

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

FEATURES

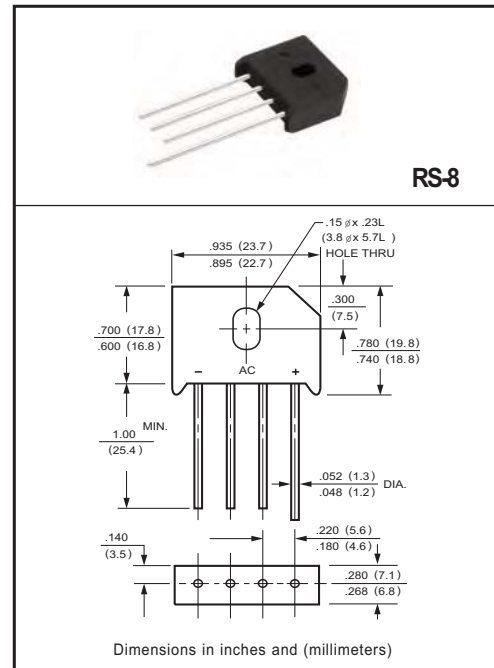
- * Ideal for printed circuit board
- * Surge overload rating: 50 amperes peak
- * Low leakage
- * Mounting position: Any
- * Low forward voltage
- * High forward surge current capability

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0
- * UL listed the recognized component directory, file #94233

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 | RS801 | RS802 | RS803 | RS804 | RS805 | RS806 | RS807 | 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 | I _O | 8.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 250 | | | | | | | Amps |
| Current Squared Time | I ² T | 259.2 | | | | | | | A ² /Sec |
| Typical Thermal Resistance (Note 1) | R _{θJC} | 7 | | | | | | | °C/W |
| | R _{θJA} | 18 | | | | | | | |
| Current Square Time Value | I ² T | 259.3 | | | | | | | A ² S |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to + 150 | | | | | | | °C |

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

| CHARACTERISTICS | SYMBOL | RS801 | RS802 | RS803 | RS804 | RS805 | RS806 | RS807 | UNITS |
|---|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Instantaneous Forward Voltage at 8.0A DC | V _F | 1.2 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @T _A = 25 °C | 5.0 | | | | | | | uAmps |
| | @T _A = 100 °C | 200 | | | | | | | |

- NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
3. Measured at 1MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTICS CURVES (RS801 THRU RS807)

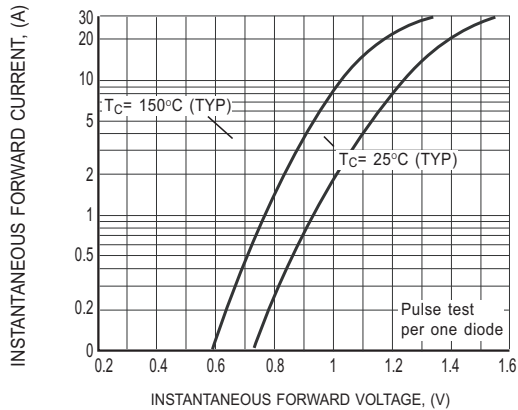


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

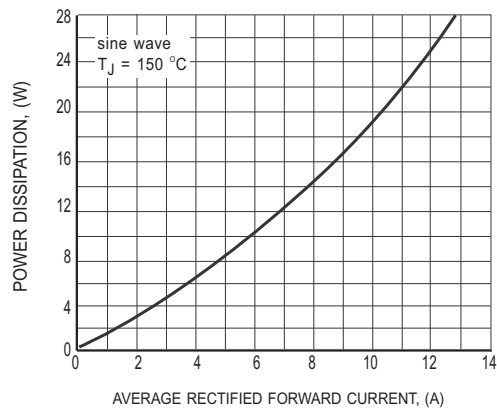


FIG.2 POWER DISSIPATION

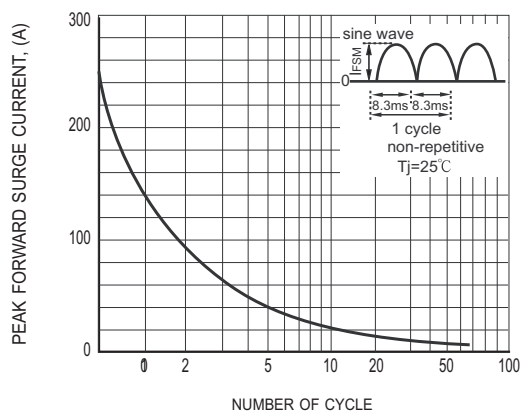


FIG.3 SURGE FORWARD CURRENT CAPABILITY

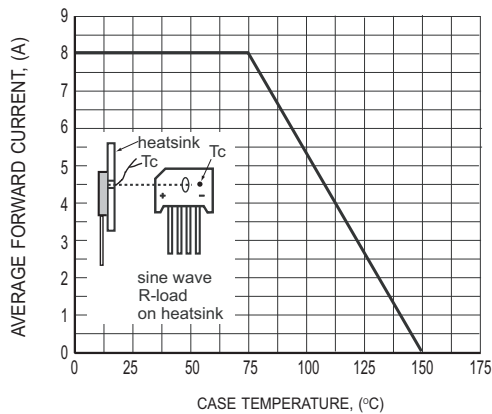


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

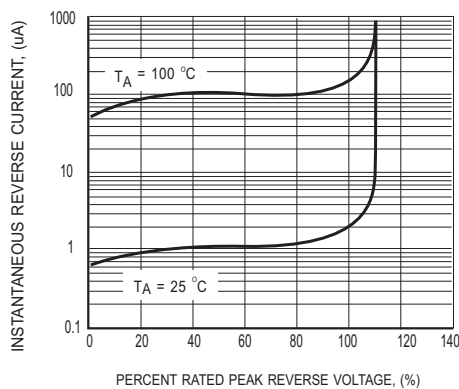
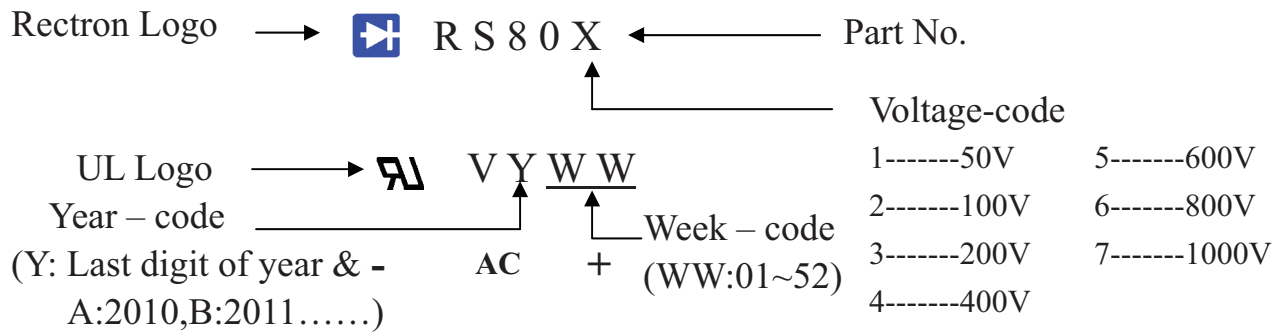


FIG.5 TYPICAL REVERSE CHARACTERISTICS

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) |
|---------|--------------|------------|------------------------|---------------------|---------------|---------------------|
| RS-8 | -B | 200 | 236*236*34 | 497*255*162 | 1,600 | 13.6 / 14.5 |

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