
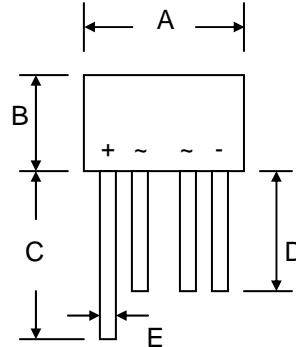


### Features

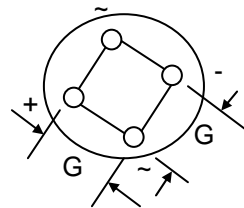
- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
-  Recognized File # E157705



WOB		
Dim	Min	Max
A	8.60	9.10
B	5.00	5.50
C	21.90	—
D	19.00	—
E	0.69	0.80
G	4.60	5.60
All Dimensions in mm		

### 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
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



### 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%.

Characteristic	Symbol	RB150	RB151	RB152	RB154	RB156	RB158	RB1510	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_A = 25^\circ\text{C}$ (Note 1)	$I_O$	1.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	50							A
Forward Voltage per element @ $I_F = 1.5\text{A}$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_{RM}$	5.0 500							$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	10							$\text{A}^2\text{s}$
Typical Junction Capacitance per leg (Note 2)	$C_J$	14							pF
Typical Thermal Resistance per leg (Note 1)	$R_{JA}$ $R_{JL}$	36 11							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^\circ\text{C}$

Note: 1. Mounted on 5.5 x 5.5mm FR-4 PCB and measured at lead length 9.5mm from case.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

