



**RBU601M  
THRU  
RBU607M**

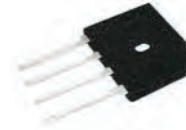
**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 50 to 1000 Volts CURRENT 6.0 Amperes

**FEATURES**

- \* Low leakage
- \* Low forward voltage
- \* Silver-plated copper leads
- \* Surge overload rating: 150 amperes peak
- \* Mounting position: Any

**MECHANICAL DATA**

- \* UL listed the recognize 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** (@ TA=25 °C unless otherwise noted)

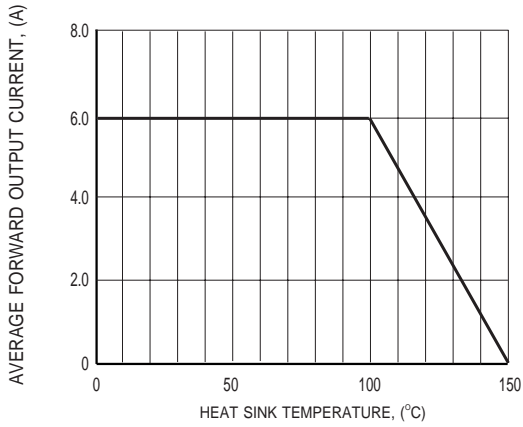
RATINGS	SYMBOL	RBU601M	RBU602M	RBU603M	RBU604M	RBU605M	RBU606M	RBU607M	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T <sub>C</sub> = *100 °C (Note 4)	I <sub>O</sub>	6.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150							Amps
Typical Current Squared Time	i <sup>2</sup> <sub>t</sub>	93.3							A <sup>2</sup> /S
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	3.5							°C/W
	R <sub>θJA</sub>	26							
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

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

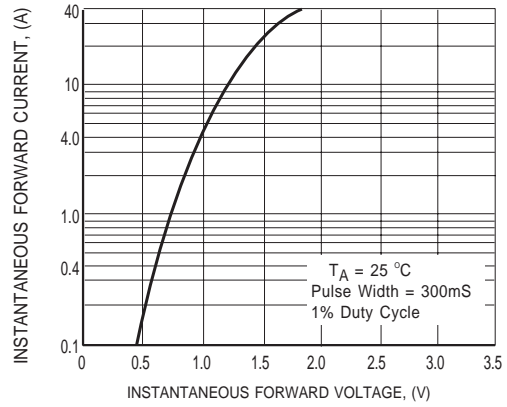
CHARACTERISTICS	SYMBOL	RBU601M	RBU602M	RBU603M	RBU604M	RBU605M	RBU606M	RBU607M	UNITS
Maximum Instantaneous Forward Voltage at 6.0A DC	V <sub>F</sub>	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C	2.0							uAmps
	@T <sub>A</sub> = 125°C	300							

- NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.  
 2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".  
 3. Equivalent to Vishay's GBU6 Series.  
 4. \*\*\* Heat Sink Temperature.  
 5. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

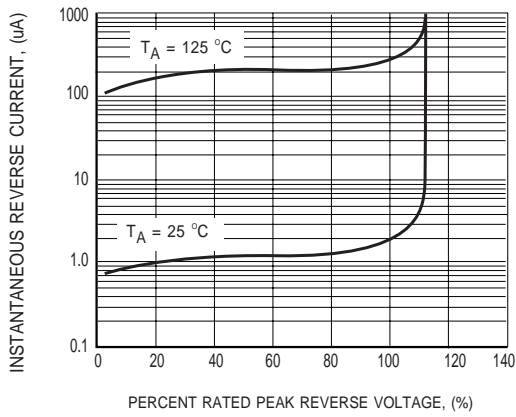
# RATING AND CHARACTERISTICS CURVES ( RBU601M THRU RBU607M )



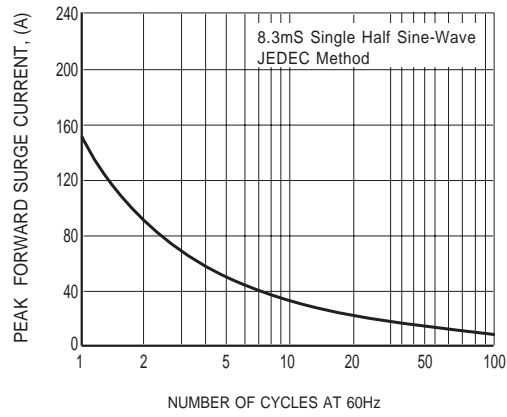
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

