

## 1.5A Bridge Rectifier

### Features

- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed:  
260°C/10 seconds, 0.375" (9.5mm) lead length  
at 5 lbs (2.3kg) tension
- This series is UL recognized under component index,  
File number E194718
- RoHS Compliant



RB



### Mechanical Data

<b>Case:</b>	Molded plastic body
<b>Epoxy:</b>	Meets UL 94V-0 flammability rating
<b>Terminals:</b>	Lead solderable per MIL - STD – 202E, method 208C
<b>Polarity</b>	Polarity symbols marked on case
<b>Weight:</b>	0.04 ounce, 1.15 gram

### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted)

Symbol	Description	RB151	RB152	RB153	RB154	RB155	RB156	RB157	Unit
<b>VRRM</b>	Max. Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V
<b>VRMS</b>	Max. RMS Voltage	35	70	140	280	420	560	700	V
<b>VDC</b>	Max. DC Blocking Voltage	50	100	200	400	600	800	1000	V
<b>IF(AV)</b>	Max. Average Forward Rectified Output Current at $T_A=25^{\circ}C$ (Note 1)	1.5							A
<b>IFSM</b>	Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	50							A
<b>I<sup>2</sup>t</b>	Rating for Fusing (t<8.3ms)	10							A <sup>2</sup> s
<b>TJ</b>	Operating Temperature Range	-55 to +125							°C
<b>TSTG</b>	Storage Temperature Range	-55 to +150							°C

**Notes:** 1. Unit mounted on P.C. board with 0.22" X 0.22" (5.5 X5.5 mm) copper pads,. 375" (9.5mm) lead length.

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## RB151 - RB157

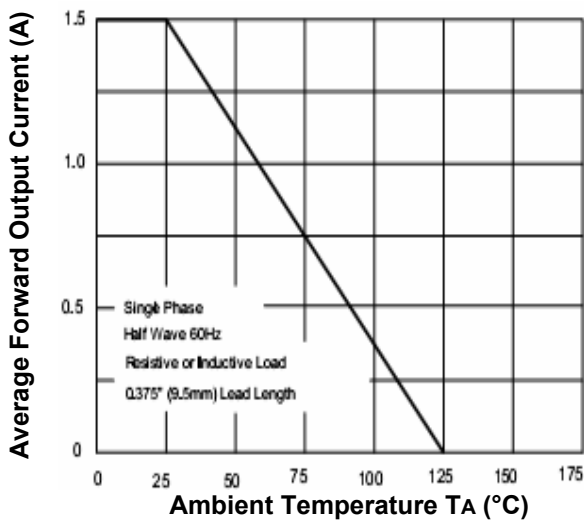
### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	RB151	RB152	RB153	RB154	RB155	RB156	RB157	Unit
$V_F$	Max. Instantaneous Forward Voltage Drop per leg at 1.0 A	1.0							V
$I_R$	Max. DC Reverse Current at Rated DC Blocking Voltage per leg	$T_A = 25^{\circ}C$						5.0	uA
		$T_A = 100^{\circ}C$						0.5	mA
$C_J$	Typical Junction Capacitance (Note1)	15							pF
$R_{\theta-JA}$	Typical Thermal Resistance (Note2)	40							$^{\circ}C/W$

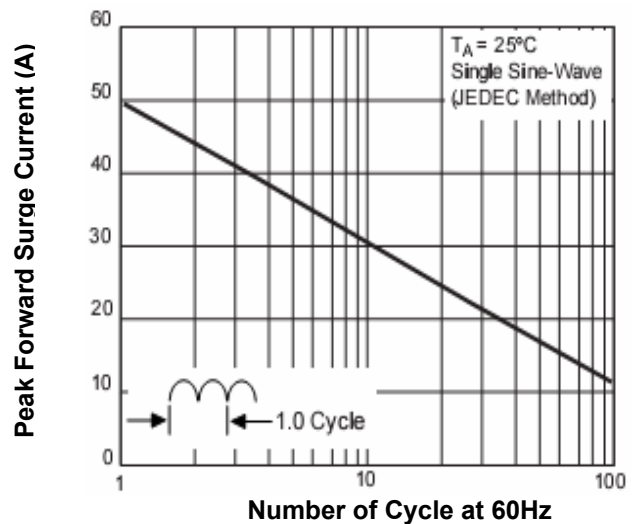
- Notes:**
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
  2. Unit mounted on P.C. board with 0.22" X 0.22" (5.5 X5.5 mm) copper pads, .375" (9.5mm) lead length.

