



**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

FEATURES

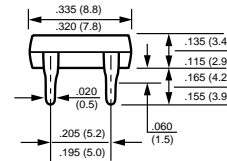
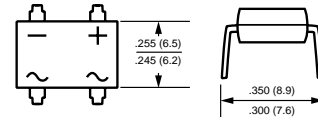
- * Good for automation insertion
- * Surge overload rating - 40 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any
- * Weight: 1.0 gram

MECHANICAL DATA

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



DB-1



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.

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

| RATINGS | SYMBOL | DB101 | DB102 | DB103 | DB104 | DB105 | DB106 | DB107 | UNITS |
|---|----------------------------------|--------------|-------|-------|-------|-------|-------|-------|---------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Bridge Input Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Output Current at T _A = 40°C | I _O | 1.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 40 | | | | | | | Amps |
| Current Squared Time | I ² t | 6.6 | | | | | | | A ² /Sec |
| Typical Thermal Resistance (Note 2) | R _{θJA} | 40 | | | | | | | °C/W |
| | R _{θJL} | 15 | | | | | | | |
| Operating and Storage Temperature Range | T _J ,T _{STG} | -55 to + 150 | | | | | | | °C |

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

| CHARACTERISTICS | SYMBOL | DB101 | DB102 | DB103 | DB104 | DB105 | DB106 | DB107 | UNITS |
|--|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Forward Voltage Drop per Bridge Element at 1.0A DC | V _F | 1.1 | | | | | | | Volts |
| Maximum Reverse Current at Rated | @ T _A = 25°C | 5.0 | | | | | | | μAmps |
| | @ T _A = 125°C | 0.5 | | | | | | | mAmps |

Note: 1."Fully ROHS compliant", "100% Sn plating(Pb-free).
2. Thermal Resistance: PCB mounted.
3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

RATING AND CHARACTERISTICS CURVES (DB101 THRU DB107)