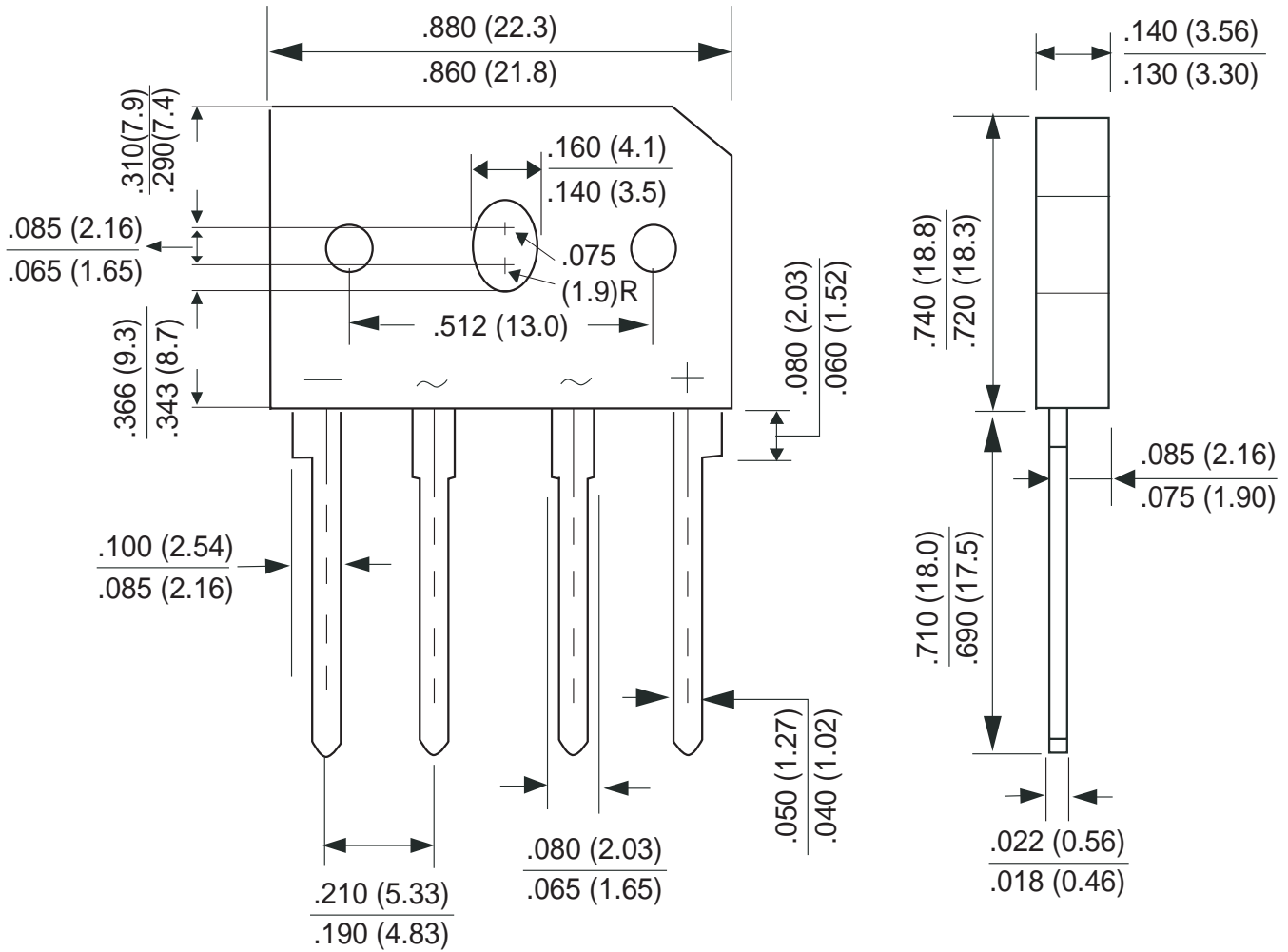


**FIG.3 TYPICAL REVERSE CHARACTERISTICS**

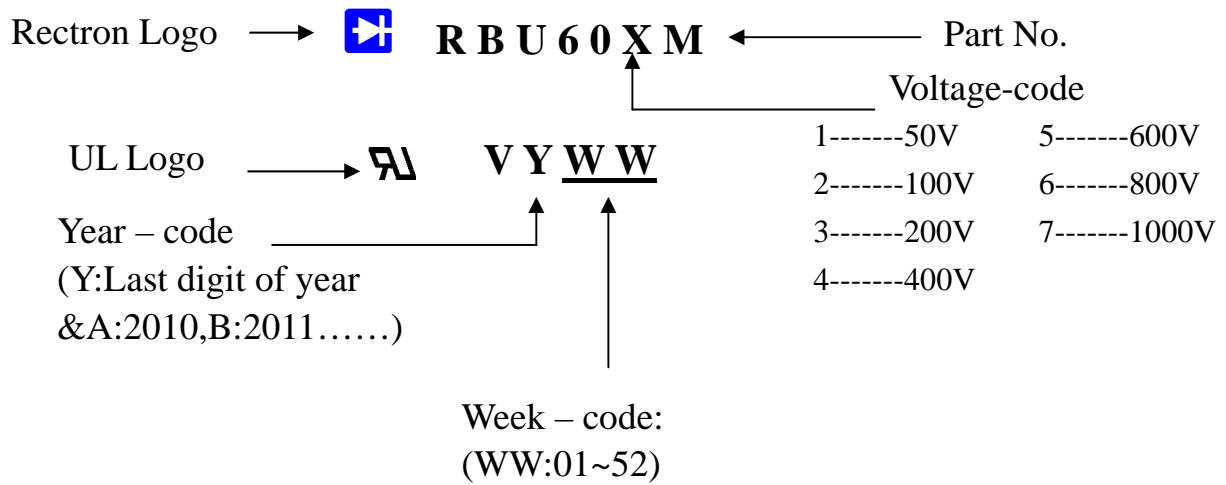


**FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**

## 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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