



**RBU1501M
THRU
RBU1507M**

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 15.0 Amperes

FEATURES

- * Low leakage
- * Low forward voltage
- * Silver-plated copper leads
- * Surge overload rating: 250 amperes peak
- * Mounting position: Any

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-O



RBU

Please See Page 3 for Dimension

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 (@ TA=25 °C unless otherwise noted)

| RATINGS | SYMBOL | RBU1501M | RBU1502M | RBU1503M | RBU1504M | RBU1505M | RBU1506M | RBU1507M | UNITS |
|--|-----------------------------------|--------------|----------|----------|----------|----------|----------|----------|---------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS 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 Rectified Current at T _C = *100 °C (Note 4) | I _O | 15.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 250 | | | | | | | Amps |
| Typical Current Squarad Time | I ² t | 259.2 | | | | | | | A ² /Sec |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to + 150 | | | | | | | °C |

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

| CHARACTERISTICS | SYMBOL | RBU1501M | RBU1502M | RBU1503M | RBU1504M | RBU1505M | RBU1506M | RBU1507M | UNITS |
|--|-------------------------|----------|----------|----------|----------|----------|----------|----------|-------|
| Maximum Instantaneous Forward Voltage at 7.5A DC | V _F | 1.1 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @T _A = 25°C | 5.0 | | | | | | | uAmps |
| | @T _A = 100°C | 100 | | | | | | | |

- NOTES : 1. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
2. "*" Heat Sink Temperature.
3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

RATING AND CHARACTERISTICS CURVES (RBU1501M THRU RBU1507M)

