



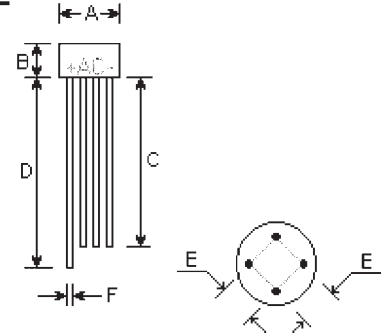
# RB151 THRU RB157

**SINGLE-PHASE SILICON BRIDGE**  
**Reverse Voltage - 50 to 1000 Volts**  
**Forward Current - 1.5 Amperes**

## Features

- Surge overload rating - 50 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Mounting Position: Any

## RB-15



DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.340	0.360	8.6	9.1	ϕ
B	0.130	0.150	3.3	3.8	
C	1.20	-	30.5	-	
D	1.27	-	32.3	-	
E	0.180	0.220	4.6	5.6	
F	0.028	0.032	0.71	0.81	ϕ

## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	RB151	RB152	RB153	RB154	RB155	RB156	RB157	Units
Maximum repetitive 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 $T_A=25^\circ\text{C}$	$I_{(AV)}$	1.5							Amps
Peak forward surge current, 8.3mS single half sine-wave superimposed on rated load	$I_{FSM}$	50.0							Amps
1 $\frac{1}{2}$ Rating for fusing (t<8.35ms)	$I^2t$	5.0							A <sup>2</sup> t
Maximum forward voltage drop per element at 1.0A peak	$V_F$	1.0							Volt
Maximum DC reverse current at rated DC blocking voltage per element $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	10.0 1.0							$\mu\text{A}$ mA
Operating temperature range	$T_J$	-55 to +125							°C
Storage temperature range	$T_{STG}$	-55 to +150							°C

# RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – MAXIMUM FORWARD SURGE CURRENT

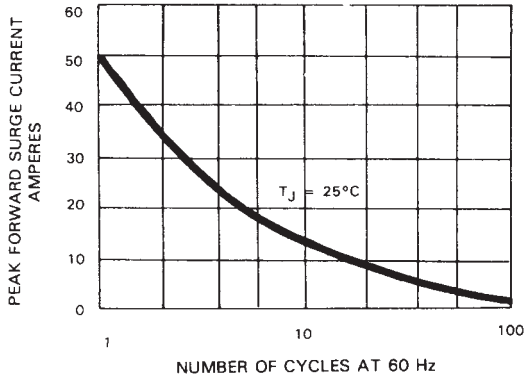


Fig. 2 – DERATING CURVE  
OUTPUT RECTIFIED CURRENT

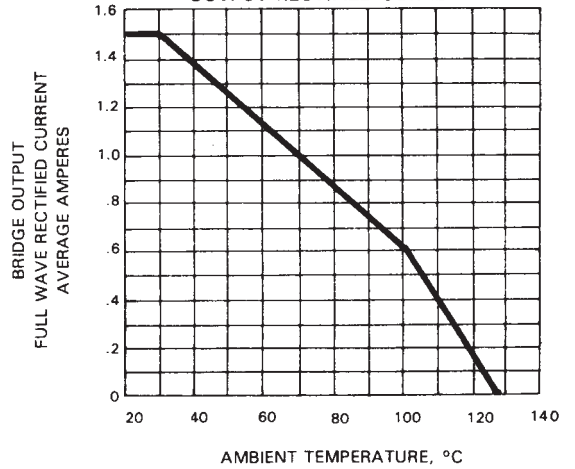


Fig. 3 – TYPICAL FORWARD CHARACTERISTICS

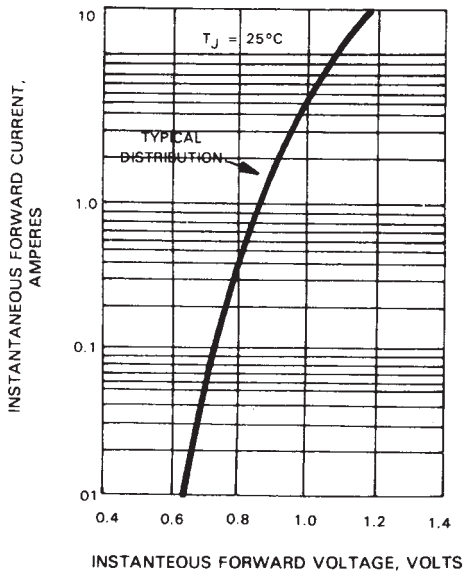


Fig. 4 – TYPICAL REVERSE CHARACTERISTICS

