

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 50 to 1000 Volts CURRENT 10.0 Ampere

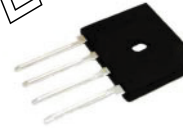
**FEATURES**

- \* Low leakage
- \* Low forward voltage
- \* Silver-plated copper leads
- \* Surge overload rating: 200 amperes peak
- \* Mounting position: Any

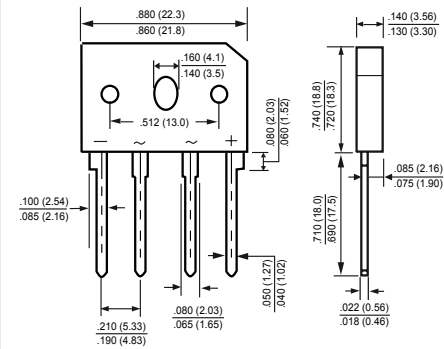
**MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-0

NEW RELEASE



RBU



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °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)**

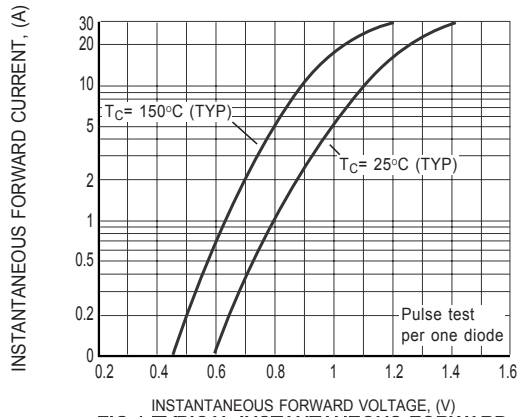
RATINGS	SYMBOL	RBU1001M	RBU1002M	RBU1003M	RBU1004M	RBU1005M	RBU1006M	RBU1007M	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_C = 100^\circ\text{C}$ (Note 4)	$I_O$	10.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200							Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.3							$^\circ\text{C}/\text{W}$
	$R_{\theta JA}$	26							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150							$^\circ\text{C}$

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

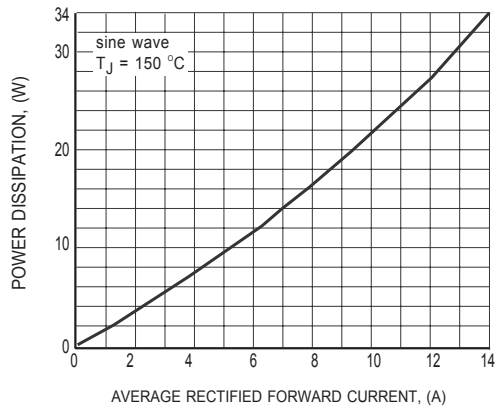
CHARACTERISTICS	SYMBOL	RBU1001M	RBU1002M	RBU1003M	RBU1004M	RBU1005M	RBU1006M	RBU1007M	UNITS
Maximum Instantaneous Forward Voltage at 5.0A DC	$V_F$	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$	2.0							$\mu\text{Amps}$
	@ $T_A = 100^\circ\text{C}$	100							

- 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 GBU10 Series.  
4. \*\*\* Heat Sink Temperature.

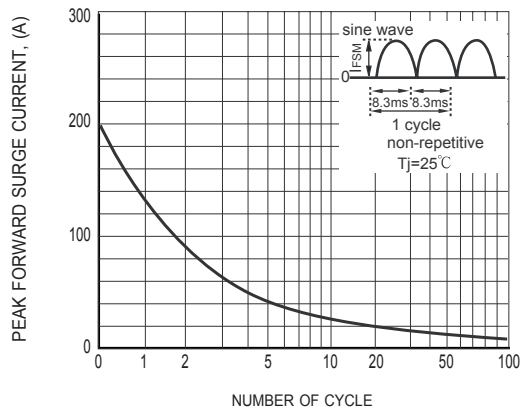
# RATING AND CHARACTERISTICS CURVES ( RBU1001M THRU RBU1007M )



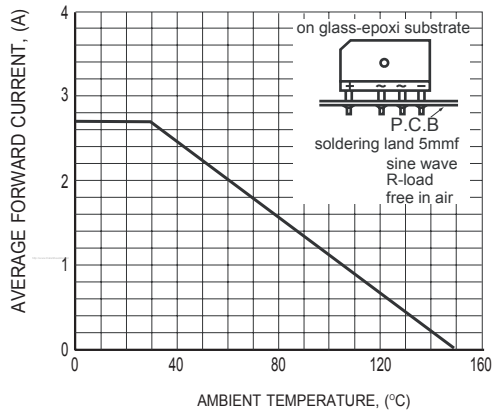
**FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



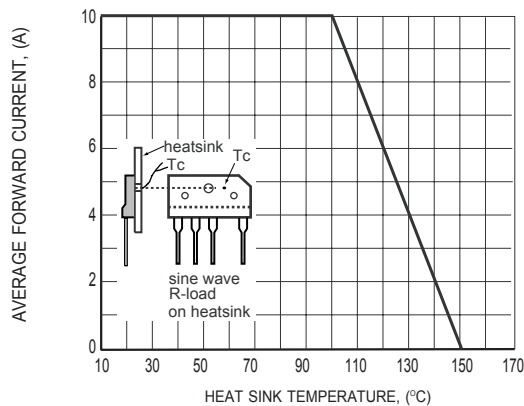
**FIG.2 POWER DISSIPATION**



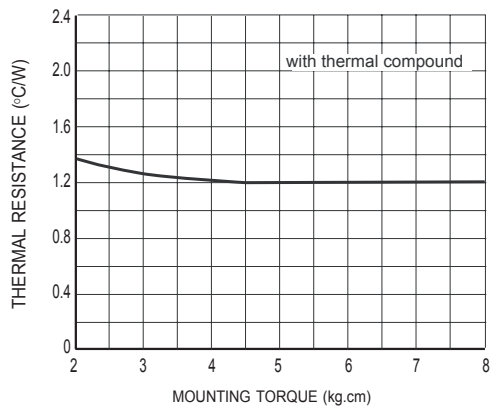
**FIG.3 SURGE FORWARD CURRENT CAPABILITY**



**FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.6 CONTACT THERMAL RESISTANCE fcf**

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