

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 600 Volts CURRENT 25 Amperes

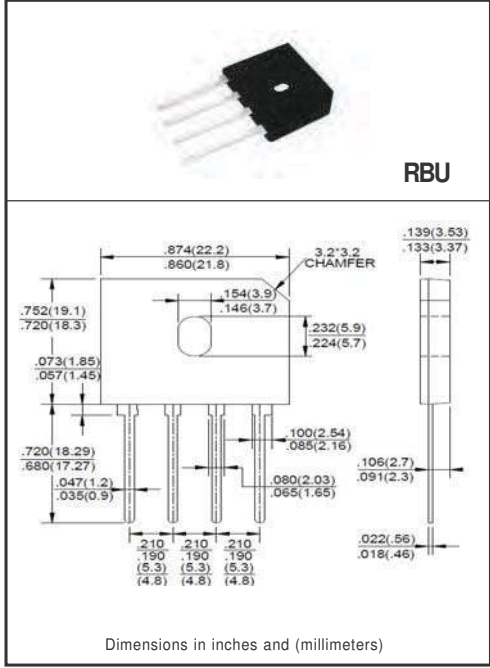
**FEATURES**

- \* Low leakage
- \* Low forward voltage
- \* Surge overload rating : 350 amperes peak
- \* Mounting position: Any
- \* Ideal for printed circuit boards
- \* High forward surge current capability

**MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-O
- \* UL list the recognized component directory, file #E94233

**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)**

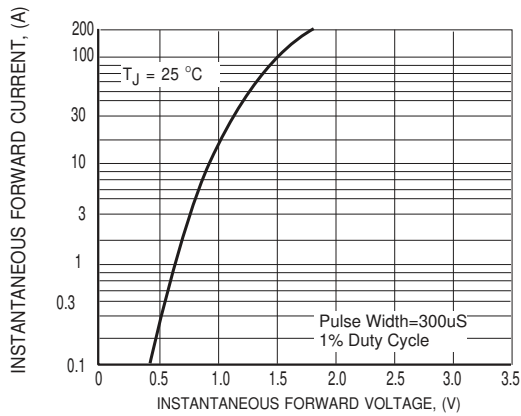
RATINGS	SYMBOL	RBU2505M-C-LV	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	600	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	420	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	600	Volts
Maximum Average Forward Rectified Current at T <sub>C</sub> = 100°C	I <sub>O</sub>	25	Amps
Insulation voltage	V <sub>iso</sub>	2500	Volts
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	350	Amps
Typical Current Squared Time	I <sup>2</sup> T	508	A <sup>2</sup> S
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	5	°C/W
	R <sub>θJA</sub>	22	
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)**

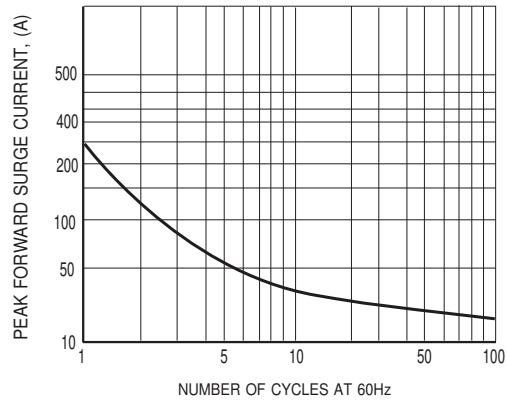
CHARACTERISTICS	SYMBOL	RBU2505M-C-LV	UNITS
Maximum Instantaneous Forward Voltage at 12.5A DC	V <sub>F</sub>	.92	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	@T <sub>A</sub> = 25°C	5.0
		@T <sub>A</sub> = 125°C	500

NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.  
2. "ROHS compliant".

