



**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 8.0 Amperes

FEATURES

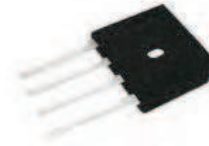
- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * High speed switching
- * High surge capability
- * High reliability
- * Guard ring construction on dice
- * Anti-ESD

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-O
- * Mounting position: Any
- * Weight: 0.01 gram (Approx.)
- * Flat lead frame

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



RBU

Please See Page 3 for Dimension

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

| RATINGS | SYMBOL | RBU801M | RBU802M | RBU803M | RBU804M | RBU805M | RBU806M | RBU807M | 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 = *75 °C (Note 4) | I _O | 8.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 200 | | | | | | | Amps |
| Current Squared Time | I ² _t | 165.9 | | | | | | | A ² /Sec |
| Typical Thermal Resistance (Note 1) | R _{θJC} | 3.4 | | | | | | | °C/W |
| | R _{θJA} | 26 | | | | | | | |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to + 150 | | | | | | | °C |

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

| CHARACTERISTICS | SYMBOL | RBU801M | RBU802M | RBU803M | RBU804M | RBU805M | RBU806M | RBU807M | UNITS |
|--|-------------------------|---------|---------|---------|---------|---------|---------|---------|-------|
| Maximum Instantaneous Forward Voltage at 8.0A DC | V _F | 1.1 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @T _A = 25°C | 2.0 | | | | | | | uAmps |
| | @T _A = 125°C | 500 | | | | | | | |

- NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
 2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
 3. Equivalent to Vishay's GBU8 Series.
 4. *** Heat Sink Temperature.
 5. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

RATING AND CHARACTERISTICS CURVES (RBU801M THRU RBU807M)

