

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 8.0 Ampere

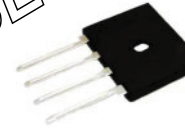
FEATURES

- * Low leakage
- * Low forward voltage
- * Ideal for printed circuit boards
- * Surge overload rating: 200 amperes peak
- * Mounting position: Any
- * High forward surge current capability

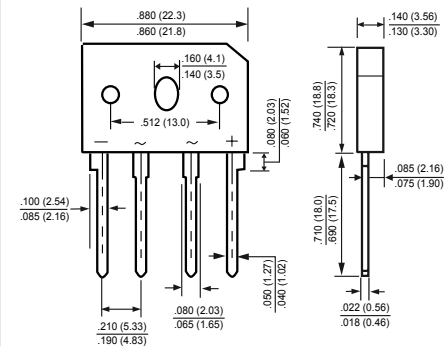
MECHANICAL DATA

- * 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	RBU801M	RBU802M	RBU803M	RBU804M	RBU805M	RBU806M	RBU807M	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 $T_C = 75^\circ\text{C}$ (Note 4)	I_O	8.0							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)	$R_{\theta JC}$	3.4							°C/W
	$R_{\theta JA}$	26							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

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

CHARACTERISTICS	SYMBOL	RBU801M	RBU802M	RBU803M	RBU804M	RBU805M	RBU806M	RBU807M	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC	V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$	2.0							μAmps
	@ $T_A = 125^\circ\text{C}$	500							

- 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 GBU8 Series.
4. *** Heat Sink Temperature.

RATING AND CHARACTERISTICS CURVES (RBU801M THRU RBU807M)

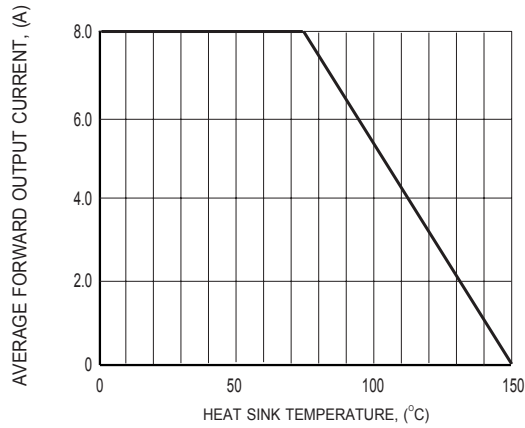


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

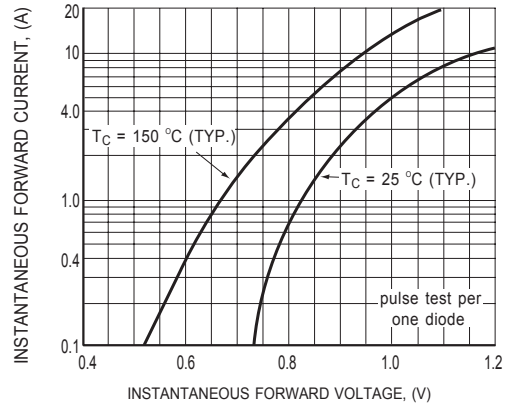


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

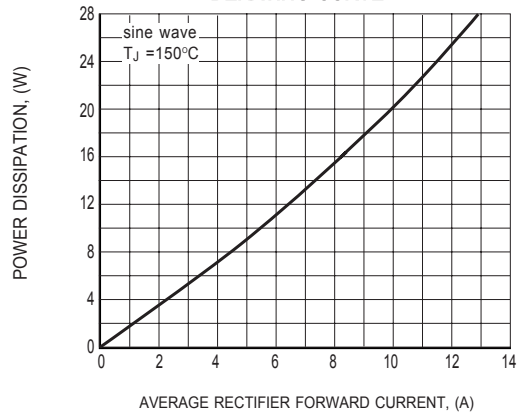


FIG.3 FORWARD DISSIPATION

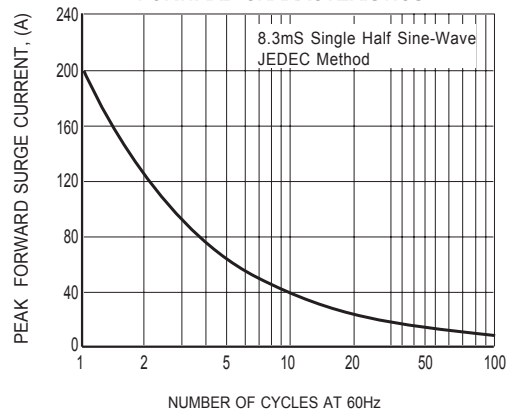


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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