

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

VOLTAGE RANGE 50 to 1200 Volts CURRENT 1.5 Ampere

FEATURES

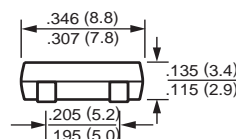
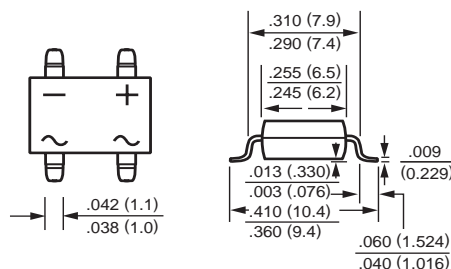
- * Surge overload rating - 40 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any
- * Weight: 1.0 gram

MECHANICAL DATA

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



DB-S



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 | DB151S | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S | DB1512S | UNITS |
|---|----------------------------------|--------------|--------|--------|--------|--------|--------|--------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | 1200 | Volts |
| Maximum RMS Bridge Input Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | 840 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | 1200 | Volts |
| Maximum Average Forward Output Current at TA = 40°C | I _o | 1.5 | | | | | | | | 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 | R _{θJA} | 40 | | | | | | | | °C/W |
| | R _{θJC} | | | | | | | | | |
| Operating and Storage Temperature Range | T _J ,T _{STG} | -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 | V _F | 1.1 | | | | | | | | Volts |
| Maximum Reverse Current at rated DC Blocking Voltage per element | @ TA = 25°C | 5.0 | | | | | | | | uAmps |
| | @ TA = 125°C | 0.5 | | | | | | | | mAmps |

NOTE: 1. Suffix "-s" Surface Mount for Dip Bridge.
 2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2005-4
 REV:A