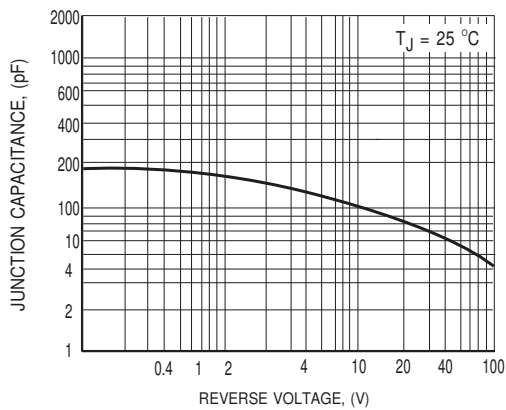
## RATING AND CHARACTERISTICS CURVES ( RBU2501M-C-LV)



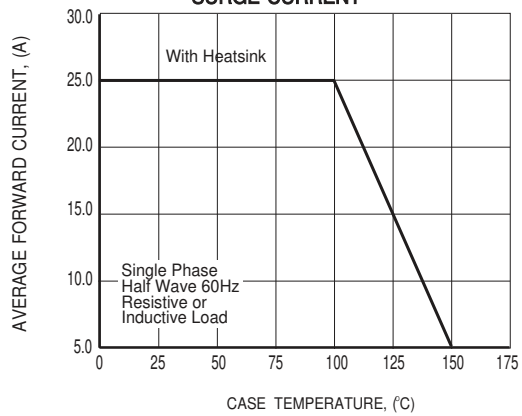
**FIG.1 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS**



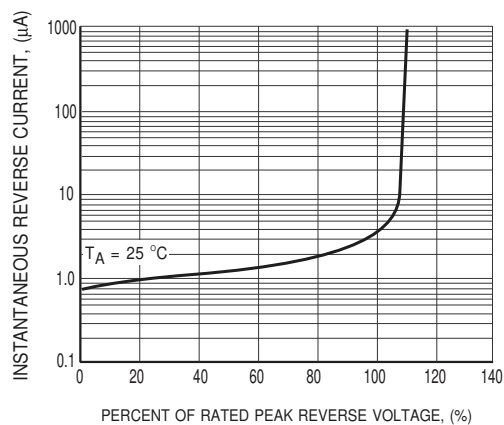
**FIG.2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.3 TYPICAL JUNCTION CAPACITANCE**

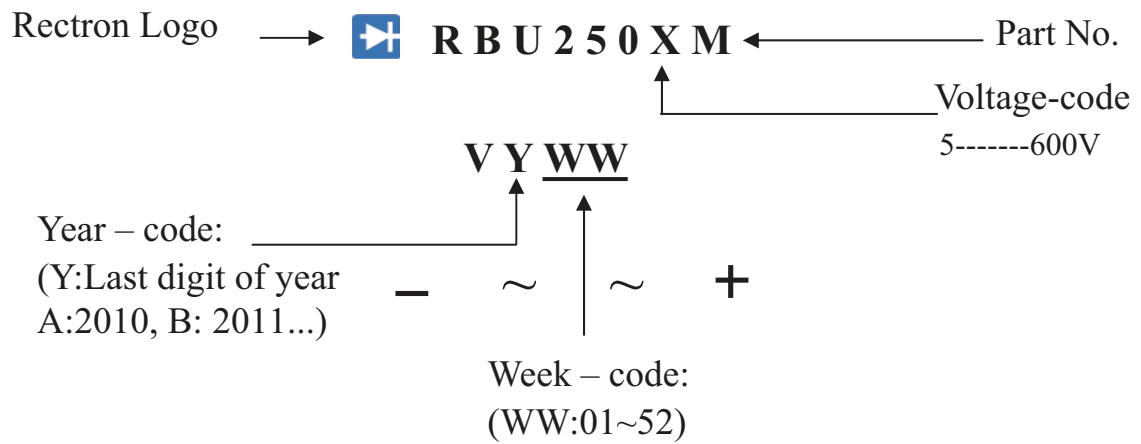


**FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.5 MAXIMUM REVERSE CHARACTERISTICS**

## 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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