

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

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

**FEATURES**

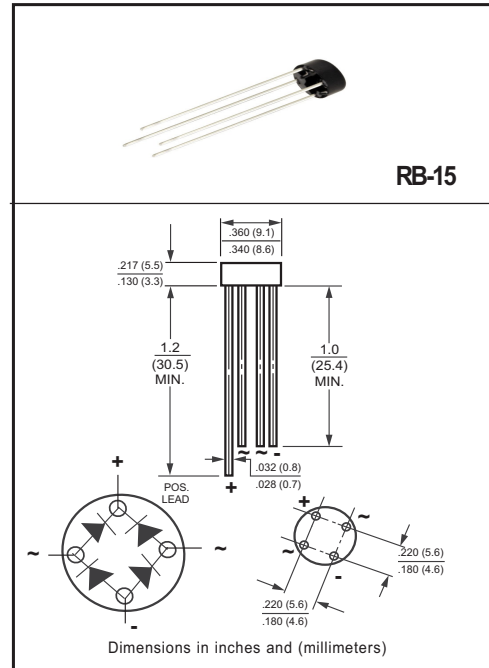
- \* High reverse voltage to 1000V
- \* Surge overload rating to 40 amperes peak
- \* Good for printed circuit board assembly

**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	$I^2_t$	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	$I_R$	1.0							$\mu A$
		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 )

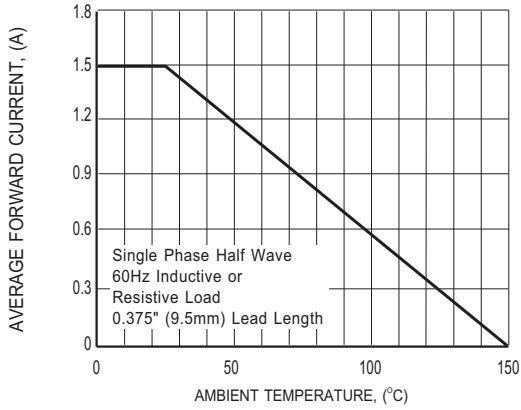


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

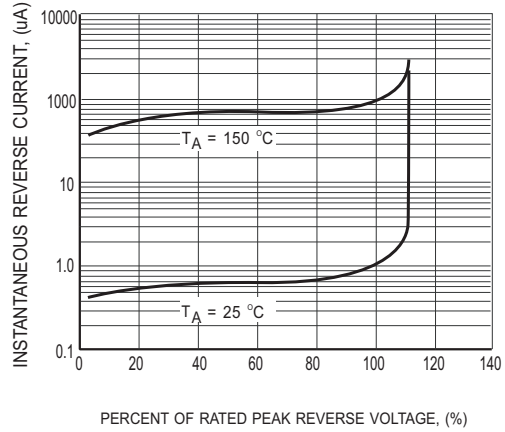


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

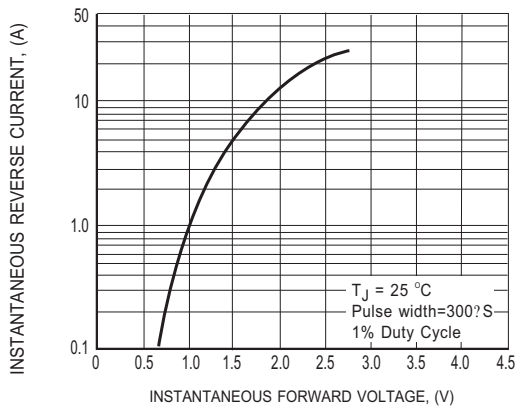


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

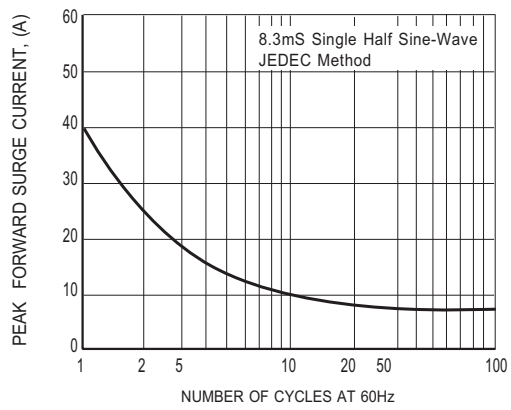
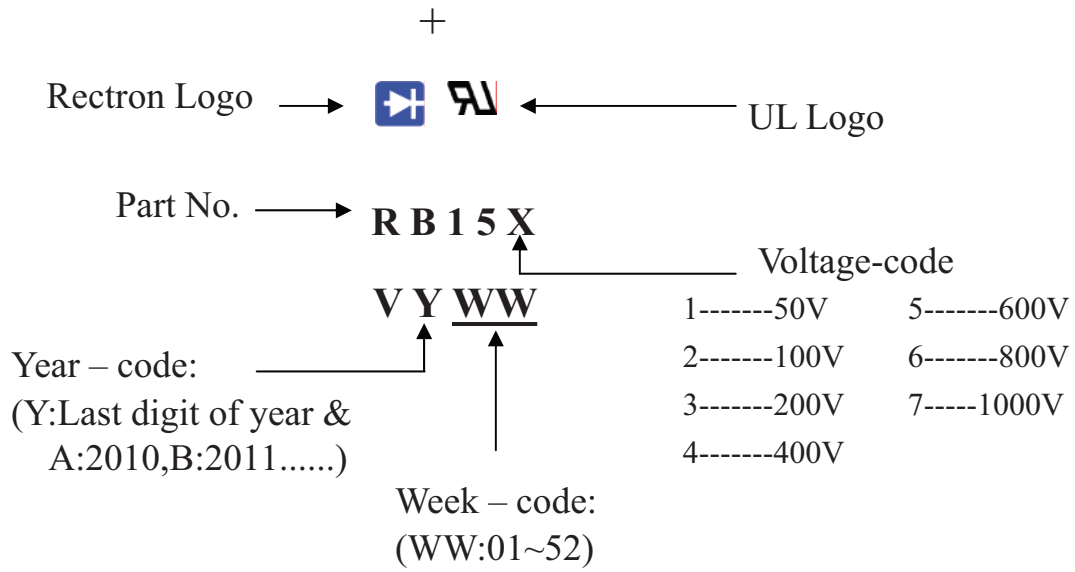


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

## Marking Description



## 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

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