

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


**VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.5 Ampere**

**FEATURES**

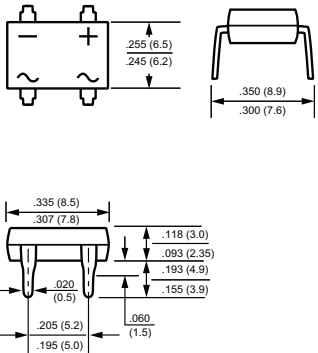
- \* Good for automation insertion
- \* Surge overload rating - 40 amperes peak
- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded
- \* Glass passivated device
- \* Polarity symbols molded on body
- \* Mounting position: Any
- \* Weight: 1.0 gram

**MECHANICAL DATA**

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



**DB-1**



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	DB151	DB152	DB153	DB154	DB155	DB156	DB157	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at TA = 40°C	I <sub>O</sub>	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	40							Amps
Typical Current Squared Time	I <sup>2</sup> T	6.64							A <sup>2</sup> S
Typical Thermal Resistance	R <sub>θJA</sub>	55							°C/W
Typical Thermal Resistance	R <sub>θJL</sub>	8							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

**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	V <sub>F</sub>	1.0							Volts
Maximum Reverse Current at Rated	I <sub>R</sub>	1.0							uAmps
DC Blocking Voltage per element		0.05							mAmps

Note:1. "RoHS compliant"

## RATING AND CHARACTERISTIC CURVES (DB151 THRU DB157)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

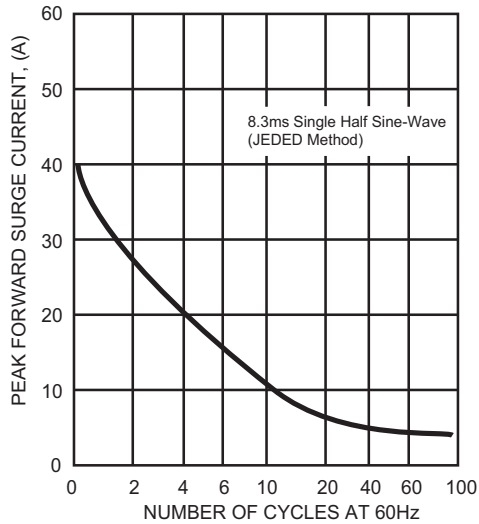


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

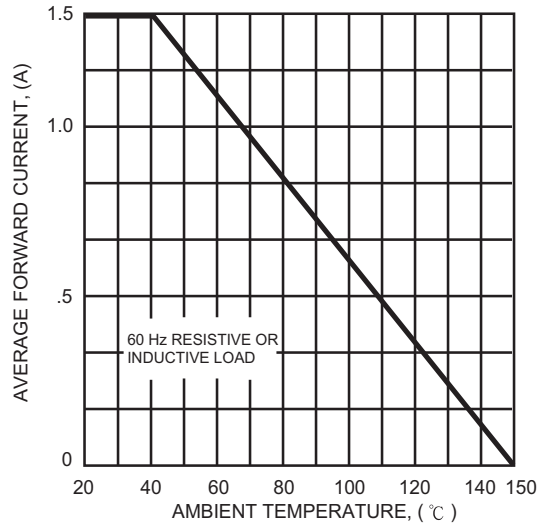


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

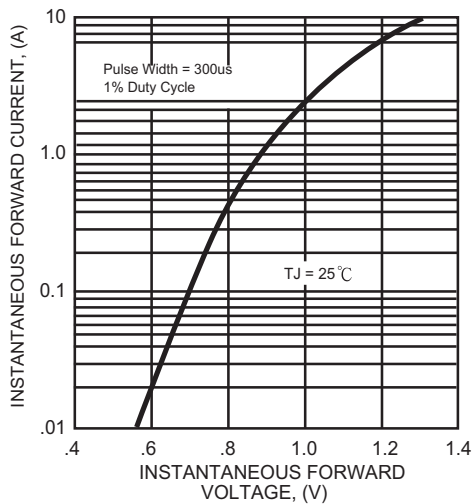
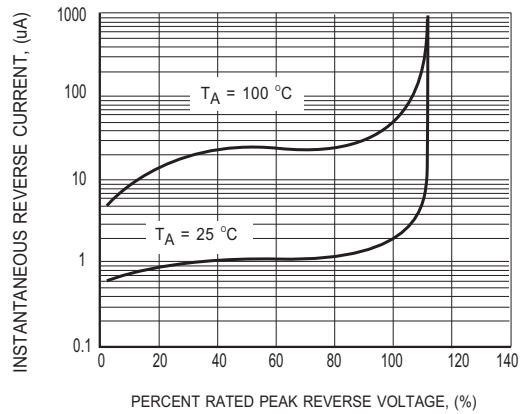
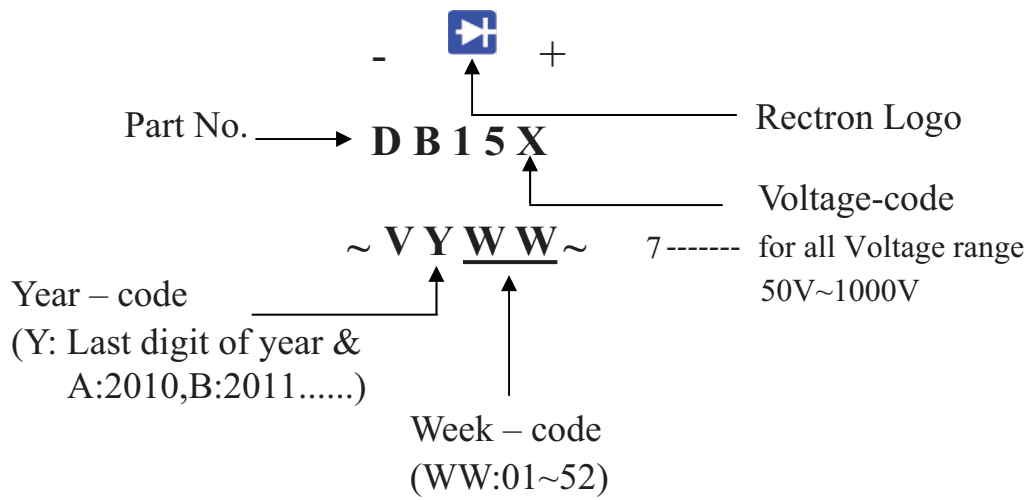


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



## Marking Description



## 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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