθJA	55							°C/W
Typical Thermal Resistance	RθJL	8							
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150							٥C

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

CHARACTERISTICS		SYMBOL	DB151	DB152	DB153	DB154	DB155	DB156	DB157	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.5A DC		Vf	11							
			1.1							Volts
Maximum Forward Voltage Drop per Bridge	@TA = 25°C	IR	5.0							uAmps
DC Blocking Voltage per element	@TA = 125°C	IX	0.5							mAmps

Note:1."Fully ROHS compliant","100% Sn plating(Pb-free).

## RATING AND CHARACTERISTIC CURVES (DB151 THRU DB157)

SURGE CURRENT 60 PEAK FORWARD SURGE CURRENT, (A) 50 8.3ms Single Half Sine-Wave (JEDED Method) 40 30 20 10 0 2 6 10 40 0 4 20 60 100 NUMBER OF CYCLES AT 60Hz

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD

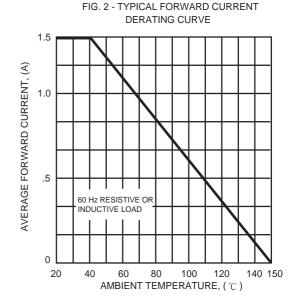


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

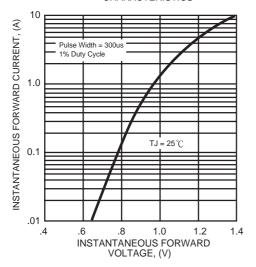


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