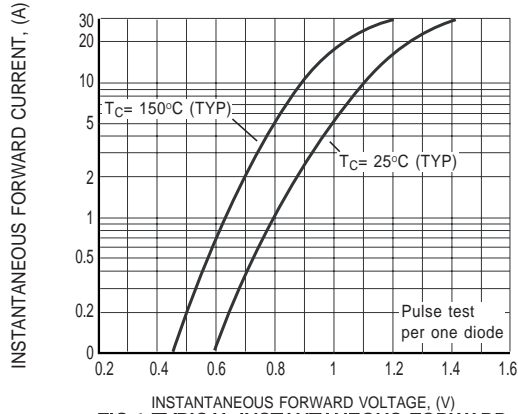


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

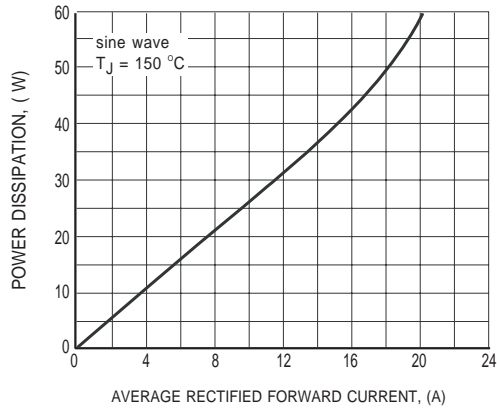


FIG.2 POWER DISSIPATION

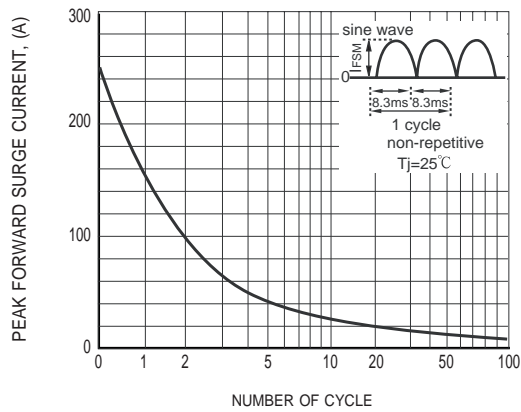


FIG.3 SURGE FORWARD CURRENT CAPABILITY

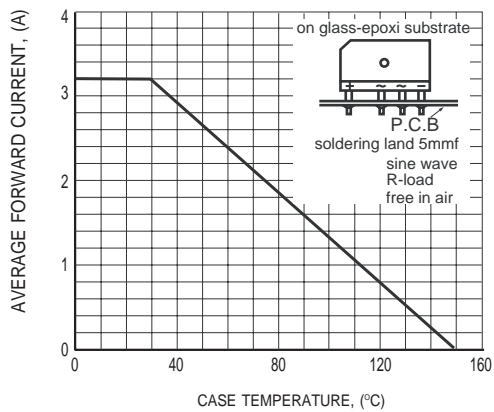


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

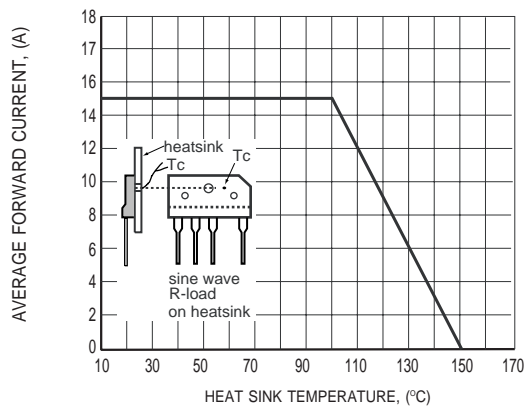


FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE

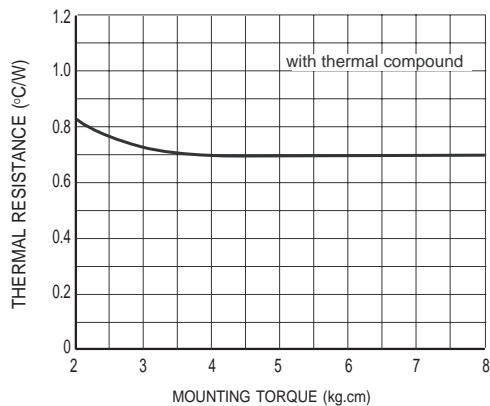
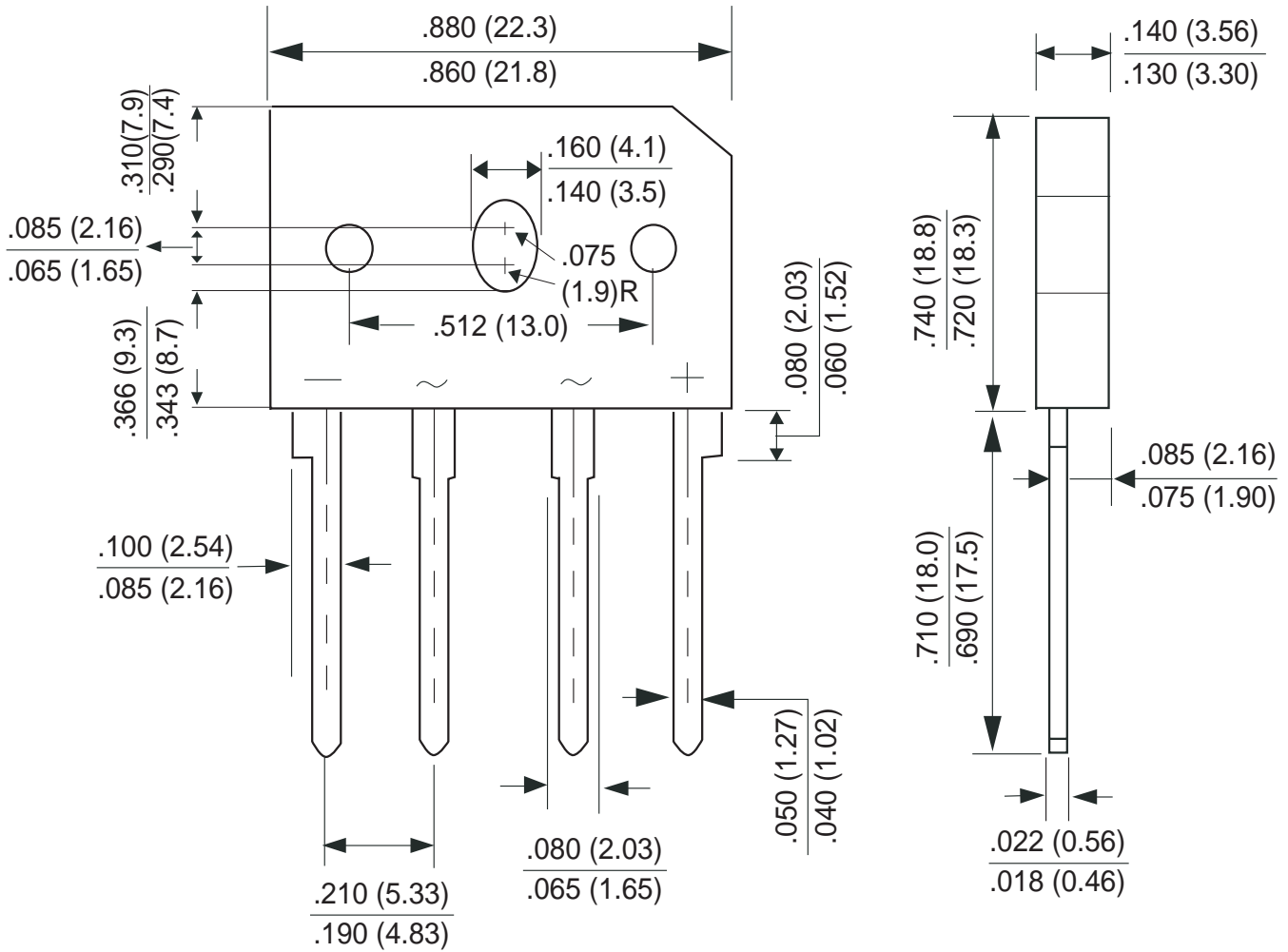
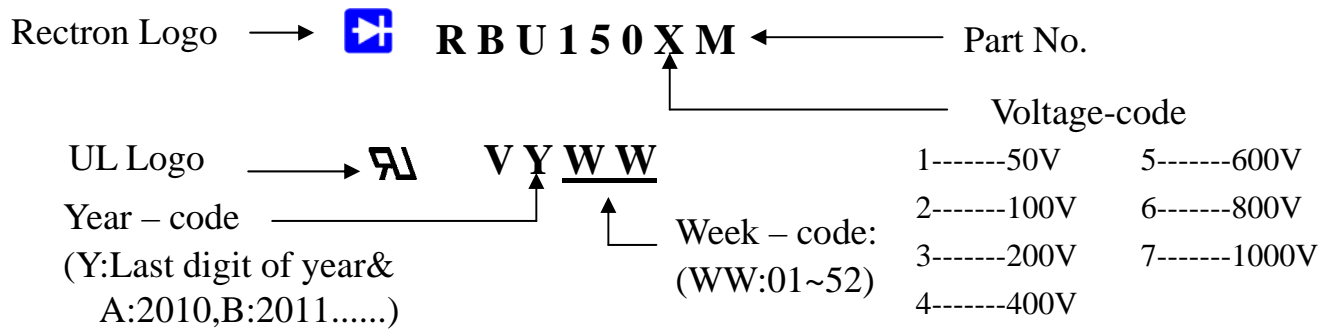


FIG.6 CONTACT THERMAL RESISTANCE fct

Dimensions in inches and (millimeters)



Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

| PACKAGE | PACKING CODE | EA PER BOX | INNER BOX SIZE (mm) | CARTON SIZE (mm) | EA PER CARTON | GROSS WEIGHT(Kg) |
|---------|--------------|------------|------------------------|---------------------|---------------|---------------------|
| RBU | -B | 450 | 240*239*35 | 502*251*126 | 2,700 | 13.00 |

TUBE PACK

| PACKAGE | PACKING CODE | EA PER BOX | INNER BOX SIZE (mm) | CARTON SIZE (mm) | EA PER CARTON | WEIGHT(Kg) |
|---------|--------------|------------|------------------------|---------------------|---------------|------------|
| RBU | -C | 1,000 | 490*135*110 | 510*293*131 | 2,000 | 13.62 |

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