

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Amperes

FEATURES

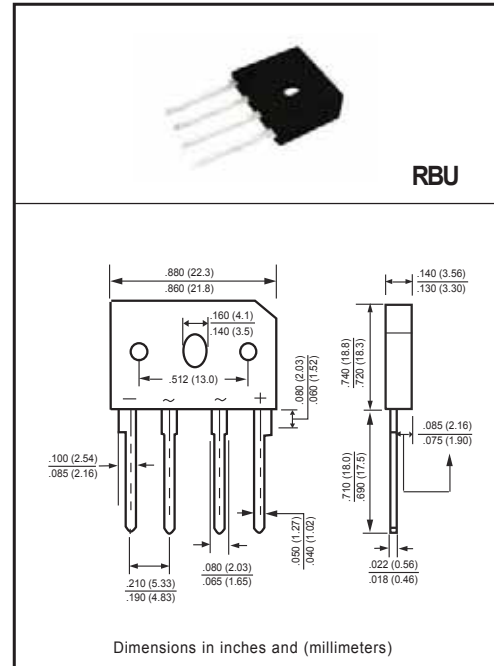
- * Ideal for printed circuit board
- * Surge overload rating: 150 amperes peak
- * Mounting position: Any

MECHANICAL DATA

- * UL listed the recognized component directory, file #E252754
- * Epoxy: Device has UL flammability classification 94V-O

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 (@ TA=25 °C unless otherwise noted)

| RATINGS | SYMBOL | RBU401M | RBU402M | RBU403M | RBU404M | RBU405M | RBU406M | RBU407M | 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 RSM Voltage | V _{RSM} | 150 | 200 | 300 | 500 | 700 | 900 | 1100 | Volts |
| Maximum Average Forward Rectified Current at T _C = 100°C | I _O | 4.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 150 | | | | | | | Amps |
| Typical Current Squared Time | I ² t | 93.37 | | | | | | | A ² S |
| Typical Junction Capacitance (Note 3) | C _J | 40 | | | | | | | pF |
| Typical Thermal Resistance (Note 1) | R _{θJC} | 4.2 | | | | | | | °C/W |
| | R _{θJA} | 22 | | | | | | | |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to + 150 | | | | | | | °C |

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

| CHARACTERISTICS | SYMBOL | RBU401M | RBU402M | RBU403M | RBU404M | RBU405M | RBU406M | RBU407M | UNITS |
|---|-------------------------|---------|---------|---------|---------|---------|---------|---------|-------|
| Maximum Instantaneous Forward Voltage at 4.0A DC | V _F | 1.0 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @T _A = 25°C | 1.0 | | | | | | | uAmps |
| | @T _A = 150°C | 1.0 | | | | | | | mAmps |

NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
2. " ROHS compliant".
3. Measured at 1MHz and applied reverse voltage of 4.0 voltage.

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RATING AND CHARACTERISTICS CURVES (RBU401M THRU RBU407M)

