



Micro Commercial Components



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20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

SDB151L THRU SDB157L

Features

- Halogen free available upon request by adding suffix "-HF"
- Surface Mount Package
- Low Profile Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

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	600V	420V	600V
SDB156L	SDB156	800V	560V	800V
SDB157L	SDB157	1000V	700V	1000V

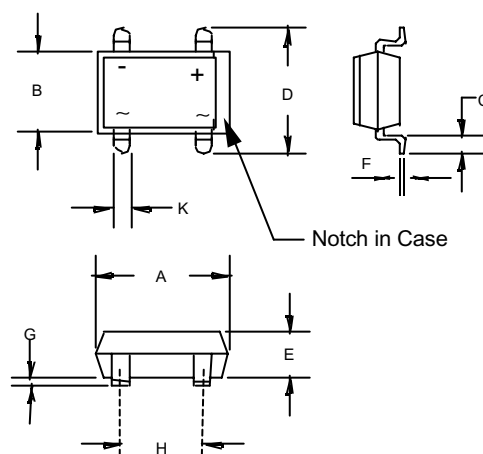
Electrical Characteristics @ 25°C Unless Otherwise Specified

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, $V_R=4.0\text{V}$

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

1.5 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

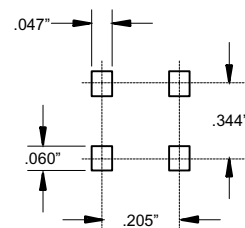
SDBL-1



DIMENSIONS

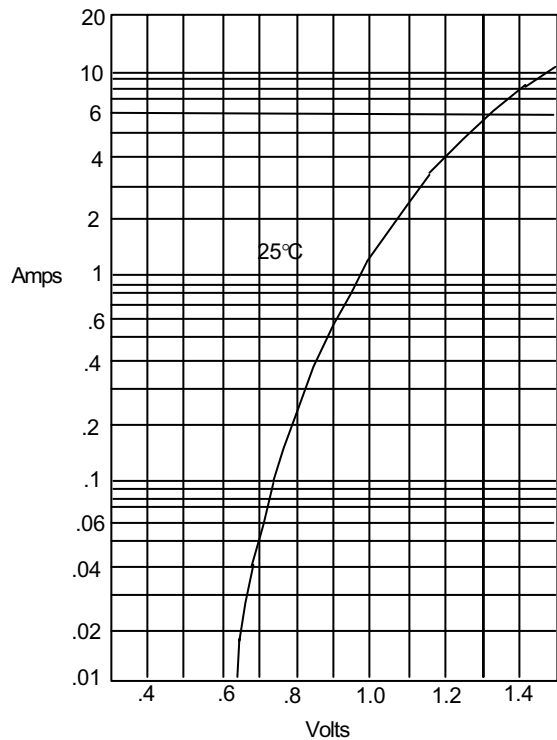
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.320	.335	8.12	8.51	
B	.244	.256	6.20	6.50	
C	.040	.060	1.02	1.53	
D	.366	.413	9.30	10.5	
E	.087	.095	2.20	2.40	
F	.006	.013	0.15	0.33	
G	.003	.013	0.076	0.33	
H	.195	.205	5.00	5.20	
K	.037	.047	0.95	1.20	

Suggested Solder Pad Layout



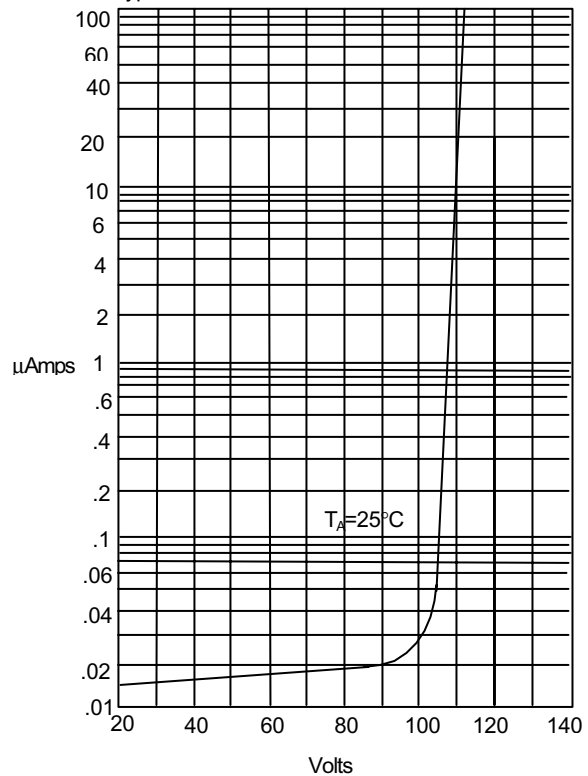
SDB151Lthru SDB157L

Figure 1
Typical Forward Characteristics



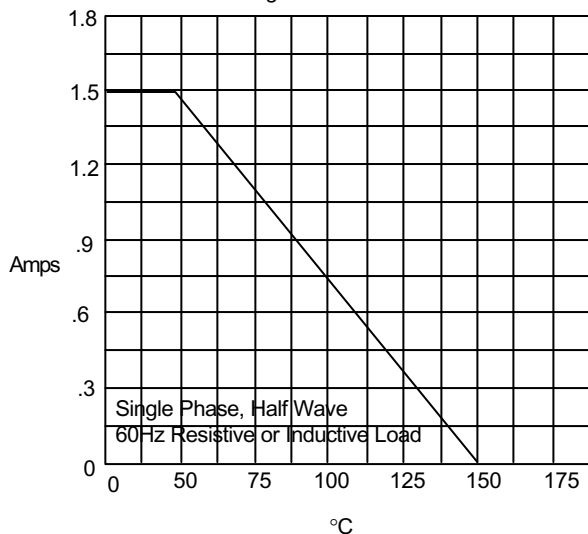
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



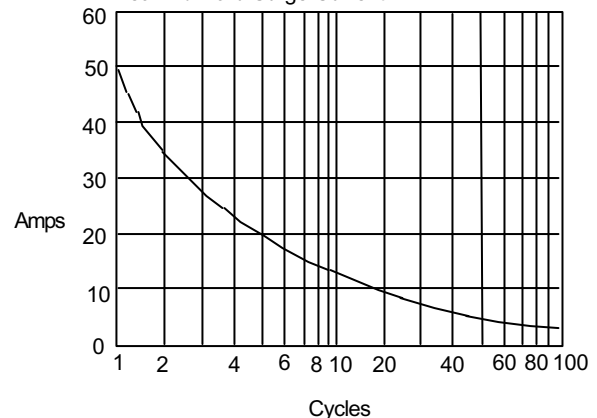
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

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

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;1.5Kpcs/Reel
(Part Number)-BP	Bulk; 5K/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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