

# RBU401M **THRU** RBU407M

# SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Amperes** 

### **FEATURES**

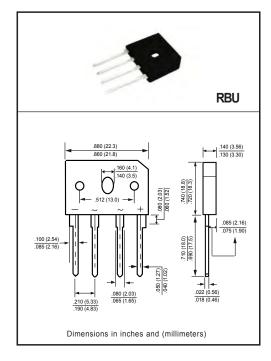
- \* Ideal for printed circuit board
- \* Surge overload rating: 130 amperes peak
- \* Mounting position: Any

### **MECHANICAL DATA**

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

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25  $^{\circ}\text{C}$  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 <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> = 50°C	l <sub>O</sub>	4.0						Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	130						Amps	
Typical Junction Capacitance (Note 3)	CJ	40						pF	
Typical Thermal Resistance (Note 1)	R <sub>θ</sub> JC	4.2							°C/W
Typical Thermal Resistance (Note 1)	R <sub>θ</sub> JA	22							
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150						°C	

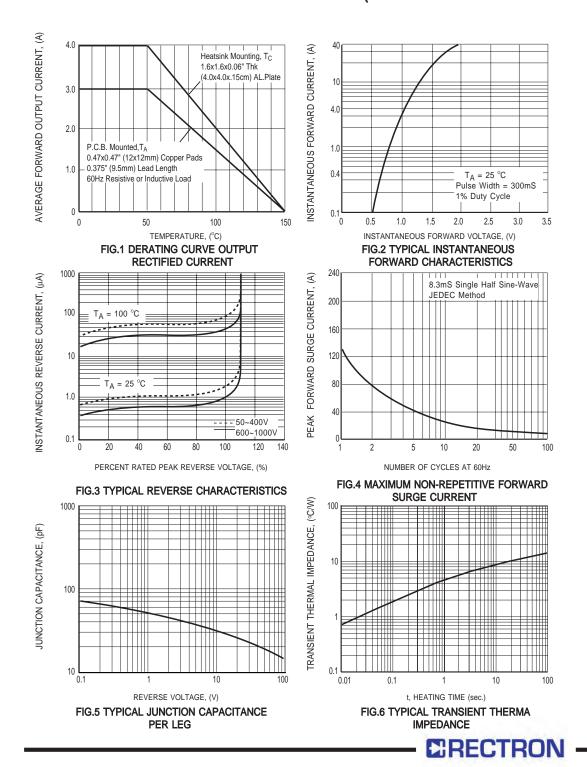
### ELECTRICAL CHARACTERISTICS (@TA=25 $^{\circ}$ C unless otherwise noted)

CHARACTERISTICS		SYMBOL	RBU401M	RBU402M	RBU403M	RBU404M	RBU405M	RBU406M	RBU407M	UNITS
Maximum Instantaneous Forward Vo	V <sub>F</sub>	1.1					Volts			
Maximum DC Reverse Current	@T <sub>A</sub> = 25°C	- 10				5.0				
at Rated DC Blocking Voltage	@T <sub>A</sub> = 125°C	IR	500					uAmps		

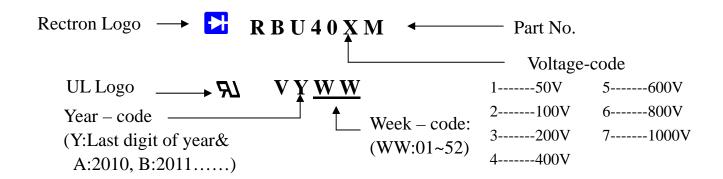
NOTES: 1. Thermal Resistance: Heat-sink case mounted or if PCB mounted.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
3. Measured at 1MHz and applied reverse voltage of 4.0 voltage.
4. Equivalent to Vishay's GBU4 Series.

2013-04 REV: B

## RATING AND CHARACTERISTICS CURVES (RBU401M THRU RBU407M)



# **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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