



**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: 130 amperes peak
- * Mounting position: Any

MECHANICAL DATA

- * UL listed the recognized component directory, file #E252754
- * 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.

MAXIMUM RATINGS (@ T_A=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 Average Forward Rectified Current at T _A = 50°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}	130							Amps
Typical Current Squared Time	I ² _t	70.1							A ² /Sec
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 (@T_A=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	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T _A = 25°C	5.0							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. Measured at 1MHz and applied reverse voltage of 4.0 voltage.
 4. Equivalent to Vishay's GBU4 Series.
 5. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

2010-05
REV:C

RATING AND CHARACTERISTICS CURVES (RBU401M THRU RBU407M)

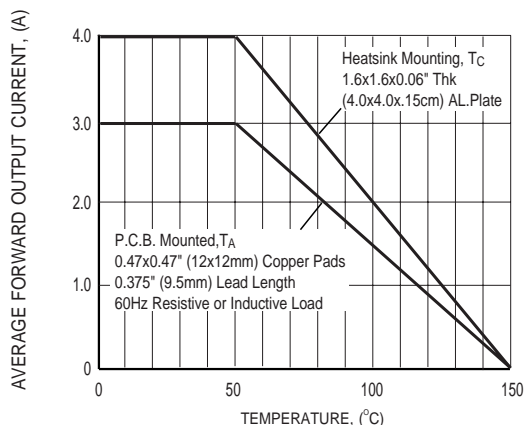


FIG.1 DERATING CURVE OUTPUT RECTIFIED CURRENT

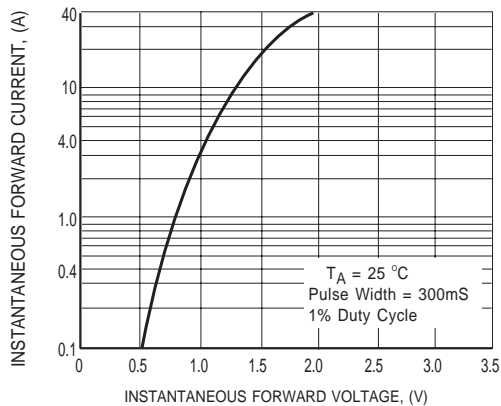


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

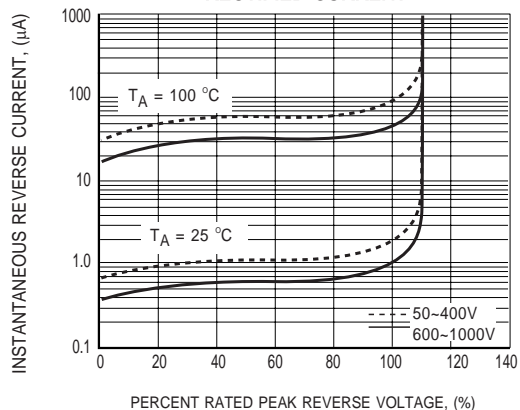


FIG.3 TYPICAL REVERSE CHARACTERISTICS

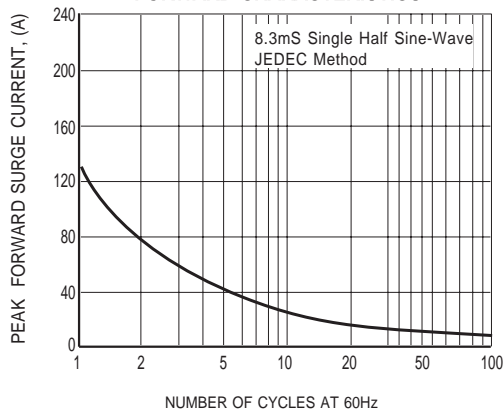


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

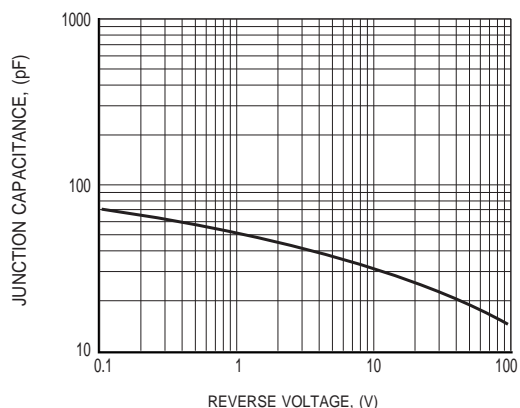


FIG.5 TYPICAL JUNCTION CAPACITANCE PER LEG

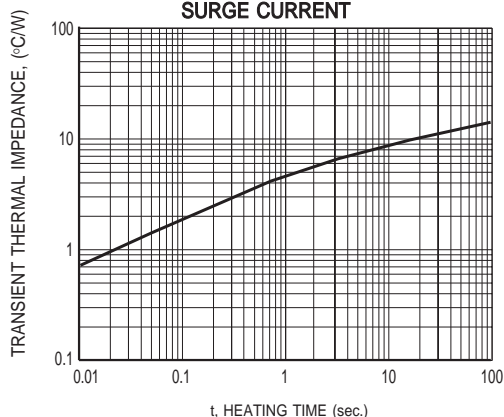
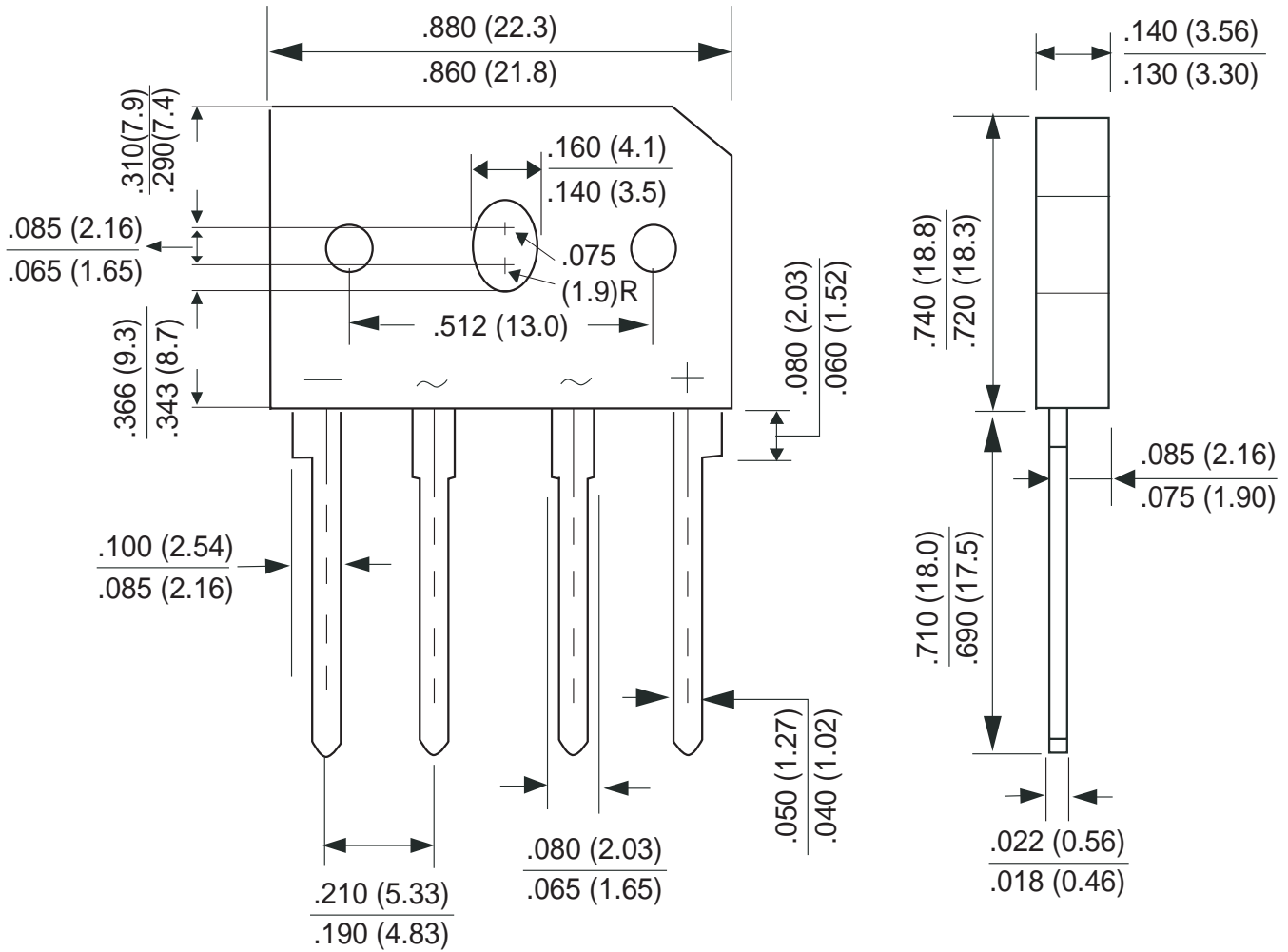
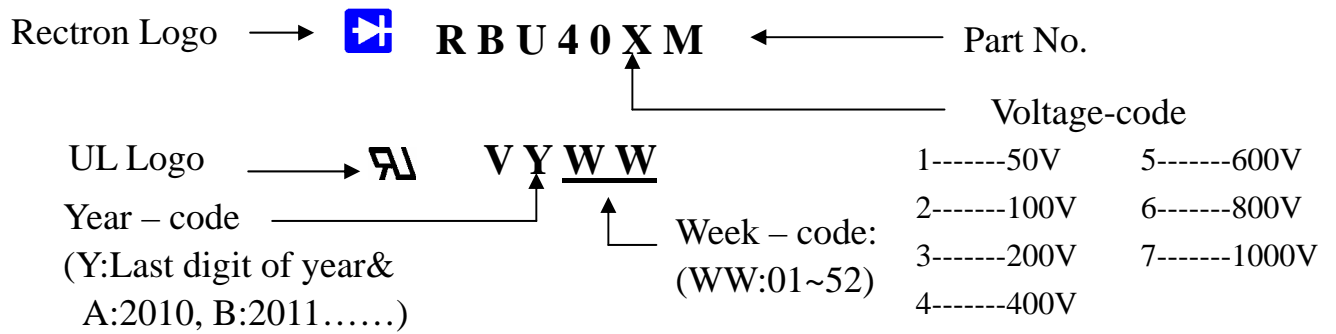


FIG.6 TYPICAL TRANSIENT THERMAL IMPEDANCE

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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