

# RB151-RB157

Silicon Bridge Rectifiers

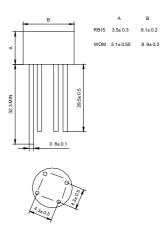
VOLTAGE RANGE: 50 --- 1000 V

CURRENT: 1.5 A

# **WOM**

# **Features**

- ♦ Rating to 1000V PRV
- Surge overload rating to 50 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Mounting Position: Any
- ♦ Glass passivated chip junctions



Dimensions in millimeters

# MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	RB151	RB152	RB153	RB154	RB155	RB156	RB157	UNITS
$V_{RRM}$	50	100	200	400	600	800	1000	V
$V_{RMS}$	35	70	140	280	420	560	700	V
$V_{DC}$	50	100	200	400	600	800	1000	V
I <sub>F(AV)</sub>	1.5						Α	
I <sub>FSM</sub>	50.0							А
V <sub>F</sub>	1.0							V
I <sub>R</sub>	10.0 0.5							μA mA
$T_J$	- 55 + 125							$^{\circ}$
T <sub>STG</sub>	- 55 + 150							${\mathbb C}$
	V <sub>RMS</sub> V <sub>DC</sub> I <sub>F(AV)</sub> V <sub>F</sub> I <sub>R</sub>	V <sub>RRM</sub> 50 V <sub>RMS</sub> 35 V <sub>DC</sub> 50  I <sub>F(AV)</sub> I <sub>FSM</sub> V <sub>F</sub> I <sub>R</sub> T <sub>J</sub>	V <sub>RRM</sub> 50 100 V <sub>RMS</sub> 35 70 V <sub>DC</sub> 50 100  I <sub>F(AV)</sub> I <sub>FSM</sub> I <sub>R</sub> T <sub>J</sub>	V <sub>RRM</sub> 50 100 200 V <sub>RMS</sub> 35 70 140 V <sub>DC</sub> 50 100 200  I <sub>F(AV)</sub> I <sub>FSM</sub> V <sub>F</sub> I <sub>R</sub> T <sub>J</sub> -58	V <sub>RRM</sub> 50       100       200       400         V <sub>RMS</sub> 35       70       140       280         V <sub>DC</sub> 50       100       200       400         I <sub>F(AV)</sub> 1.5         I <sub>FSM</sub> 50.0         V <sub>F</sub> 1.0         I <sub>R</sub> 0.5         T <sub>J</sub> -55 + 1	V <sub>RRM</sub> 50       100       200       400       600         V <sub>RMS</sub> 35       70       140       280       420         V <sub>DC</sub> 50       100       200       400       600         I <sub>F(AV)</sub> 1.5         V <sub>F</sub> 1.0         I <sub>R</sub> 10.0       0.5         T <sub>J</sub> -55 + 125	V <sub>RRM</sub> 50       100       200       400       600       800         V <sub>RMS</sub> 35       70       140       280       420       560         V <sub>DC</sub> 50       100       200       400       600       800         I <sub>F(AV)</sub> 1.5         I <sub>FSM</sub> 50.0         V <sub>F</sub> 1.0         I <sub>R</sub> 10.0       0.5         T <sub>J</sub> -55 + 125	VRRM       50       100       200       400       600       800       1000         VRMS       35       70       140       280       420       560       700         VDC       50       100       200       400       600       800       1000         IF(AV)       1.5         VF       1.0         IR       10.0       0.5         TJ       -55 + 125



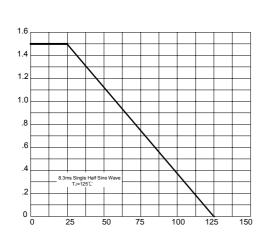
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# **Ratings AND Charactieristic Curves**

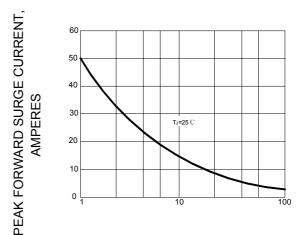
# FIG.1 - DERATING CUTPUT RECTIFIED CURRENT

# BRIDGE OUTPUT FULL WAVE RECTIFIED CURRENT AVERAGE AMPERES



AMBIENT TEMPERATURE, °C

## FIG.2 - MAXIMUM FORWARD SURGE CURRENT

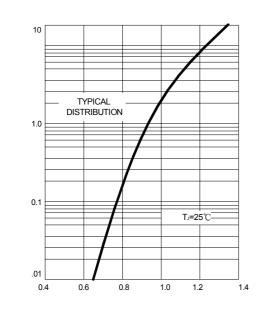


NUMBER OF CYCLES AT 60Hz

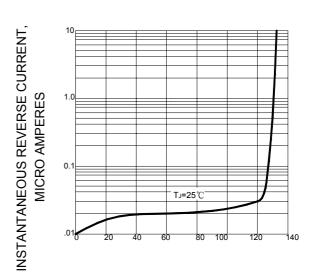
### FIG.3 - TYPICAL FORWARD CHARACTERISTIC

### FIG.4 - TYPICAL REVERSE CHARACTERISTIC





INSTANTANEOUS FORWARD VOLTAGE, VOLTS



PERCENT OF RATED PEAK REVERSE VOLTAGE