

**VOLTAGE RANGE: 50 - 800V**  
**CURRENT: 1.5 A**

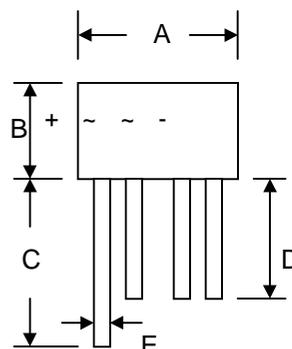


### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards

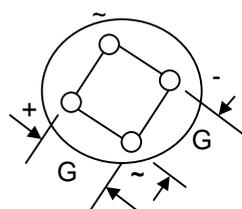
### Mechanical Data

- Case: WOB, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.1 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



Dim	WOB	
	Min	Max
A	8.60	9.10
B	5.0	5.50
C	27.9	—
D	25.4	—
E	0.71	0.81
G	4.60	5.60

All Dimensions in mm



### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

RATING	SYMBOL	RB150	RB151	RB152	RB154	RB156	RB158	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	Volts
Maximum Average Forward Current $T_c=50^\circ\text{C}$	$I_{F(AV)}$	1.5						Amps.
Peak Forward Surge Current, Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	40						Amps.
Maximum Forward Voltage per Diode at $I_F = 1$ Amp.	$V_F$	0.95						Volt
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	10						$\mu\text{A}$
	$I_{R(H)}$	100						$\mu\text{A}$
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	15						$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$	- 40 to + 140						$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 40 to + 140						$^\circ\text{C}$

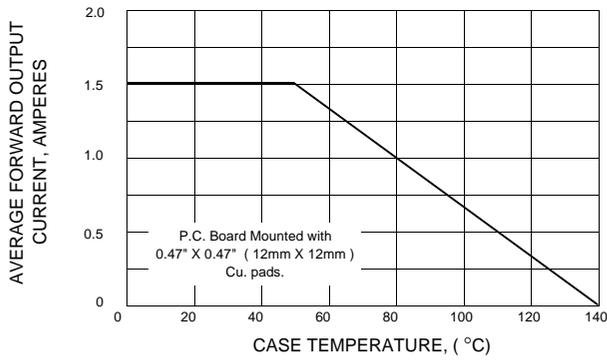
#### Notes :

- 1) Thermal resistance from Junction to lead mounted on P.C. Board with 0.47" X 0.47" ( 12mm X 12mm ) Cu pads.

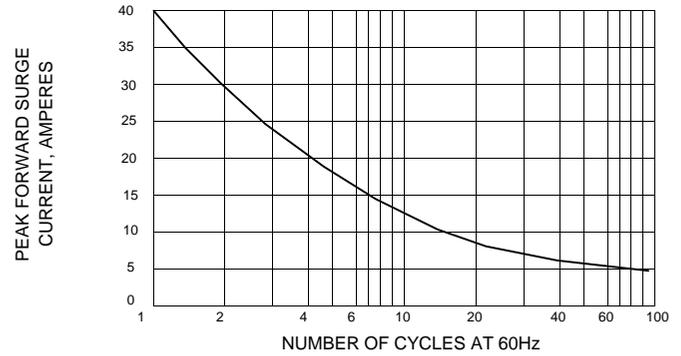


## RATING AND CHARACTERISTIC CURVES ( RB150 - RB158 )

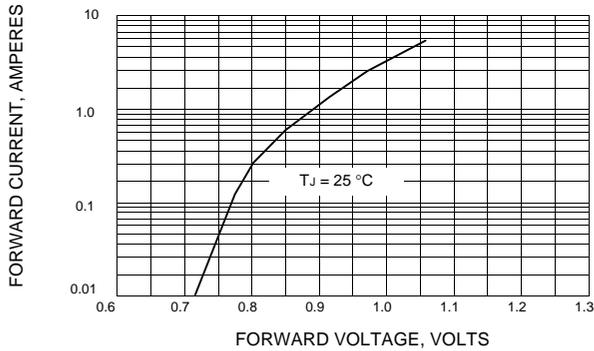
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