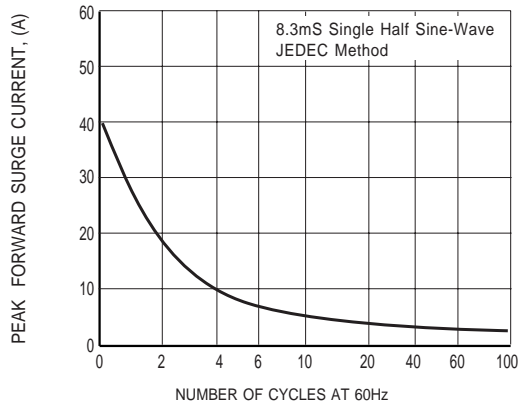


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

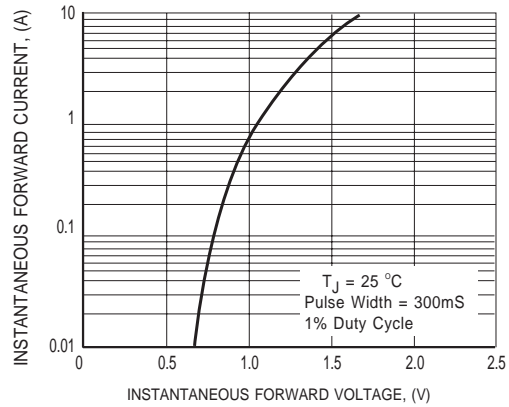


FIG. 2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

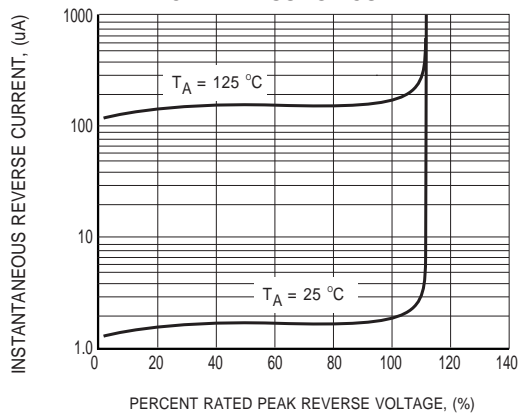


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

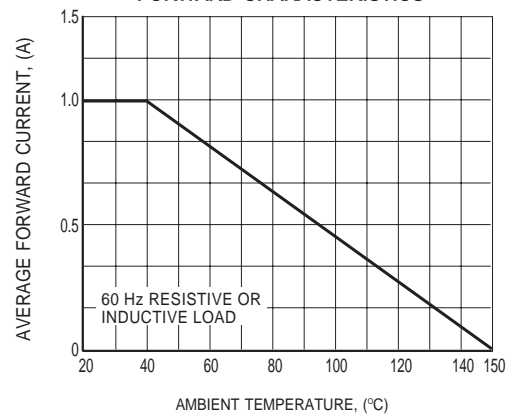
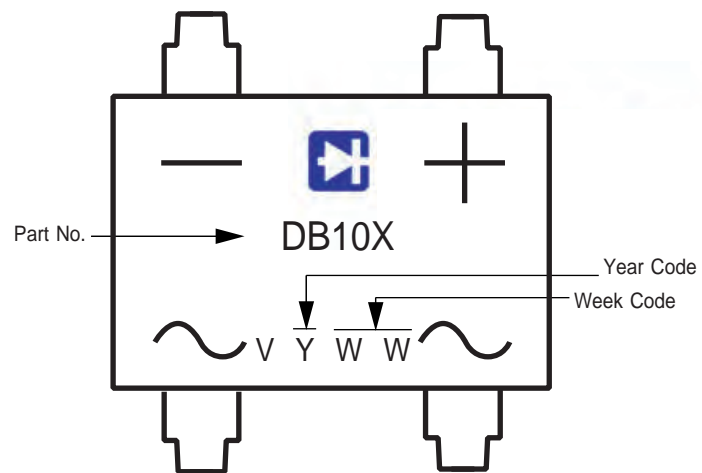


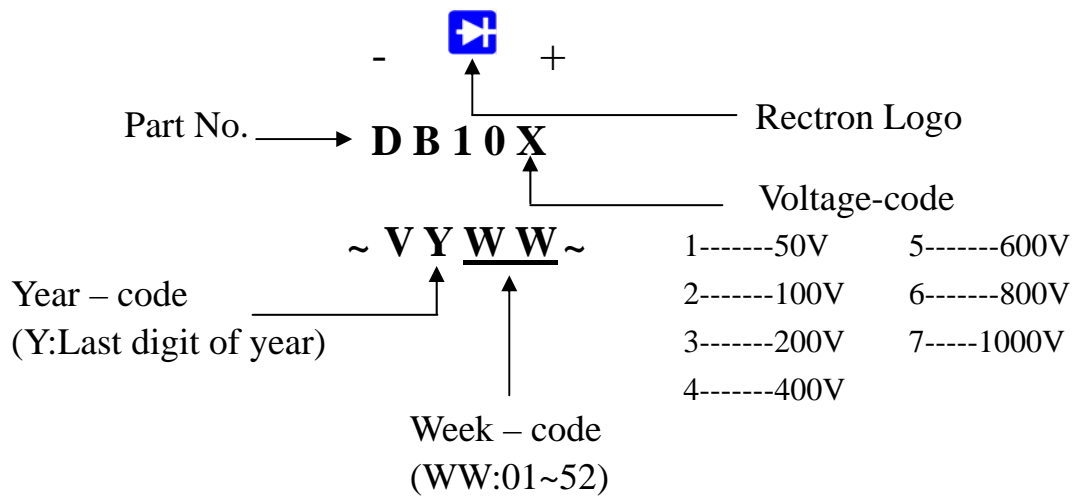
FIG. 4 TYPICAL FORWARD CURRENT DERATING CURVE

THE MARKING OF DB10X

Marking Description :



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 | 450*140*84 | 464*305*283 | 15,000 | 14.30 |

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