

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

VOLTAGE RANGE 50 to 1200 Volts CURRENT 1.0 Ampere

FEATURES

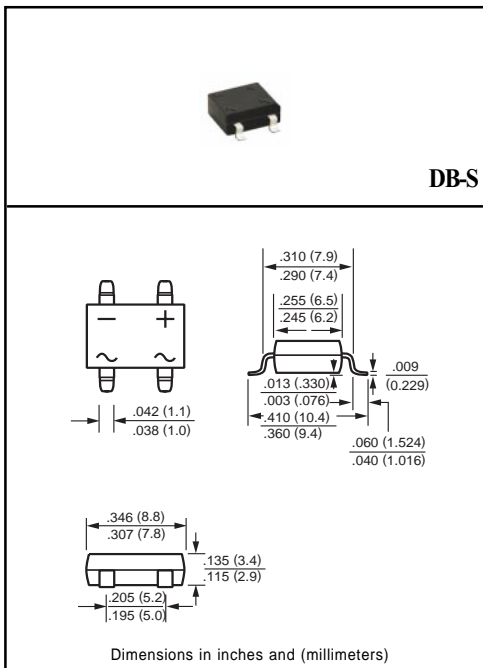
- * Surge overload rating - 50 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any
- * Weight: 1.0 gram

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%.



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

| RATINGS | SYMBOL | DB101S | DB102S | DB103S | DB104S | DB105S | DB106S | DB107S | DB1012S | 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 | 1.0 | | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 50 | | | | | | | | Amps |
| Operating and Storage Temperature Range | TJ,TSTG | -55 to +150 | | | | | | | | °C |

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

| CHARACTERISTICS | SYMBOL | DB101S | DB102S | DB103S | DB104S | DB105S | DB106S | DB107S | DB1012S | UNITS |
|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|
| Maximum Forward Voltage Drop per Bridge Element at 1.0A DC | VF | 1.1 | | | | | | | | Volts |
| Maximum Reverse Current at rated DC Blocking Voltage per element | IR | 5.0 | | | | | | | | uAmps |
| | | 0.5 | | | | | | | | mAmps |

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

RATING AND CHARACTERISTIC CURVES (DB101S THRU DB1012S)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

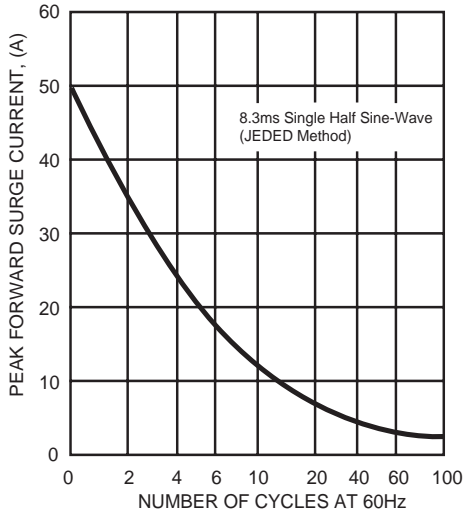


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

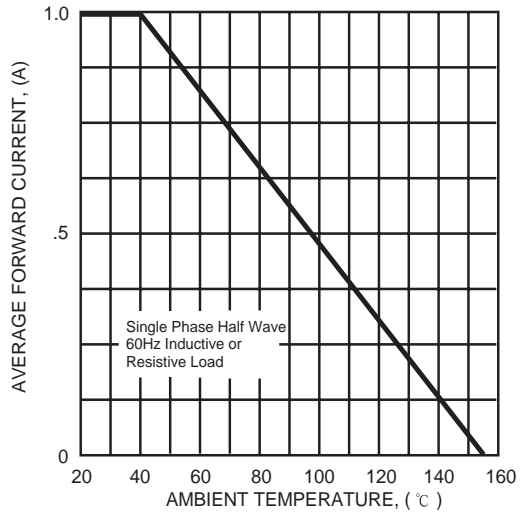


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

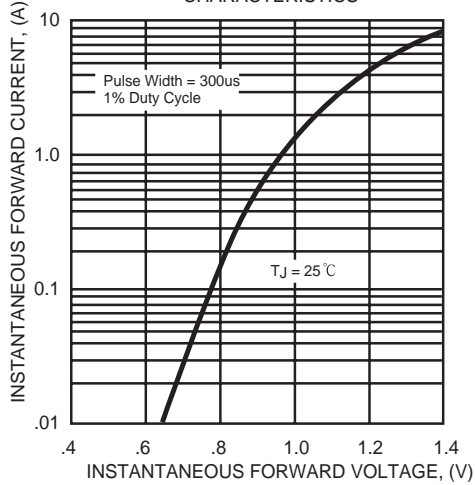
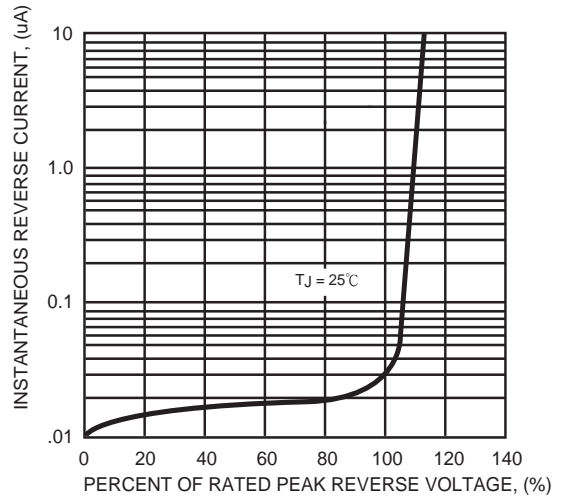
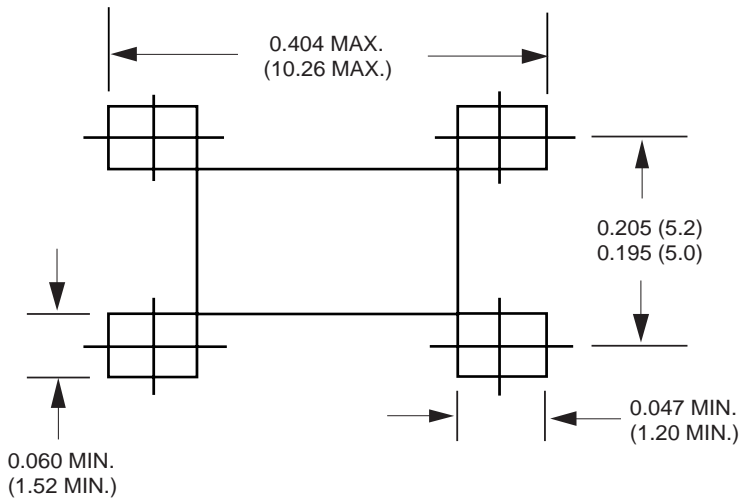


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



Mounting Pad Layout



Dimensions in inches and (millimeters)