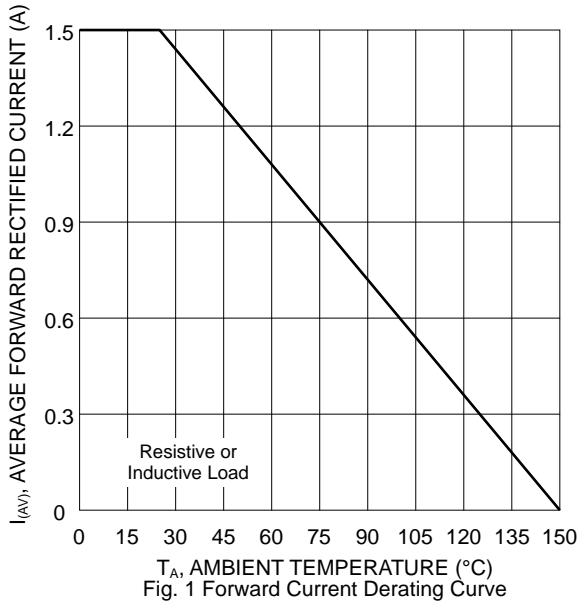


Fig. 1 Forward Current Derating Curve

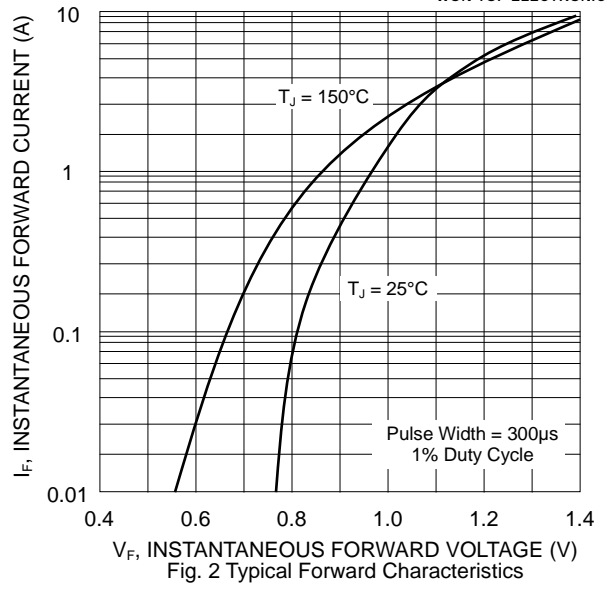


Fig. 2 Typical Forward Characteristics

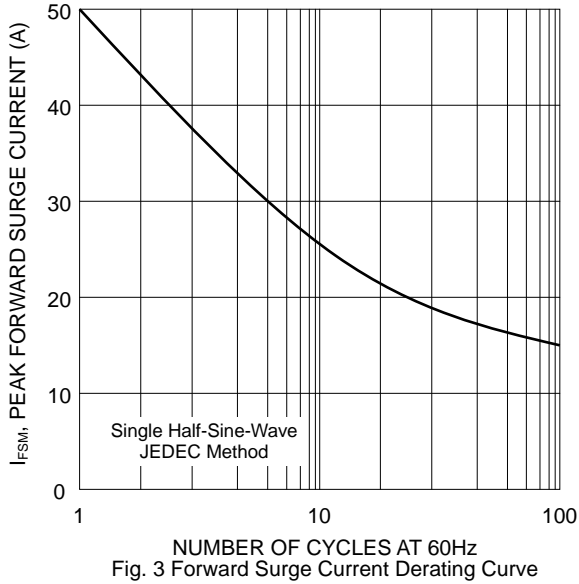


Fig. 3 Forward Surge Current Derating Curve

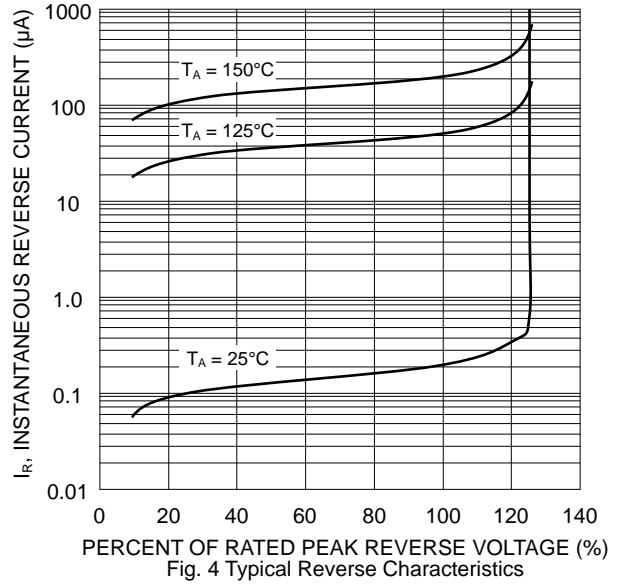


Fig. 4 Typical Reverse Characteristics

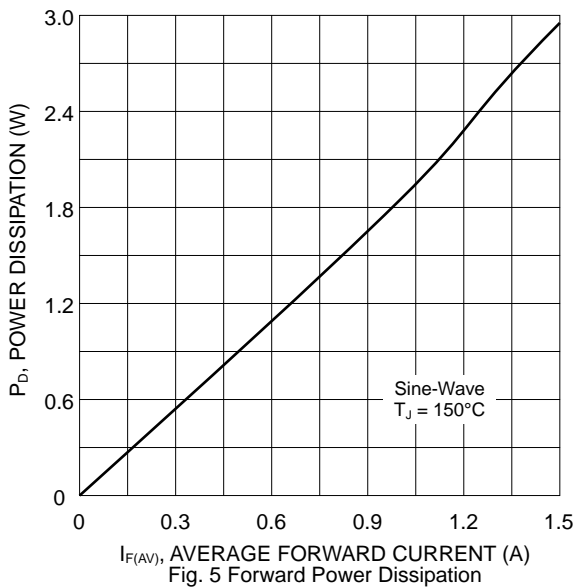


Fig. 5 Forward Power Dissipation

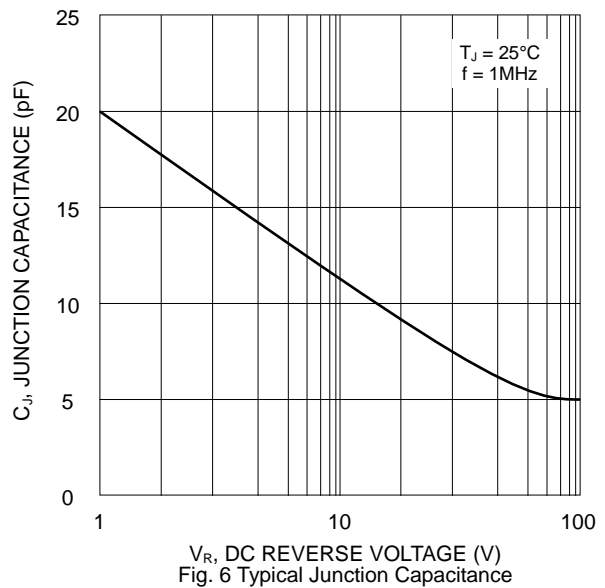
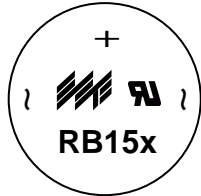


Fig. 6 Typical Junction Capacitance

## MARKING INFORMATION



RB15x = Device Number  
 x = 005, 01, 02, 04, 06, 08, 10  
 Polarity = As Marked on Body

## PACKAGING INFORMATION

### BULK


Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
260 x 190 x 80	1,000	400 x 273 x 415	10,000	14.0

**Note:** 1. Paper box, white or brown color.

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
RB150	Round Bridge	1000 Units/Box
RB151	Round Bridge	1000 Units/Box
RB152	Round Bridge	1000 Units/Box
RB154	Round Bridge	1000 Units/Box
RB156	Round Bridge	1000 Units/Box
RB158	Round Bridge	1000 Units/Box
RB1510	Round Bridge	1000 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, RB150-LF.**

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*We power your everyday.*