

SDB101 THRU SDB107

Features

- Surface Mount Package
- Glass Passivated Diode Construction
- Moisture Resistant Epoxy Case
- High Surge Current Capability

Maximum Ratings

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

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SDB101	---	50V	35V	50V
SDB102	---	100V	70V	100V
SDB103	---	200V	140V	200V
SDB104	---	400V	280V	400V
SDB105	---	600V	420V	600V
SDB106	---	800V	560V	800V
SDB107	---	1000V	700V	1000V

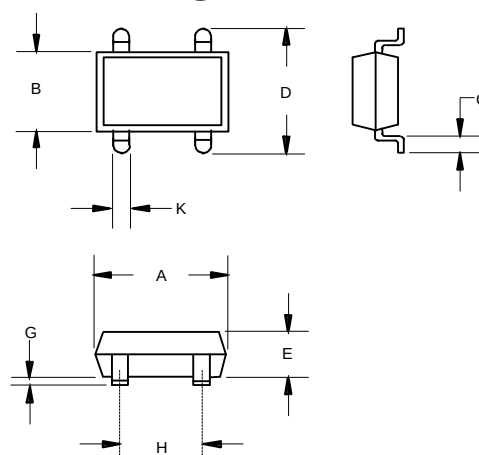
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1 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	$I_{FM} = 1.0\text{A}; T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA 0.5mA	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Maximum Reverse Recovery Time	T_{rr}	36ns	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$
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%

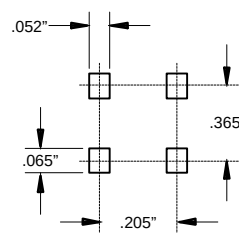
1 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

SDB-1



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.355	.365	9.00	9.30	
B	.245	.255	6.20	6.60	
C	.040	.060	1.02	1.52	
D	---	.441	---	11.20	
E	.115	.135	2.90	3.40	
G	---	.012	---	0.30	
H	.195	.205	5.00	5.20	
K	.040	.047	1.20	1.02	TYP

Suggested Solder Pad Layout



SDB101 thru SDB107

Figure 1
Typical Forward Characteristics

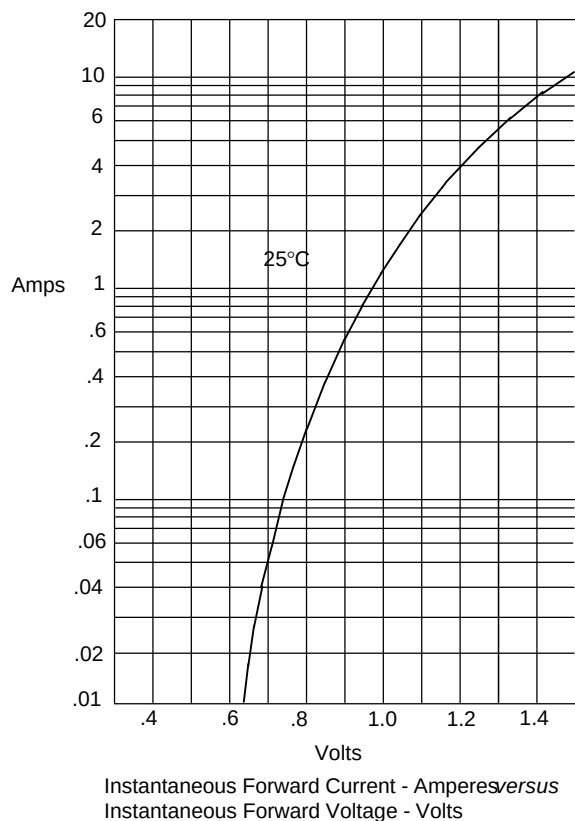


Figure 2
Typical Reverse Characteristics

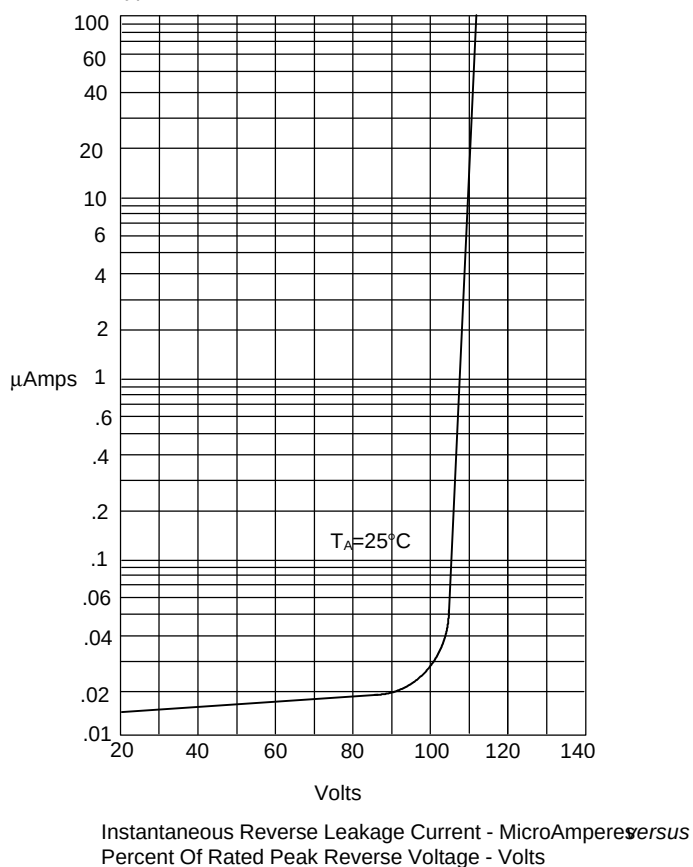


Figure 3
Forward Derating Curve

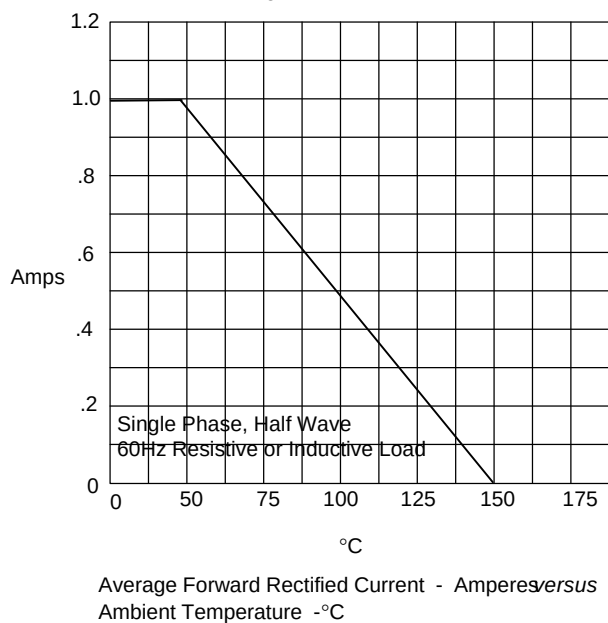


Figure 4
Peak Forward Surge Current

