



Micro Commercial Components
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SDB151 THRU SDB158

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

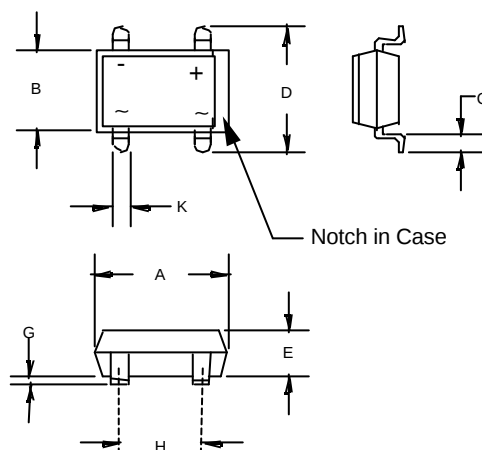
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SDB151	SDB151	50V	35V	50V
SDB152	SDB152	100V	70V	100V
SDB153	SDB153	200V	140V	200V
SDB154	SDB154	400V	280V	400V
SDB155	SDB155	500V	350V	500V
SDB156	SDB156	600V	420V	600V
SDB157	SDB157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

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 μA 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 μsec , Duty Cycle 1%

SDB-1



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.320	.335	8.13	8.50	
B	.245	.255	6.20	6.50	
C	.040	.060	1.02	1.50	
D	.386	.404	9.80	10.3	
E	.120	.130	3.05	3.30	
G	.002	.008	0.05	0.20	
H	.195	.205	5.00	5.20	
K	.040	.047	1.02	1.20	TYP

Suggested Solder Pad Layout

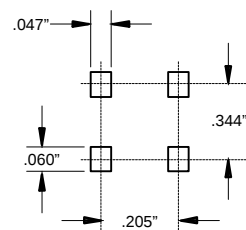
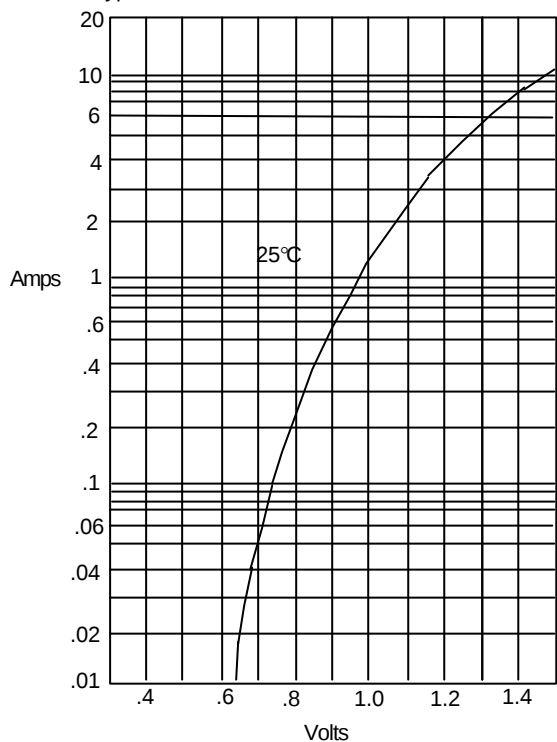
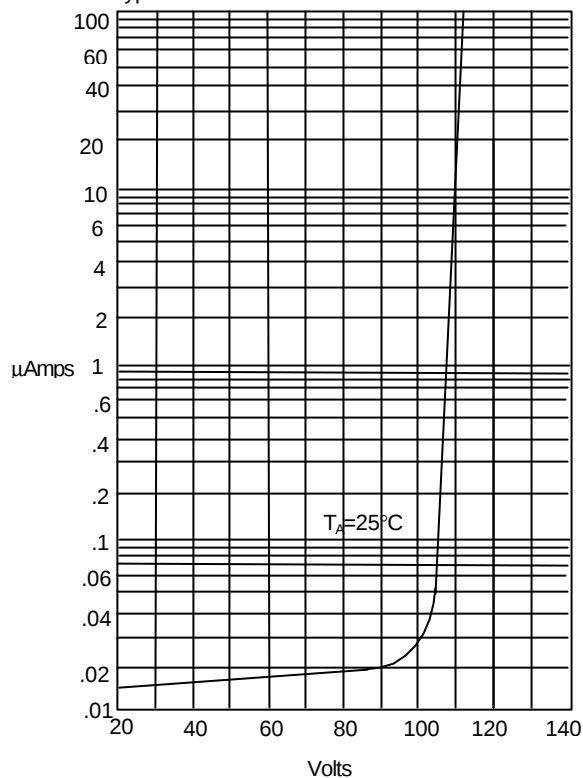


Figure 1
Typical Forward Characteristics



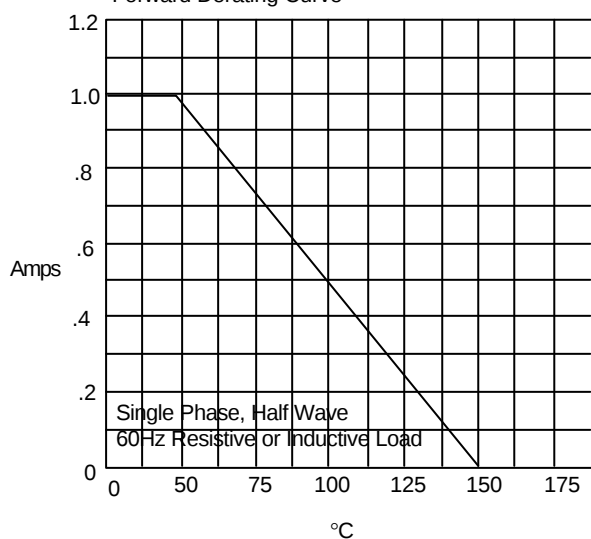
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



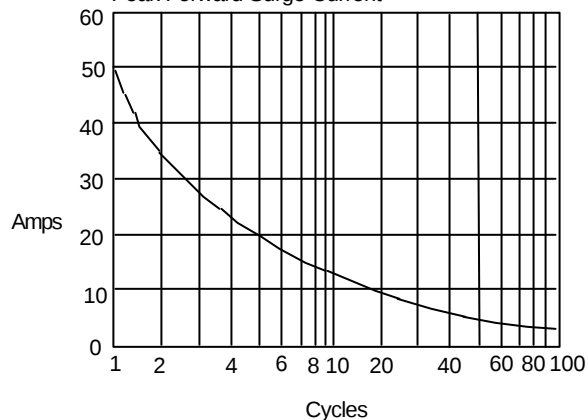
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

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