### Typical Characteristics Curves

**Fig.1- Derating Curve For Output Rectified Current**



**Fig.2- Max. Non-Repetitive Peak Forward Surge Current per leg**



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Fig.3- Typical Forward Characteristics per leg

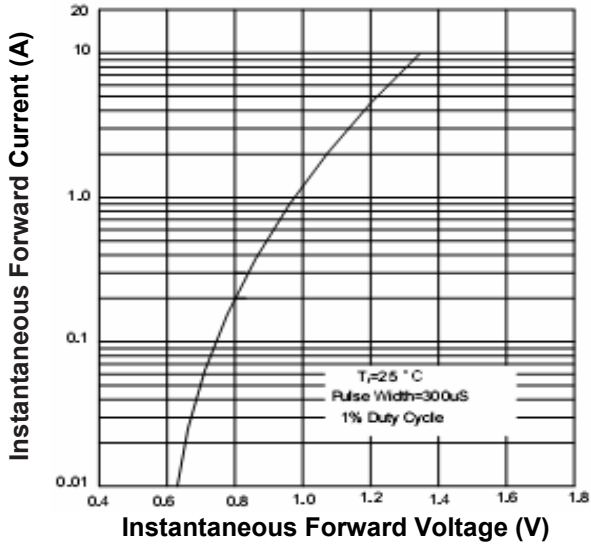


Fig.4- Typical Reverse Characteristics per leg

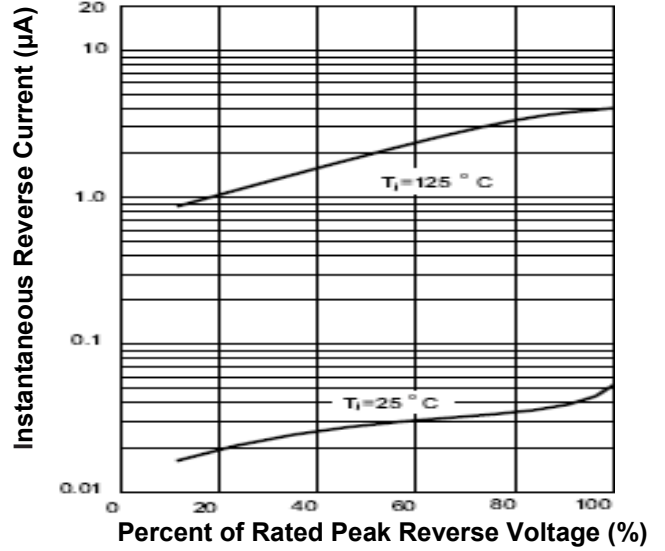
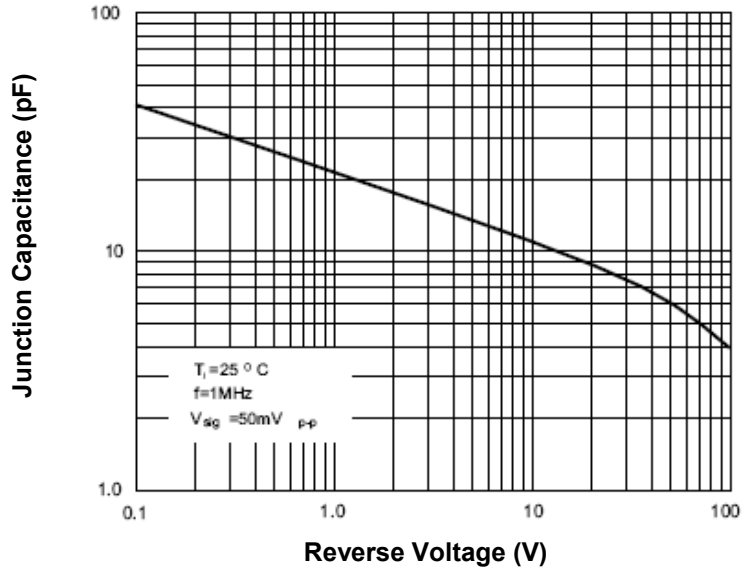


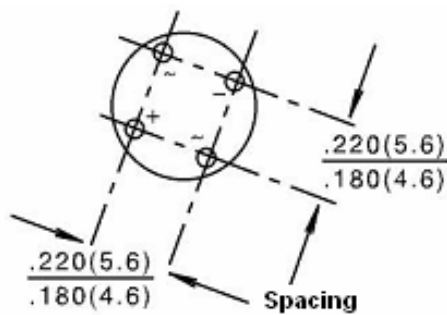
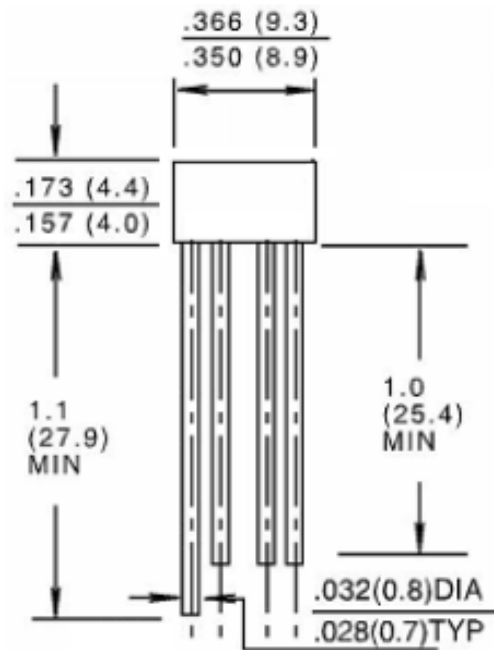
Fig.5- Typical Junction Cap. per leg



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## RB151 - RB157

Dimensions in inches (mm)



RB

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