



THE DATASHEET OF RBU406M



**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Amperes

FEATURES

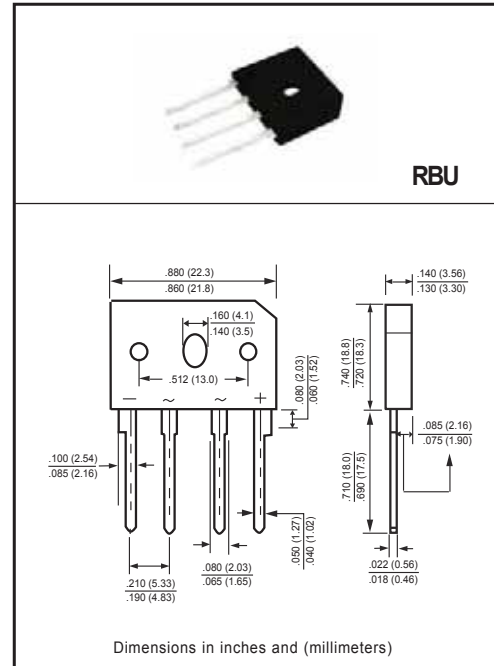
- * Ideal for printed circuit board
- * Surge overload rating: 150 amperes peak
- * Mounting position: Any

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 °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 _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum RSM Voltage	V _{RSM}	150	200	300	500	700	900	1100	Volts
Maximum Average Forward Rectified Current at T _C = 100°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}	150							Amps
Typical Current Squared Time	I ² t	93.37							A ² S
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 (@TA=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	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _A = 25°C	1.0							uAmps
	@T _A = 125°C	200							

NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
2. " RoHS compliant".
3. Measured at 1MHz and applied reverse voltage of 4.0 voltage.

2023-07
REV:E

RATING AND CHARACTERISTICS CURVES (RBU401M THRU RBU407M)

