



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

**RBU1501M
THRU
RBU1507M**

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Dimensions in inches and (millimeters)

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 $T_C = 100^\circ\text{C}$ (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 Squared Time	I^2t	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	I _R	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.

2010-05
REV: B

RATING AND CHARACTERISTICS CURVES (RBU1501M THRU RBU1507M)

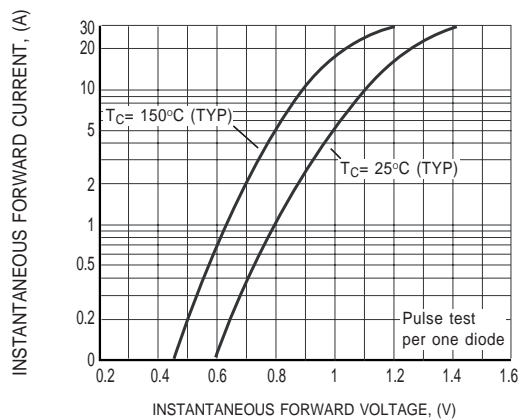


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

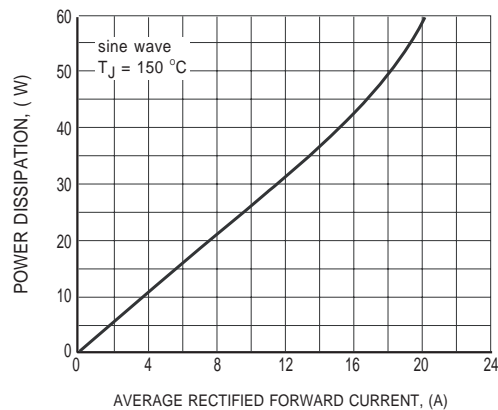


FIG.2 POWER DISSIPATION

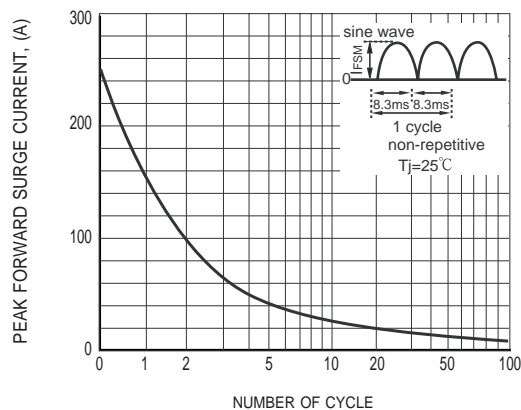


FIG.3 SURGE FORWARD CURRENT CAPABILITY

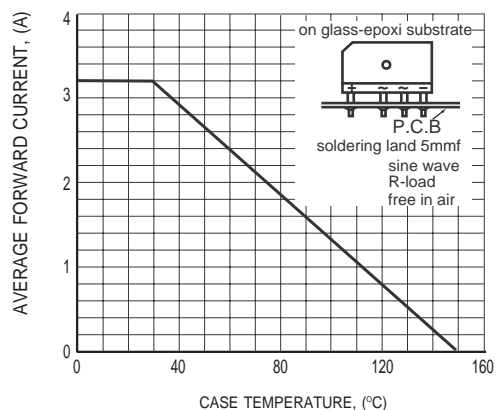


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

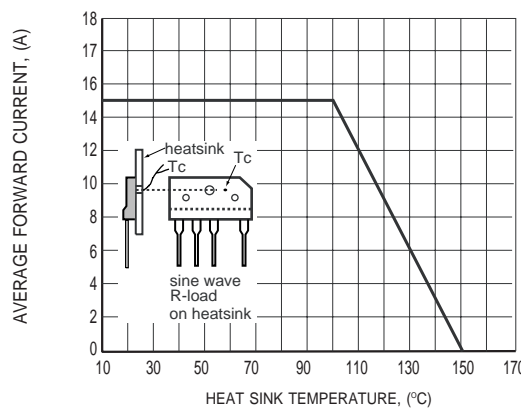


FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE

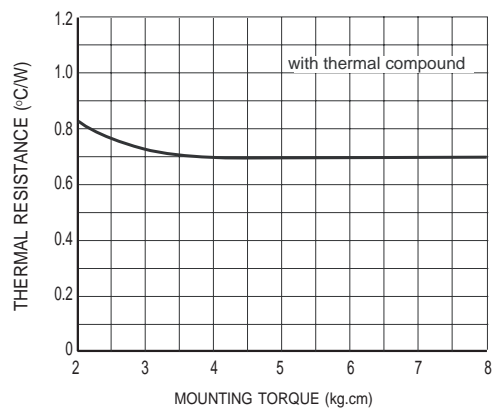
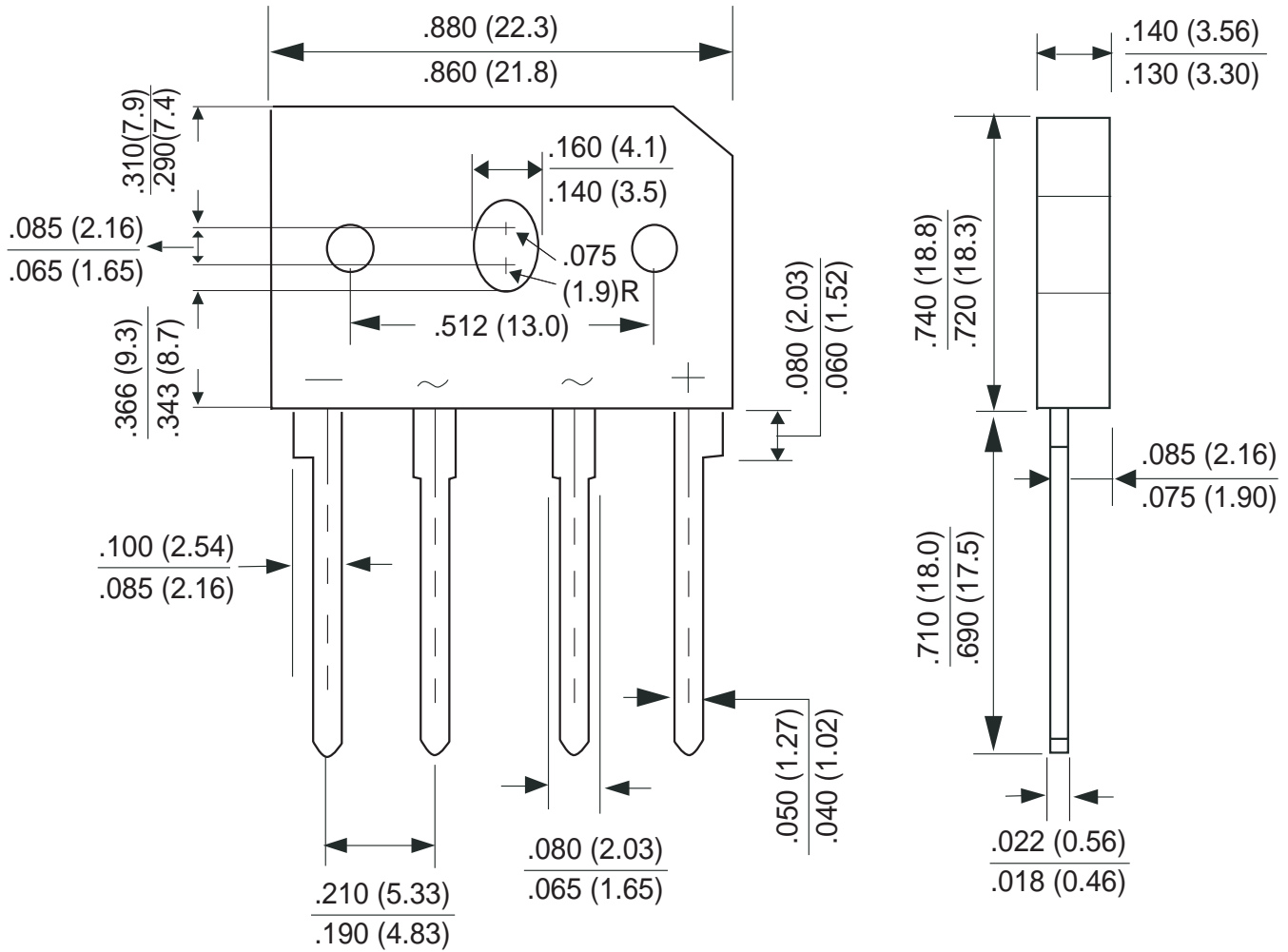
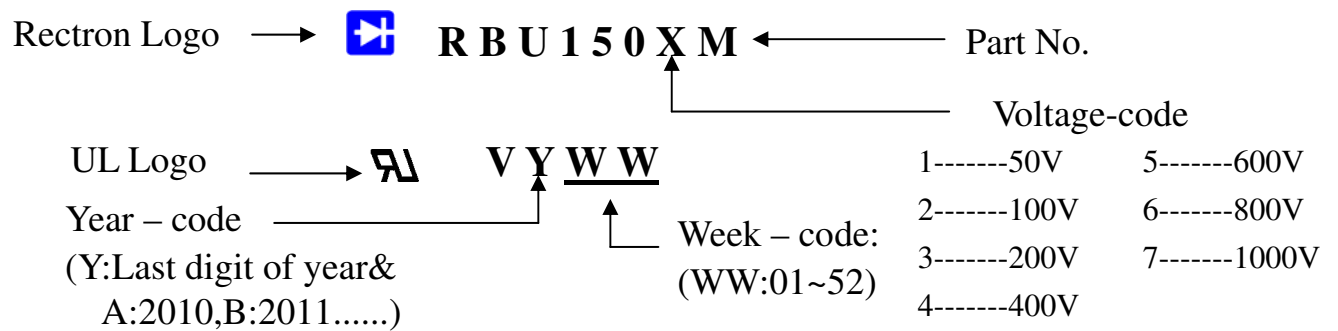


FIG.6 CONTACT THERMAL RESISTANCE fct

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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