Technical Data
Data Sheet N1562, Rev. C

SD103BWSA SCHOTTKY BARRIER DIODE

SOD-323

Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material —UL Recognition Flammability Classification 94V-O
- Green Products in Compliance with the ROHS Directive
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Schematic & Pin Configuration

Mechanical Characteristics

- Case: SOD-323, Molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.04 grams(approx)

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Units
Peak Reverse Voltage	V_{RRM}	30	V
Average Forward Current	I_O	100	mA
Power Dissipation	P_D	250	mW
Power Dissipation(T_L = 25°C)	P_D	833	mW
Peak Forward Surge Current (tp=8.3ms)	IFSM	750	mA
Operating Junction Temperature Range	TJ	-65 to +150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C
Thermal Resistance	$R_{\Theta JA}$	500	°C/W
Thermal Resistance	$R_{\Theta JL}$	150	°C/W

Note: 1. Valid provided that terminals are kept at ambient temperature.

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristics	Symbol	Condition	Min	Typ.	Max.	Units
Forward Voltage Drop*	V_F	@I_F = 50mA,T_A = 25°C @I_F = 100mA,T_A = 25°C	- -	- -	0.55 0.80	V
Reverse Recovery Voltage*	V_{BR}	@I_F = 100uA	30	-	-	V
Reverse Current*	I_R	@V_R = 25V, T_J = 25 °C	-	-	10	uA
Typical Junction Capacitance	Cj	@V_R =10.0 V, Tc=25°C, f_{SIG} = 1MHz	-	7.0	-	pF

* Pulse width < 300 μs, duty cycle < 2%

Ratings and Characteristics Curves

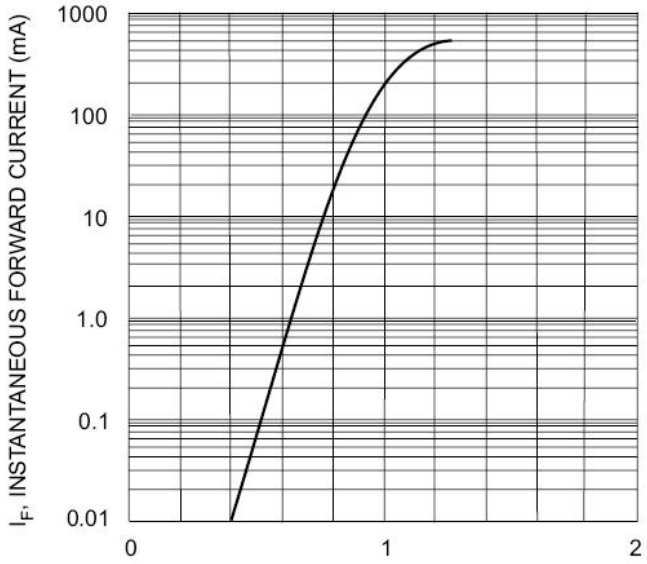

Fig. 1 Forward Characteristics

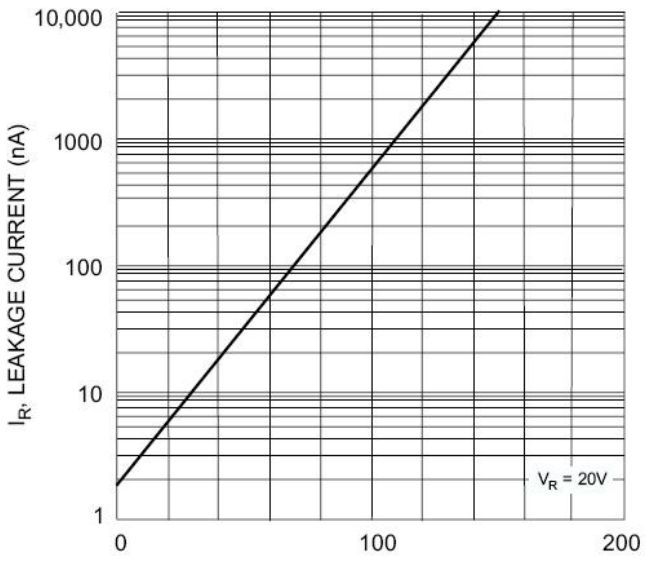

Fig. 2 Leakage Current vs Junction Temperature

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RoHS

Ordering Information

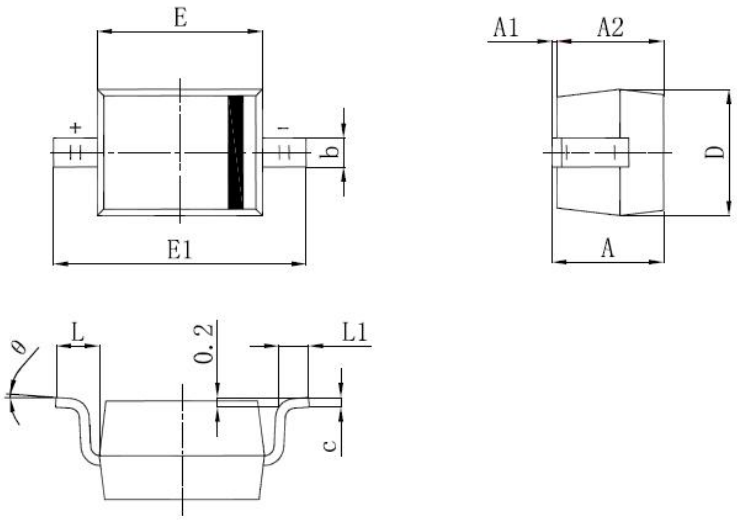
Device	Package	Shipping
SD103BWSA	SOD-323 (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

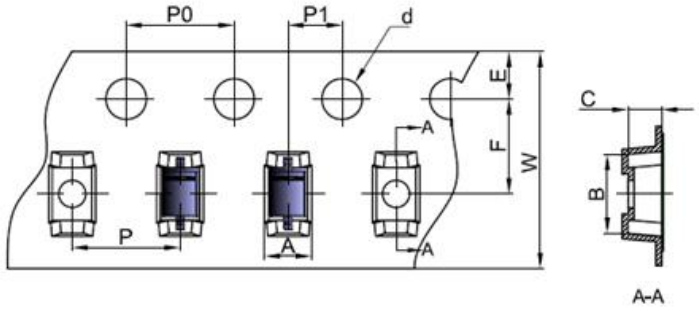
S1 = Marking Code

Mechanical Dimensions SOD-323



SYMBOL	Millimeters		Inches	
	MIN.	MAX.	MIN.	MAX.
A	-	1.000	-	0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.700	0.098	0.106
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Carrier Tape Specification SOD-323



SYMBOL	Millimeters	
	Min.	Max.
B	2.85	2.95
C	1.20	1.30
d	1.40	1.60
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

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