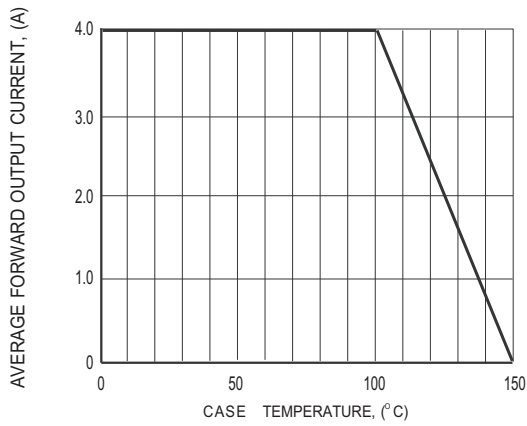


FIG.1 DERATING CURVE OUTPUT RECTIFIED CURRENT

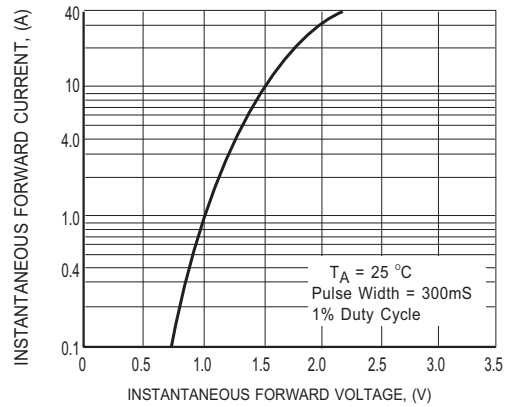


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

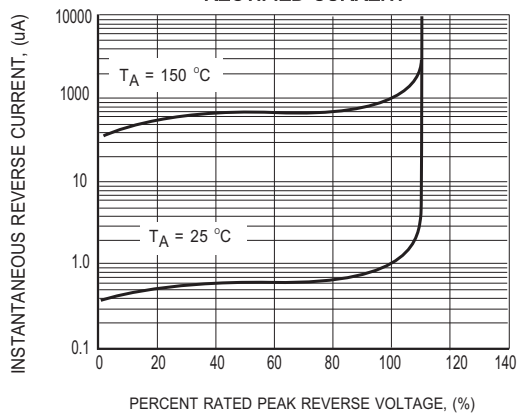


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

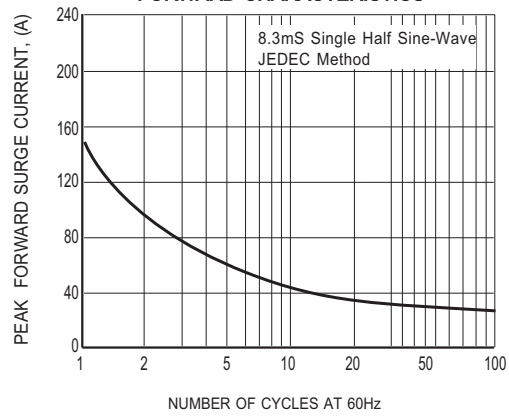


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

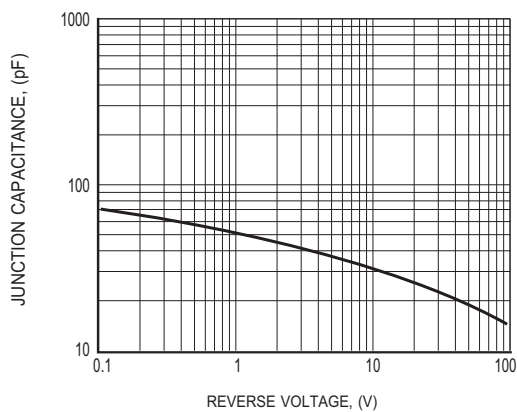


FIG.5 TYPICAL JUNCTION CAPACITANCE PER LEG

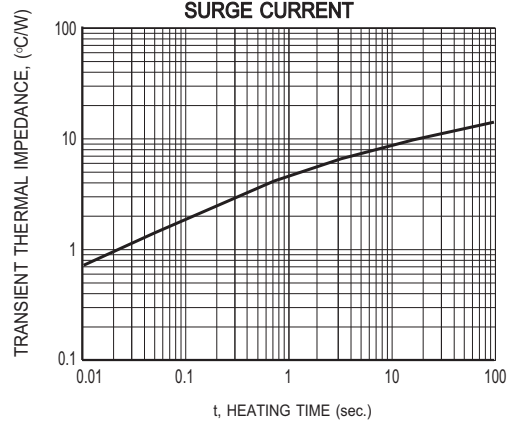
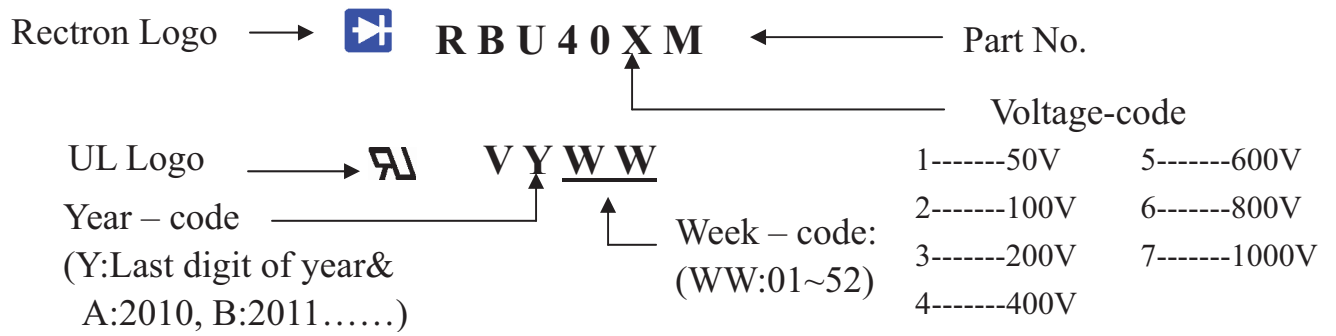


FIG.6 TYPICAL TRANSIENT THERMAL IMPEDANCE

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 |

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