

RB151 THRU RB157

# SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.5 Amperes** 

#### **FEATURES**

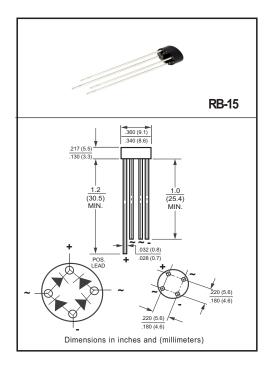
- \* High reverse voltage to 1000V
- \* Surge overload rating to 40 amperes peak
- \* Good for printed circuit board assembly

### **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  $^{\circ}\text{C}$  ambient temperature unless otherwise specified. resistive or inductive load.



### MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

WAXIMUW RATINGS (@ IA-25 C unless otherwise note	u)								
RATINGS	SYMBOL	RB151	RB152	RB153	RB154	RB155	RB156	RB157	UNITS
Maximum Recurrent Peak Reverse Voltage		50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> =25°C	Io	1.5						Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	40					Amps		
Typical Current Squarad Time	I <sup>2</sup> t	6.64					A <sup>2</sup> /Sec		
Typical Thermal Resistance (Note 1)	RθJA	36							
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	12							°C/W
Operating Temperature Range	TJ	-55 to + 150						٥C	
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150					٥C		

### 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 <sub>F</sub>				1.0				Volts
Maximum Average Reverse Current	@T <sub>A</sub> = 25°C	-				1.0				uА
at Rated DC Blocking Voltage	@T <sub>A</sub> = 150°C	IR.				1.0				mΑ

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

2020-08 REV:E

### RATING AND CHARACTERISTICS CURVES (RB151 THRU RB157)

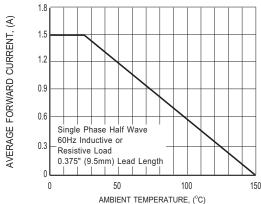


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

INSTANTANEOUS REVERSE CURRENT, (A)

1.0



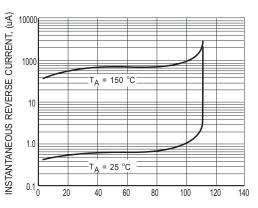
Pulse width=300? S 1% Duty Cycle

2.0 2.5 3.0 3.5 4.0 4.5

FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

INSTANTANEOUS FORWARD VOLTAGE, (V)

1.5



PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)
FIG.2 MAXIMUM REVERSE

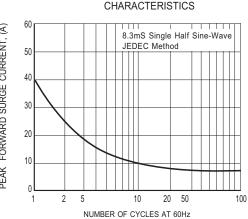
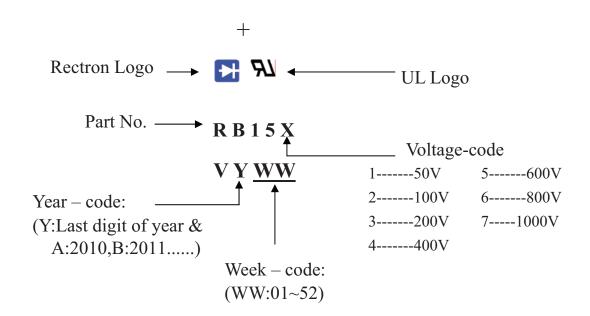


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



# **Marking Description**





# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### BULK PACK

PACKAGE	PACKING CODE EA PER BOX		INNER BOX SIZE CARTON SIZE (mm) (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.



### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Bridge Rectifiers category:

Click to view products by Rectron manufacturer:

Other Similar products are found below:

MB2510 MB252 MB356G MB358G GBJ1504-BP GBU15J-BP GBU15K-BP GBU4A-BP GBU6B-E3/45 GSIB680-E3/45 DB101-BP DF01 DF10SA-E345 KBPC50-10S RS405GL-BP G5SBA60-E3/51 GBU10J-BP GBU6M GBU8D-BP GBU8J-BP GSIB1520-E3/45 2KBB10 36MB140A TB102M MB1510 MB258 MB6M-G MB86 TL401G MDA920A2 TU602 TU810 MP501W-BP BR101-BP BR84DTP204 BU2008-E3/51 36MB100A KBPC10/15/2501WP KBPC25-02 VS-2KBB60 DF06SA-E345 DF1510S VS-40MT160PAPBF W02M GBL02-E3/45 GBU4G-BP GBJ2506-BP GBU6B-E3/51 GSIB15A80-E3/45 DB104-BP