

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

**VOLTAGE RANGE 50 to 1200 Volts CURRENT 1.5 Ampere**

**FEATURES**

- \* Surge overload rating - 60 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**

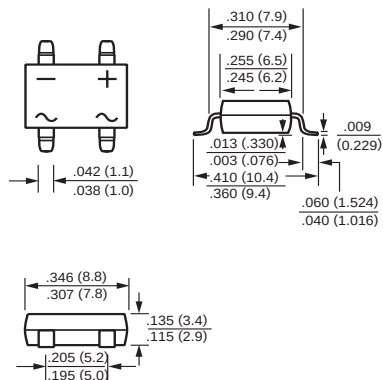
- \* Epoxy : Device has UL flammability classification 94V-0
- \* UL listed the recognized component directory, file #E94233

**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-S**



Dimensions in inches and (millimeters)

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

| RATINGS                                                                                           | SYMBOL       | DB151S       | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S | DB1512S | UNITS |
|---------------------------------------------------------------------------------------------------|--------------|--------------|--------|--------|--------|--------|--------|--------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                            | VRRM         | 50           | 100    | 200    | 400    | 600    | 800    | 1000   | 1200    | Volts |
| Maximum RMS Bridge Input Voltage                                                                  | VRMS         | 35           | 70     | 140    | 280    | 420    | 560    | 700    | 840     | Volts |
| Maximum DC Blocking Voltage                                                                       | VDC          | 50           | 100    | 200    | 400    | 600    | 800    | 1000   | 1200    | Volts |
| Maximum Average Forward Output Current at TA = 40°C                                               | IO           | 1.5          |        |        |        |        |        |        |         | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM         | 60           |        |        |        |        |        |        |         | Amps  |
| Typical thermal resistance                                                                        | RθJA<br>RθJL | 40<br>15     |        |        |        |        |        |        |         | °C/W  |
| Operating and Storage Temperature Range                                                           | TJ,TSTG      | -55 to + 150 |        |        |        |        |        |        |         | °C    |

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

| CHARACTERISTICS                                            | SYMBOL | DB151S | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S | DB1512S | UNITS |
|------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|
| Maximum Forward Voltage Drop per Bridge Element at 1.5A DC | VF     | 1.1    |        |        |        |        |        |        |         | Volts |
| Maximum Reverse Current at rated                           | IR     | 5.0    |        |        |        |        |        |        |         | uAmps |
| DC Blocking Voltage per element                            |        | 0.5    |        |        |        |        |        |        |         | mAmps |

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

## RATING AND CHARACTERISTIC CURVES ( DB151S THRU DB1512S )

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

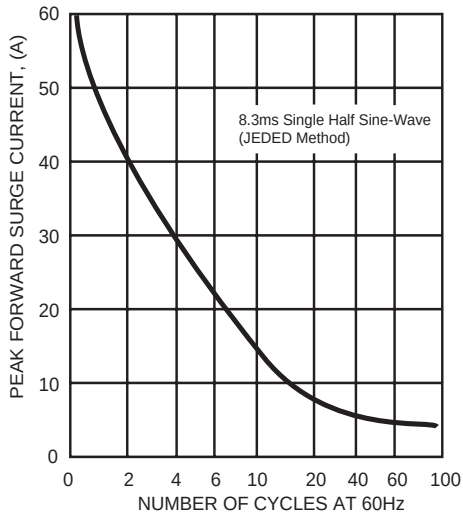


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

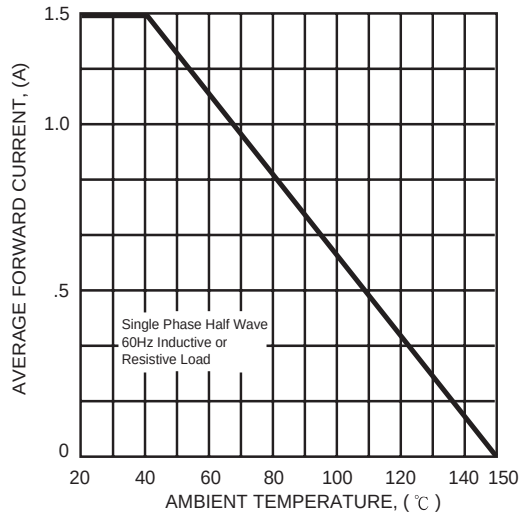


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

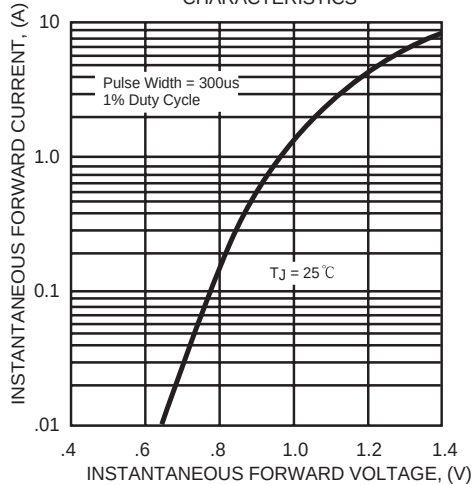
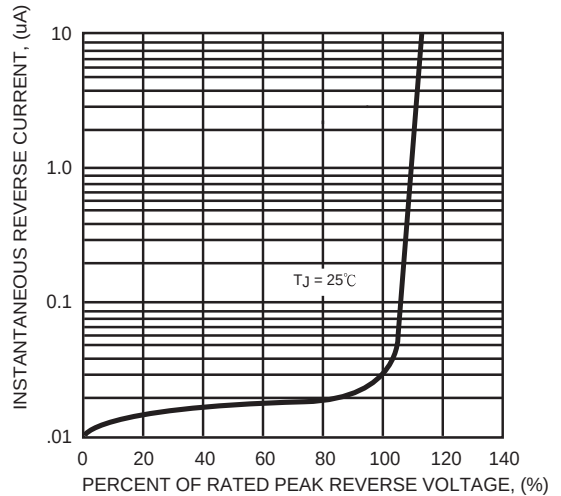
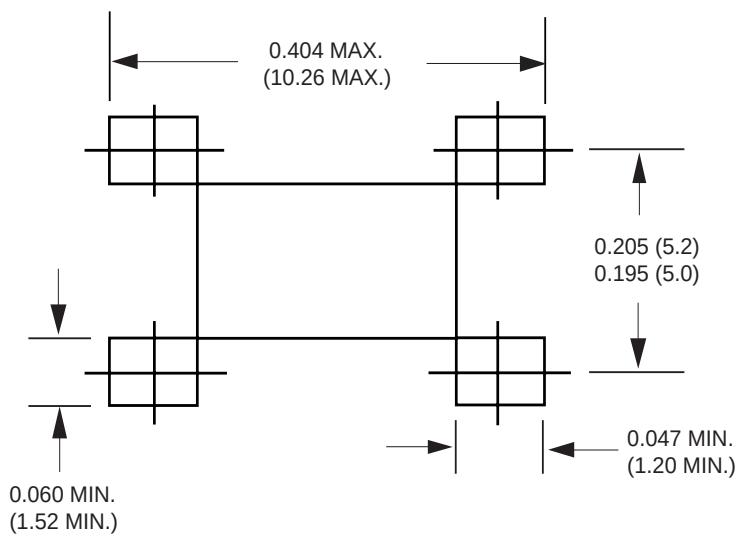


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



## Mounting Pad Layout



Dimensions in inches and (millimeters)