



Micro Commercial Components  
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# SDB151L THRU SDB158L

## Features

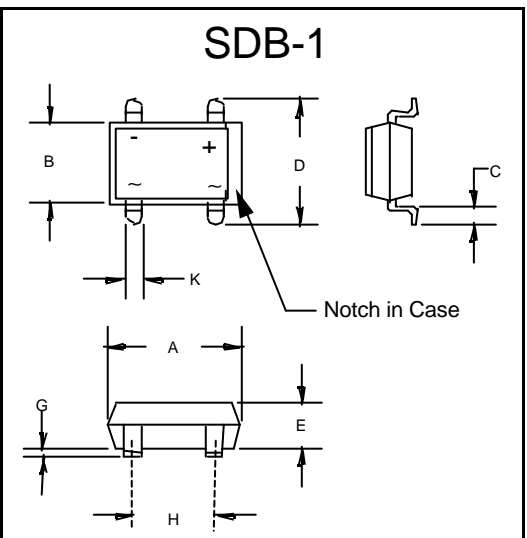
- Surface Mount Package
- Low Profile Package
- Moisture Resistant Epoxy Case
- High Surge Current Capability

## 1.5 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

## Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SDB151L	SDB151	50V	35V	50V
SDB152L	SDB152	100V	70V	100V
SDB153L	SDB153	200V	140V	200V
SDB154L	SDB154	400V	280V	400V
SDB155L	SDB155	500V	350V	500V
SDB156L	SDB156	600V	420V	600V
SDB157L	SDB157	800V	560V	800V
SDB158L	SDB158	1000V	700V	1000V



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.316	.335	8.05	8.51	
B	.245	.255	6.20	6.50	
C	.040	.060	1.02	1.52	
D	.360	.410	9.40	10.40	
E	.086	.098	2.20	2.50	
G	.004	.011	0.10	0.28	
H	.195	.205	5.00	5.20	
K	.038	.042	1.00	1.10	TYP

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.5 A	$T_A = 40^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM} = 1.5\text{A}$ ; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 1.0mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	25pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

\*Pulse Test: Pulse Width 300 $\mu\text{sec}$ , Duty Cycle 1%

## Suggested Solder Pad Layout

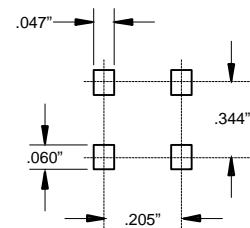
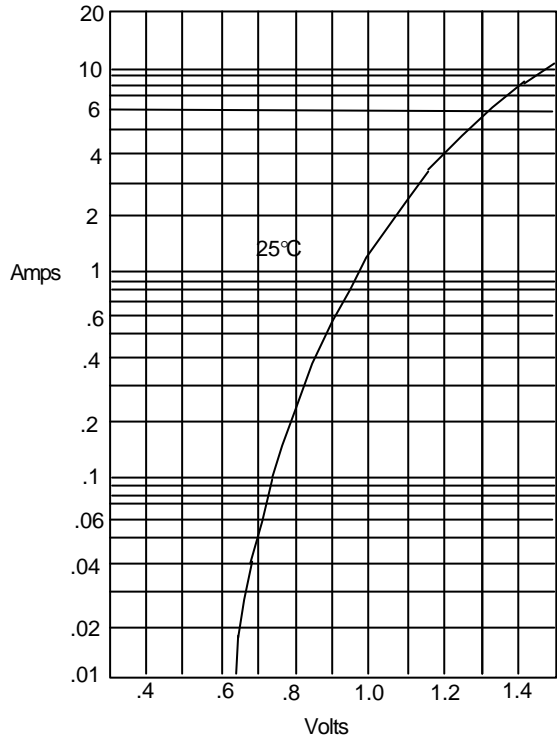


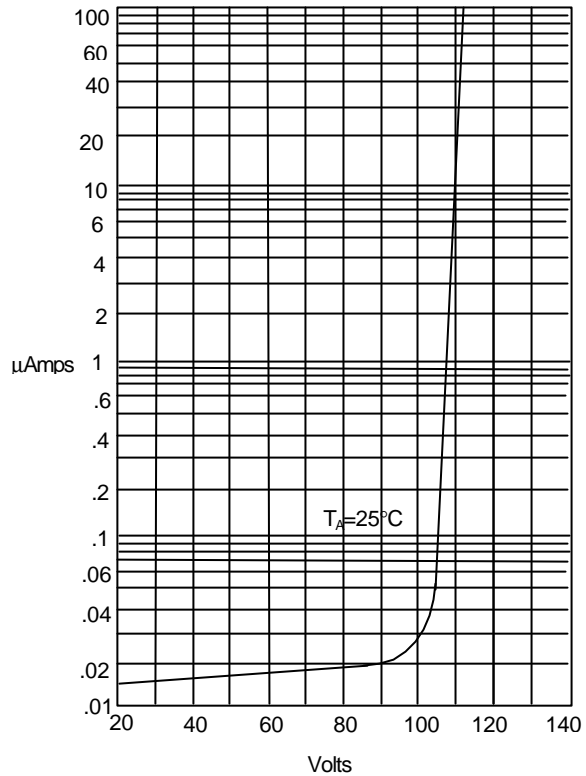


Figure 1  
Typical Forward Characteristics



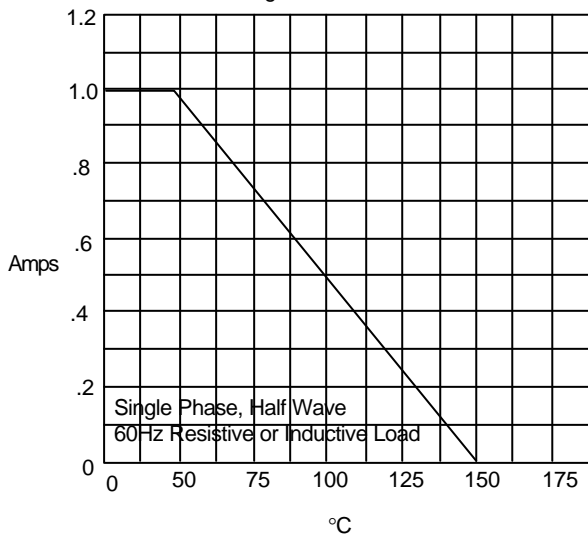
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



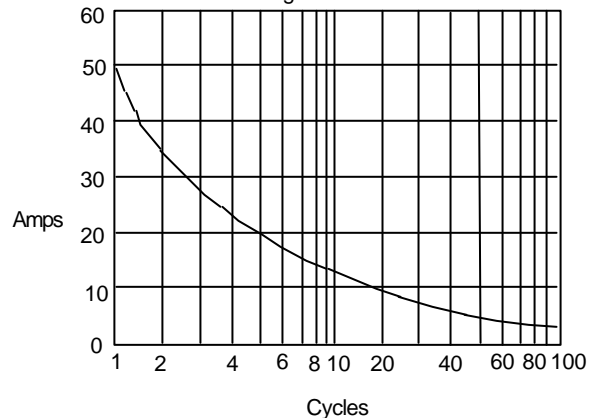
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles