

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 10.0 Amperes

FEATURES

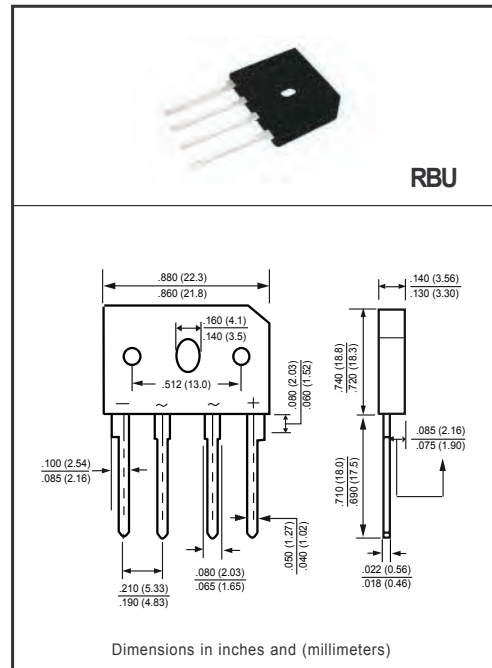
- * Low leakage
- * Low forward voltage
- * Surge overload rating: 200 amperes peak
- * Mounting position: Any

MECHANICAL DATA

- * UL listed the recognize component directory file # E252754
- * Epoxy: Device has UL flammability classification 94V-0

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 | RBU1001M | RBU1002M | RBU1003M | RBU1004M | RBU1005M | RBU1006M | RBU1007M | 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 | I_O | 10.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 200 | | | | | | | Amps |
| Typical Current Squared Time | I^2t | 165.9 | | | | | | | A ² S |
| Isolation Voltage of case | V_{ISO} | 1600 | | | | | | | V _{AC} |
| Typical Thermal Resistance (Note 1) | $R_{\theta JC}$ | 2.3 | | | | | | | °C/W |
| | $R_{\theta JA}$ | 26 | | | | | | | |
| Operating and Storage Temperature Range | T_J, T_{STG} | -55 to + 150 | | | | | | | °C |

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

| CHARACTERISTICS | SYMBOL | RBU1001M | RBU1002M | RBU1003M | RBU1004M | RBU1005M | RBU1006M | RBU1007M | UNITS |
|---|-----------------------|----------|----------|----------|----------|----------|----------|----------|-------|
| Maximum Instantaneous Forward Voltage at 5.0A DC | V_F | 1.0 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @ $T_A = 25^\circ C$ | 1.0 | | | | | | | uAmps |
| | @ $T_A = 125^\circ C$ | 100 | | | | | | | |

- 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 GBU10 Series.
 4. *** Heat Sink Temperature.
 5. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

RATING AND CHARACTERISTICS CURVES (RBU1001M THRU RBU1007M)