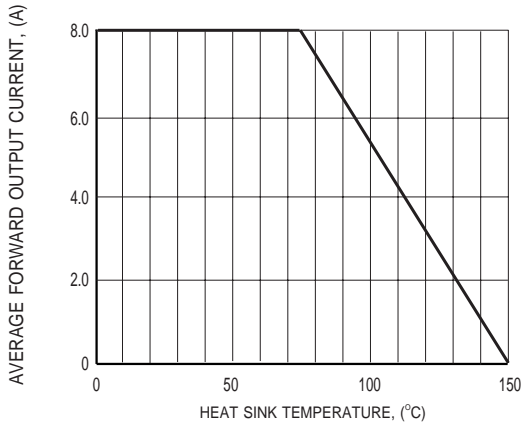


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

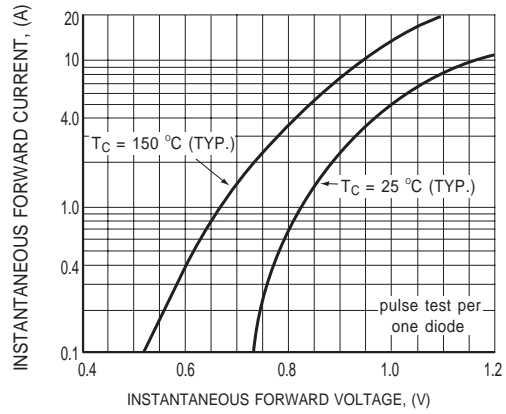


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

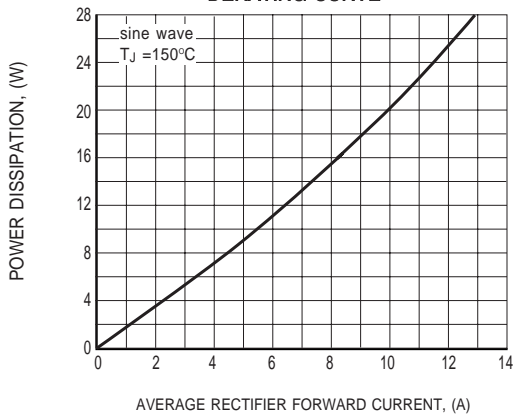


FIG.3 FORWARD DISSIPATION

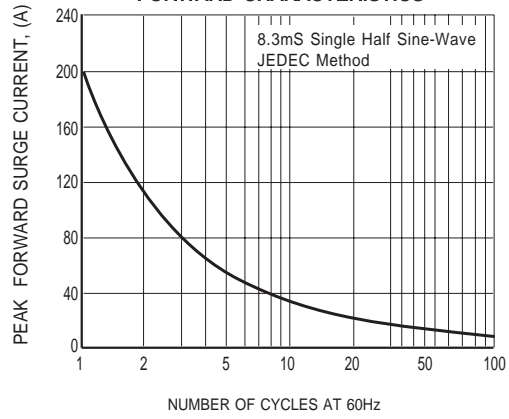
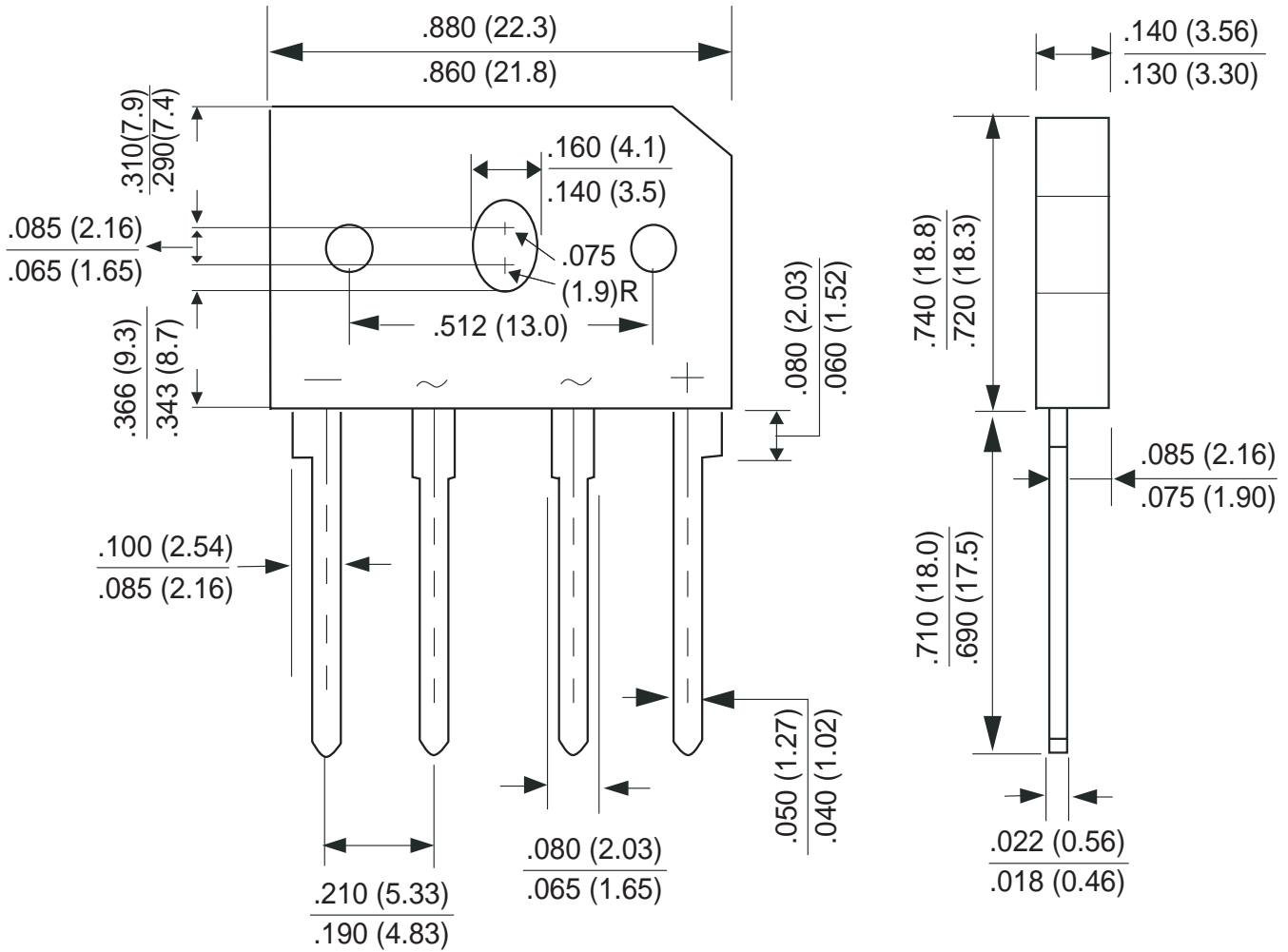
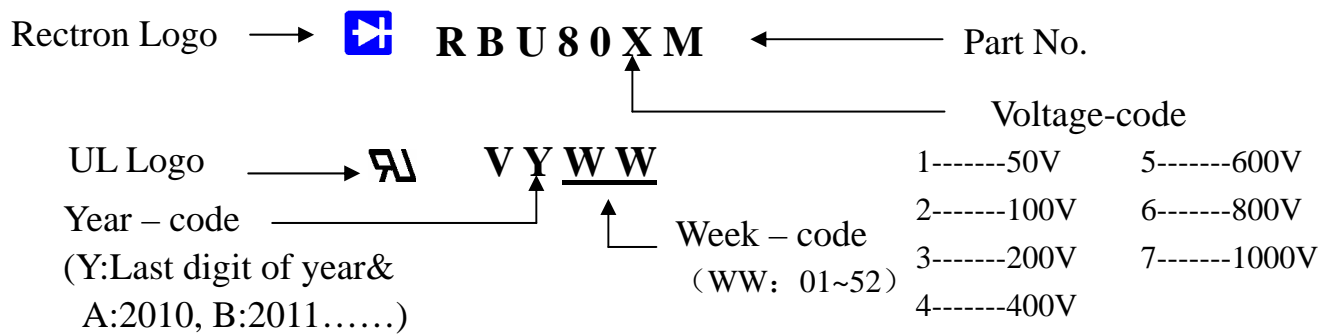


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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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