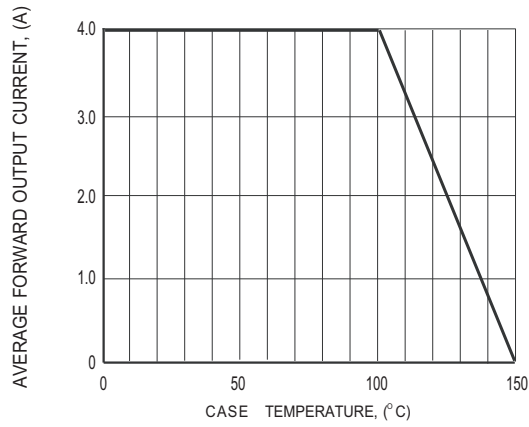


FIG.1 DERATING CURVE OUTPUT RECTIFIED CURRENT

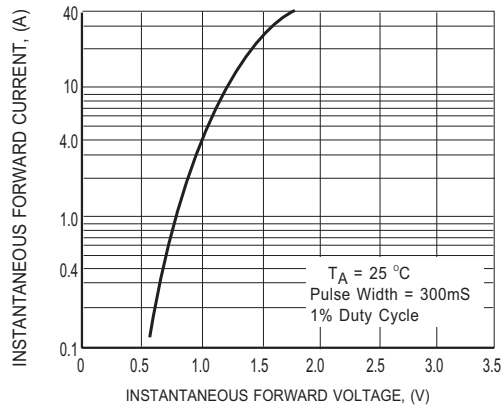


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

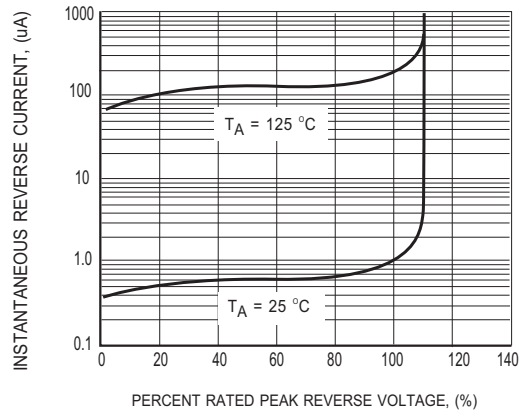


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

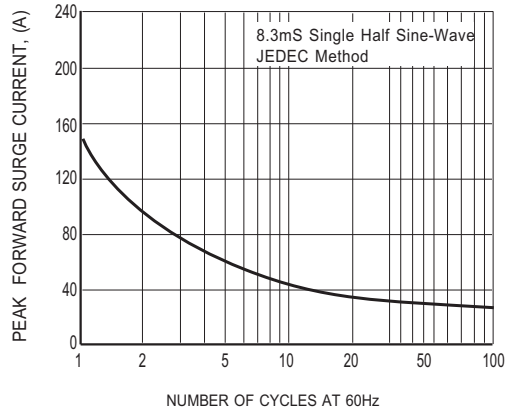


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

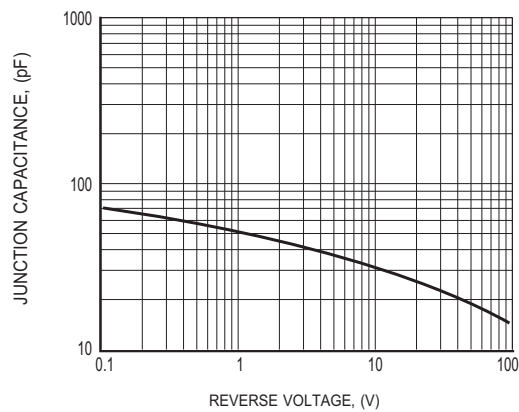


FIG.5 TYPICAL JUNCTION CAPACITANCE PER LEG

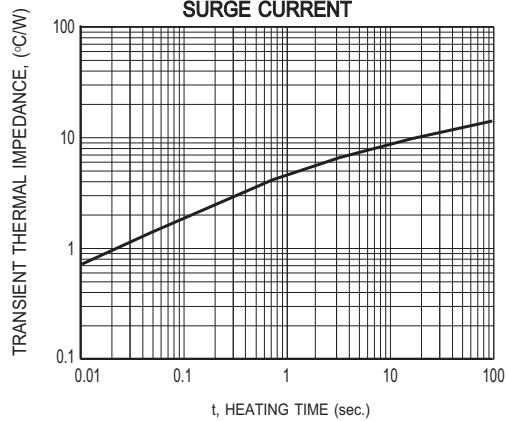
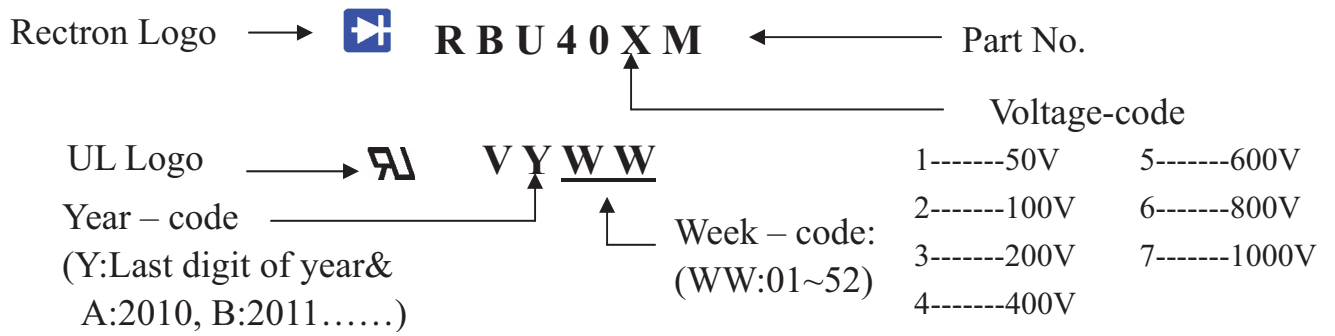


FIG.6 TYPICAL TRANSIENT THERMAL IMPEDANCE

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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