

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

VOLTAGE RANGE 50 to 1200 Volts CURRENT 1.5 Ampere

FEATURES

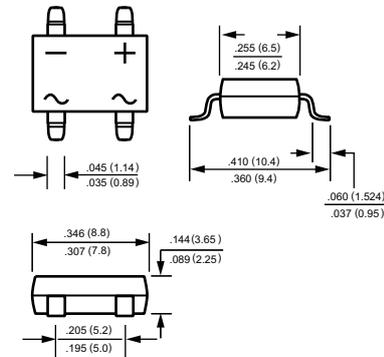
- * Surge overload rating - 60 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any

MECHANICAL DATA

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



DB-S



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 | 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 Current Squared Time | i ² T | 14.9 | | | | | | | | A ² S |
| Typical thermal resistance | RθJA | 40 | | | | | | | | °C/W |
| | RθJC | 30 | | | | | | | | |
| | RθJL | 15 | | | | | | | | |
| 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 | 1.0 | | | | | | | | Volts |
| Maximum Reverse Current at rated DC Blocking Voltage per element | @TA = 25°C | 1.0 | | | | | | | | uAmps |
| | @TA = 125°C | 0.05 | | | | | | | | mAmps |

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

RATING AND CHARACTERISTIC CURVES (DB151S THRU DB1512S)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

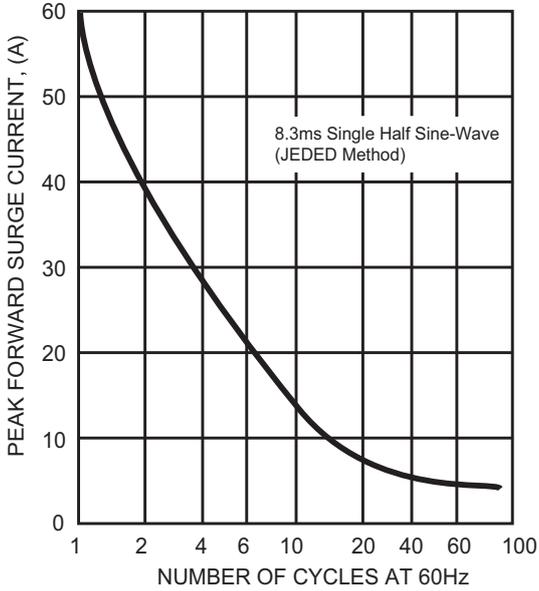


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

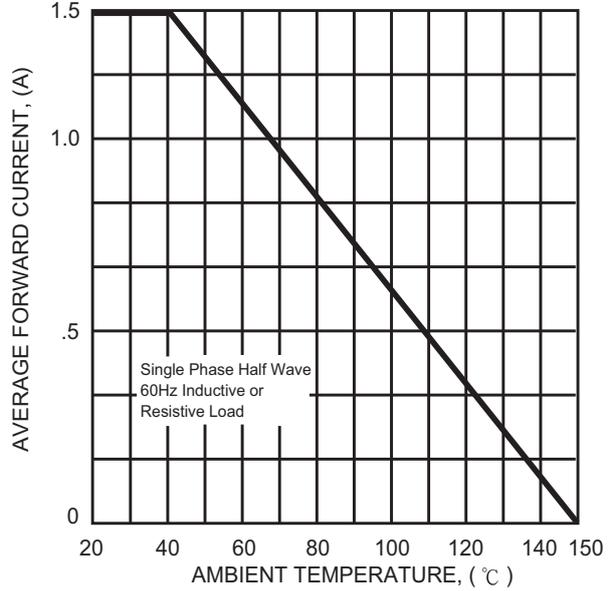


FIG. 3 - MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