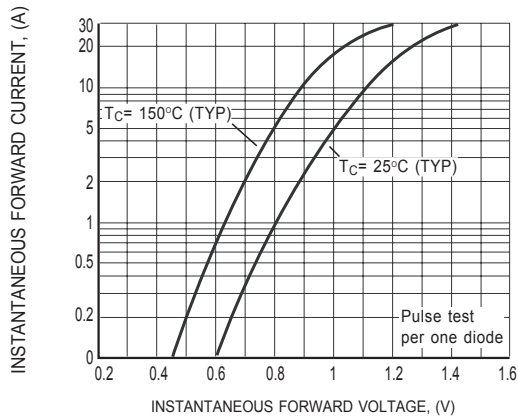


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

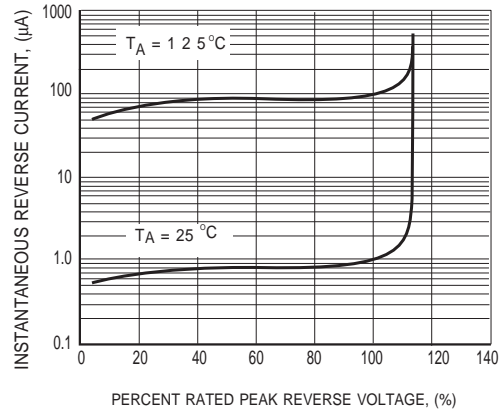


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

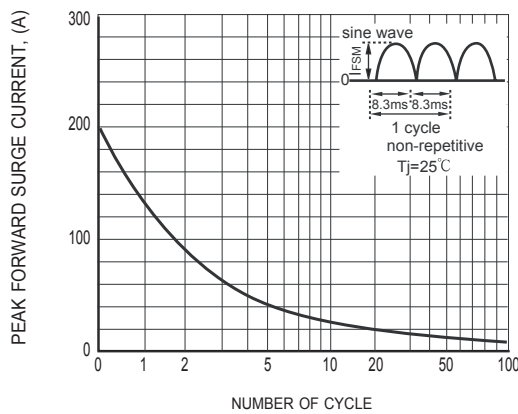


FIG.3 SURGE FORWARD CURRENT CAPABILITY

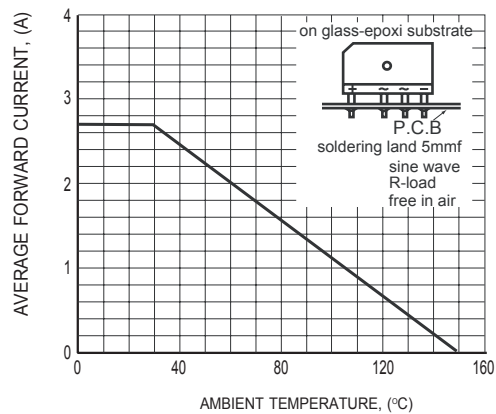


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

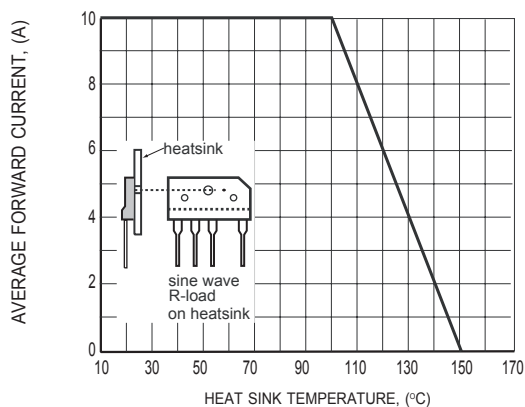


FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE

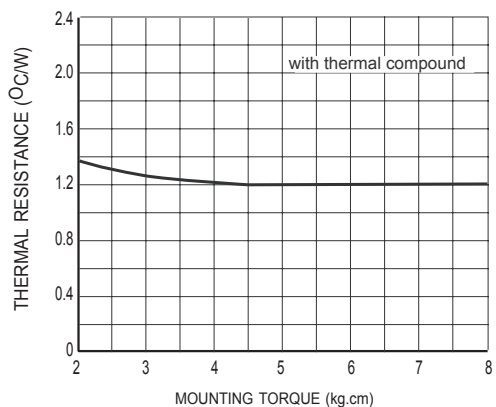
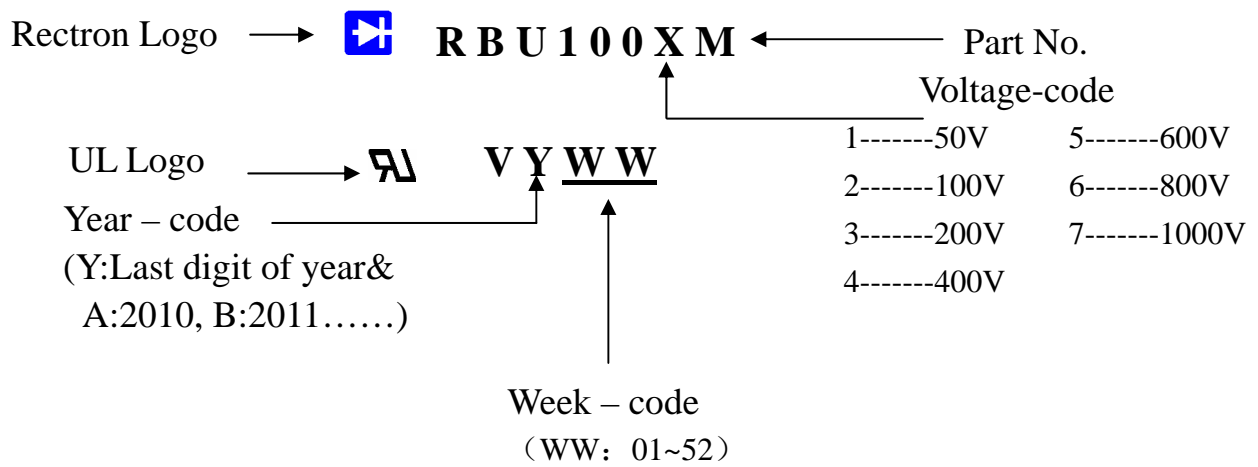


FIG.6 CONTACT THERMAL RESISTANCE for

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) |
|---------|--------------|------------|------------------------|---------------------|---------------|------------|
| RBU | -C | 1,000 | 490*135*110 | 510*293*131 | 2,000 | 13.62 |