

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.5 Amperes

FEATURES

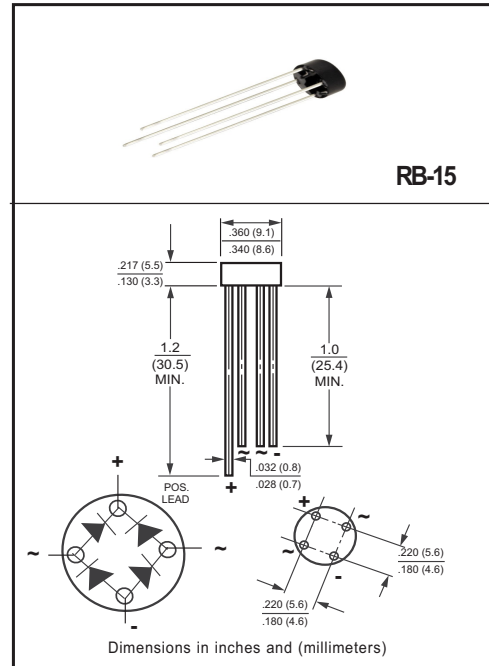
- * High reverse voltage to 1000V
- * Surge overload rating to 40 amperes peak
- * Good for printed circuit board assembly

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-O
- * UL listed the recognized component directory, file #E94233
- * Lead: Silver-plated copper leads

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	RB151	RB152	RB153	RB154	RB155	RB156	RB157	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 $T_A=25^{\circ}C$	I_O	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	40							Amps
Typical Current Squared Time	I^2t	6.64							A^2/Sec
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	36							$^{\circ}C/W$
	$R_{\theta JC}$	12							
Operating Temperature Range	T_J	-55 to + 150							$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to + 150							$^{\circ}C$

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

CHARACTERISTICS	SYMBOL	RB151	RB152	RB153	RB154	RB155	RB156	RB157	UNITS	
Maximum Instantaneous Forward Voltage at 1.0A DC	V_F	1.0							Volts	
Maximum Average Reverse Current at Rated DC Blocking Voltage	I_R	@ $T_A = 25^{\circ}C$	1.0							μA
		@ $T_A = 150^{\circ}C$	1.0							mA

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

2020-08
REV:E

RATING AND CHARACTERISTICS CURVES (RB151 THRU RB157)

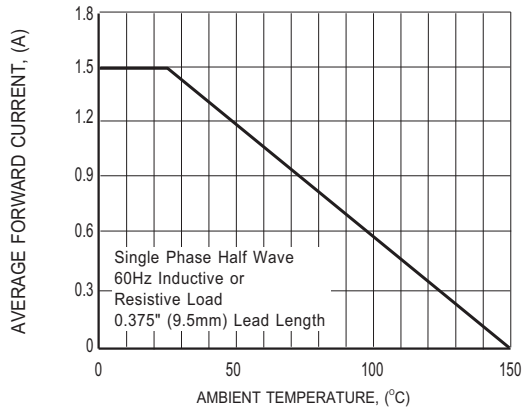


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

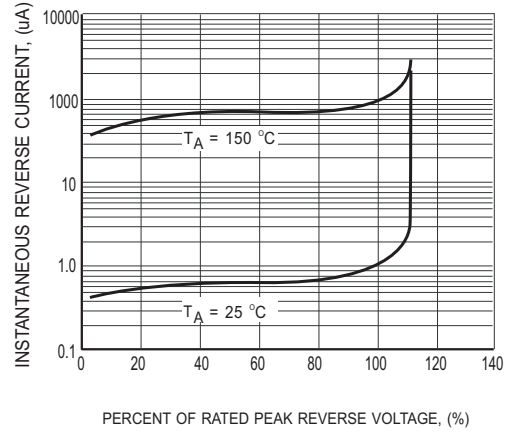


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

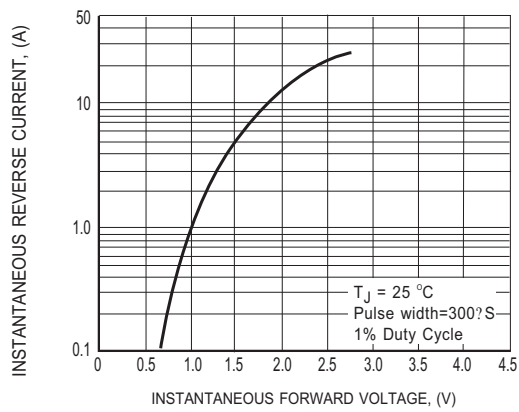


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

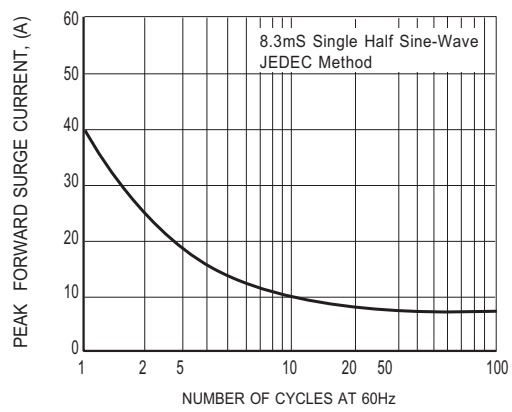
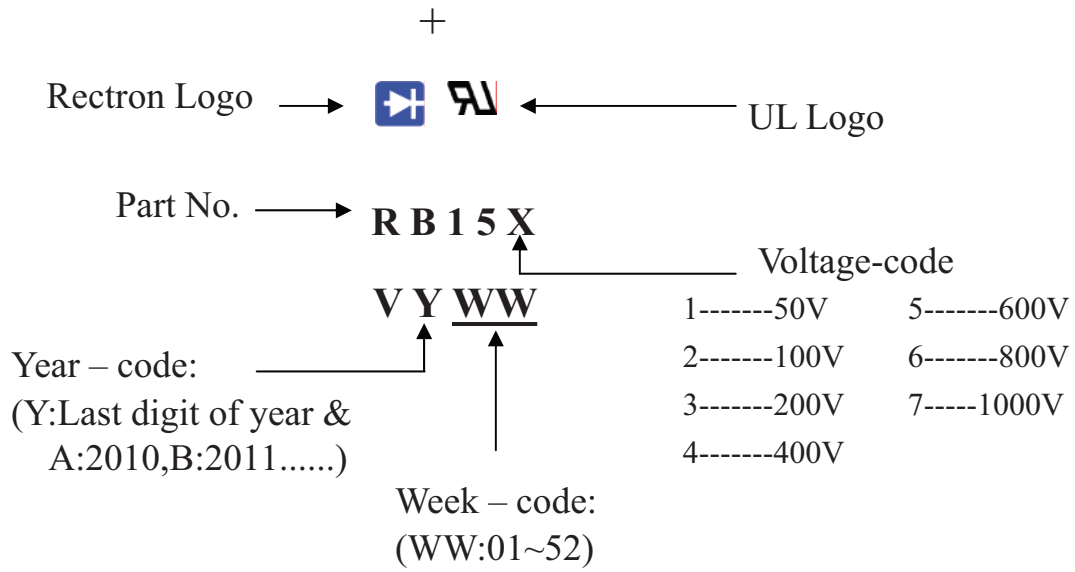


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



Marking Description



 **RECTRON**

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)
RB-15	-B	1,000	165*252*59	347*320*271	10,000	11.6



DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.