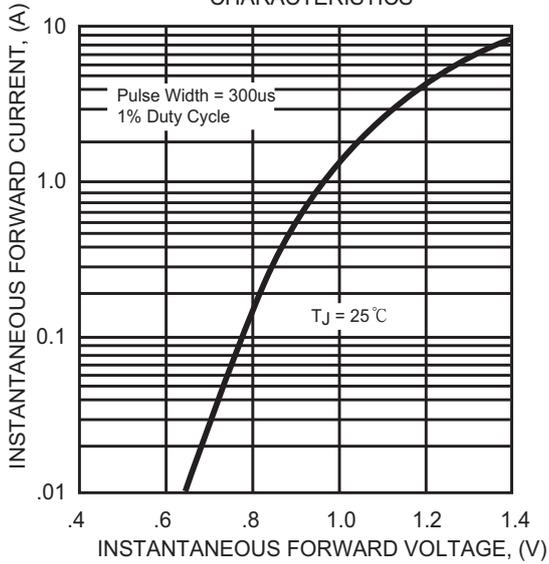
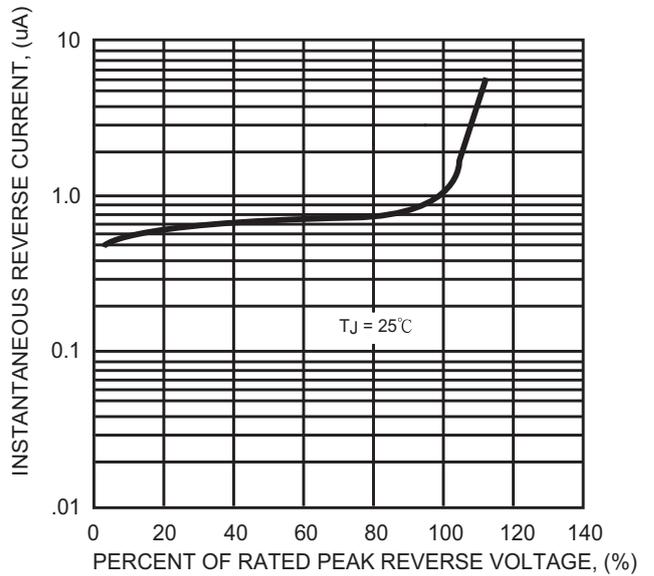
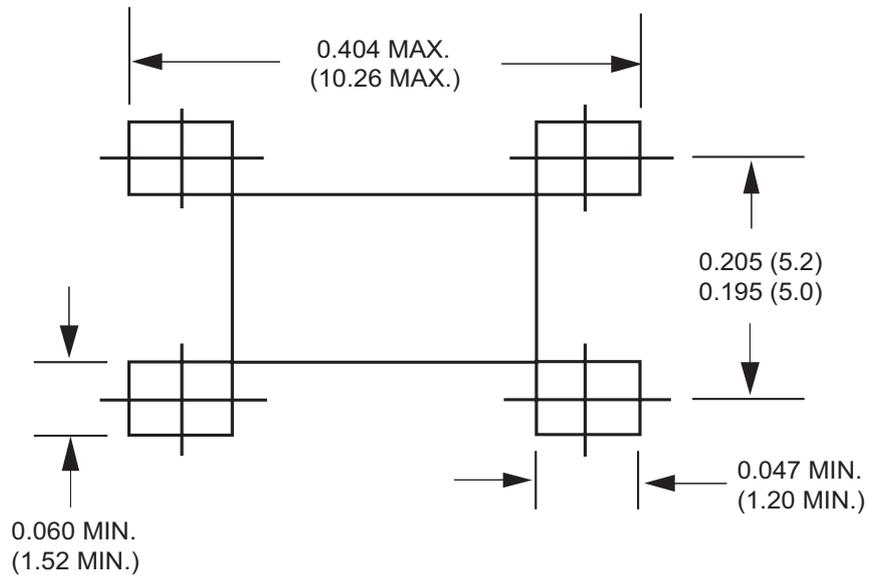


FIG. 4 - MAXIMUM REVERSE CHARACTERISTICS



Mounting Pad Layout



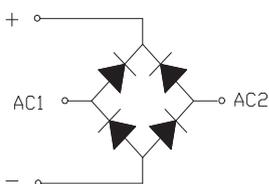
Dimensions in inches and (millimeters)



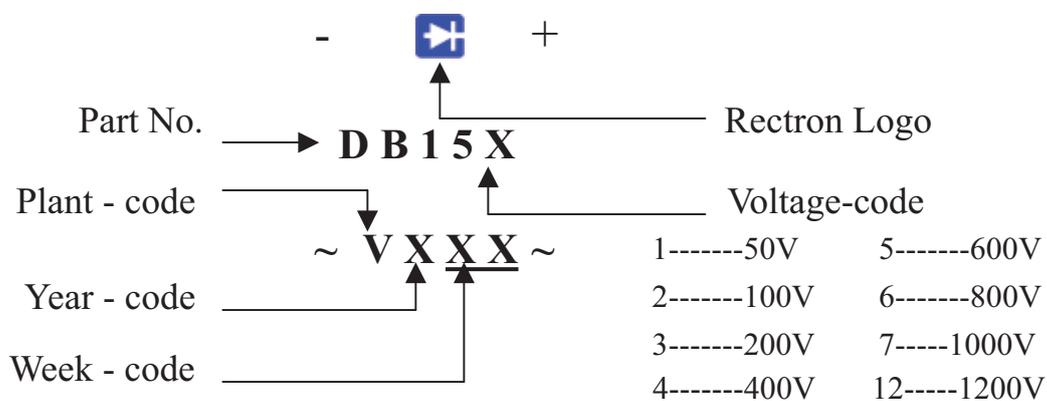
RECTRON

Attachment information about DB15XS

1. Internal Circuit



2. Marking on the body





RECTRON

Attachment information about DB15XS

3. Items marked on the inner box and carton

3.1 On the box (for -C)

CUSTOMER
TYPE
LOT NO.
QUANTITY
Q.A.
DATE

3.2 On the reel

CUSTOMER
TYPE
QUANTITY
LOT NO.
Q.A.
REMARK

3.3 On the carton

CUSTOMER
TYPE
QUANTITY
LOT NO.
REMARK

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

| PACKAGE | PACKING CODE | EA PER REEL | EA PER INNER BOX | COMPONENT SPACE (mm) | TAPE SPACE (mm) | REEL DIA (mm) | CARTON SIZE (mm) | EA PER CARTON | GROSS WEIGHT(Kg) |
|---------|--------------|-------------|------------------|----------------------|-----------------|---------------|------------------|---------------|------------------|
| DB-S | -T/W | 1,000 | 1,000 | 9.5 | 52 | 330 | 360*355*360 | 8,000 | 9.8 |

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