RATING AND CHARACTERISTIC CURVES (DB151S THRU DB1512S)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

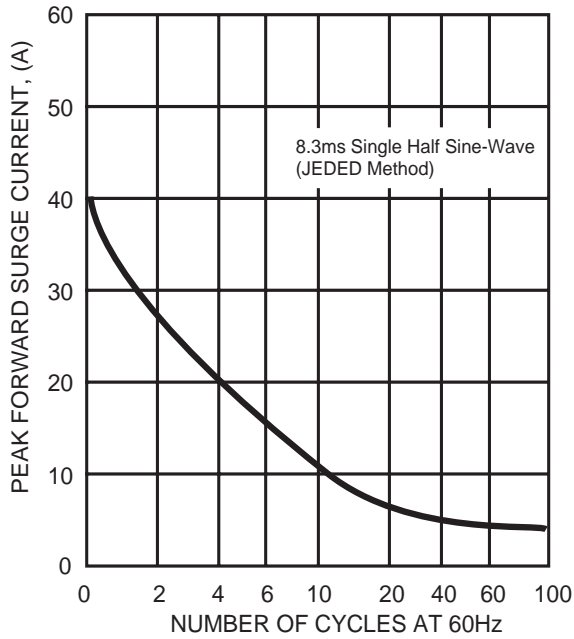


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

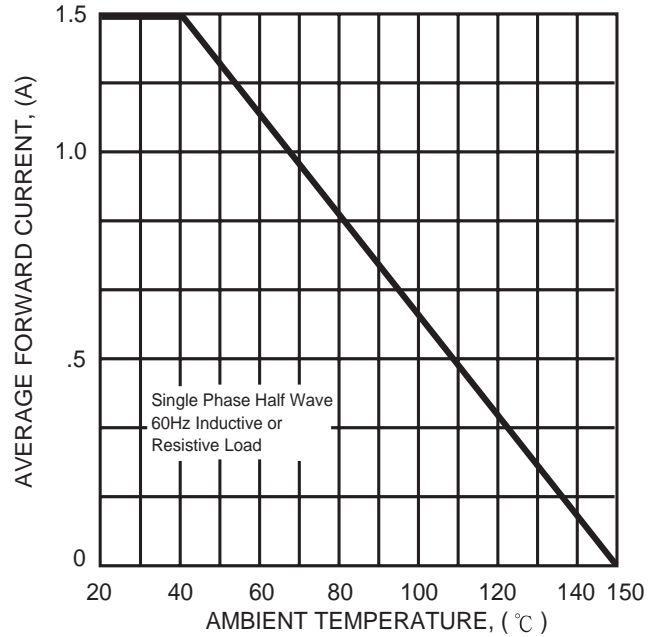


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

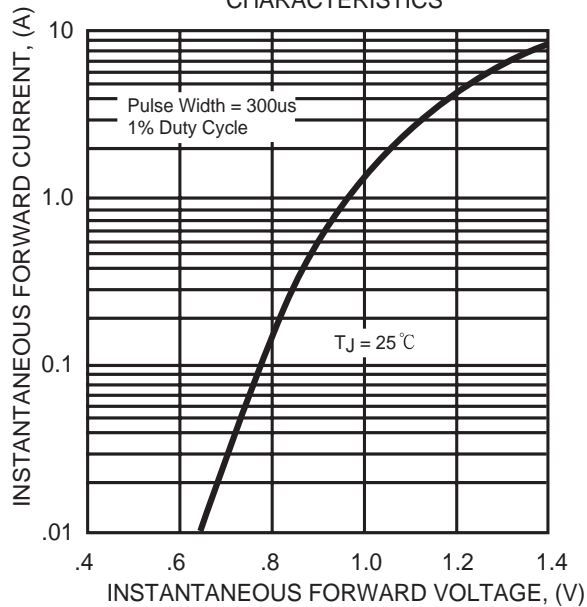
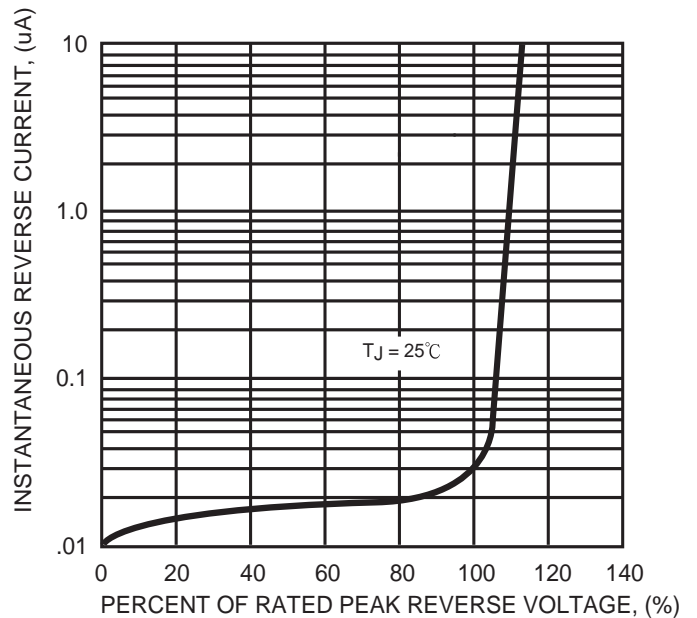
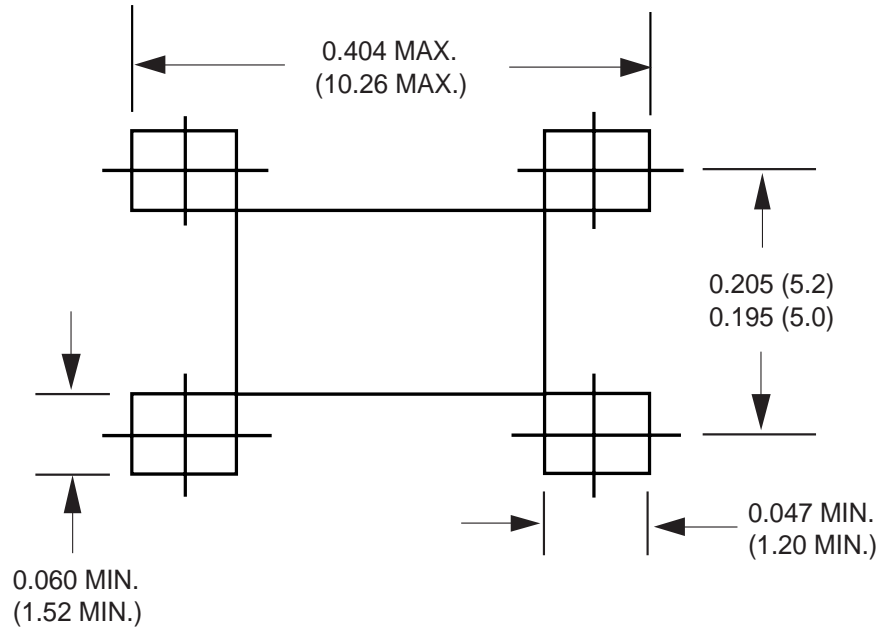


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



Mounting Pad Layout



Dimensions in inches and (millimeters)