

SOD-323 Plastic-Encapsulate Schottky Barrier Diode

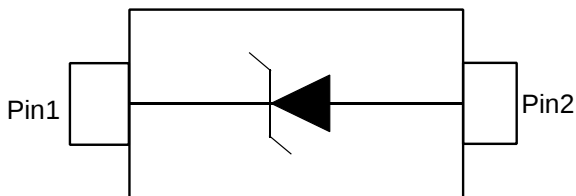
Description

General Application Schottky barrier rectifier, encapsulated in a SOD323 leadless ultra small, Surface-Mounted Device (SMD) plastic package.

Features

- Average forward current: $I_{F(AV)}$: 350mA
- Reverse voltage: $V_R \leq 40\text{ V}$
- Low forward voltage: $V_F \leq 550\text{ mV @200mA}$
- Low reverse current: $I_R \leq 5\mu\text{A@30V}$
- High reliability

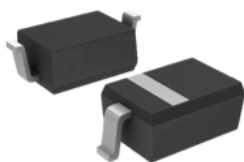
Schematic and Pin Configuration



SOD-323 (Top View)

Circuit Schematic

Package



SOD-323(Bottom View)

Mechanical Characteristics

- SOD-323 Small Outline Plastic Package
- Level 1 moisture sensitivity per J-STD-020
- Lead Finish: Matte Tin
- Case Material: “Green” Molding Compound
- We declare that the material of product compliance with RoHS requirements and Halogen Free

Applications

- Low voltage rectification
- Switch Mode Power Supply(SMPS)
- Inverse Polarity Protection
- Low Power Consumption Application

Marking Information



S4 = Device Marking Code
Bar denotes cathode

Ordering Information

Part Number	Shipping	Reel Size
SD103AWS	3000/Tape & Reel	7 inch

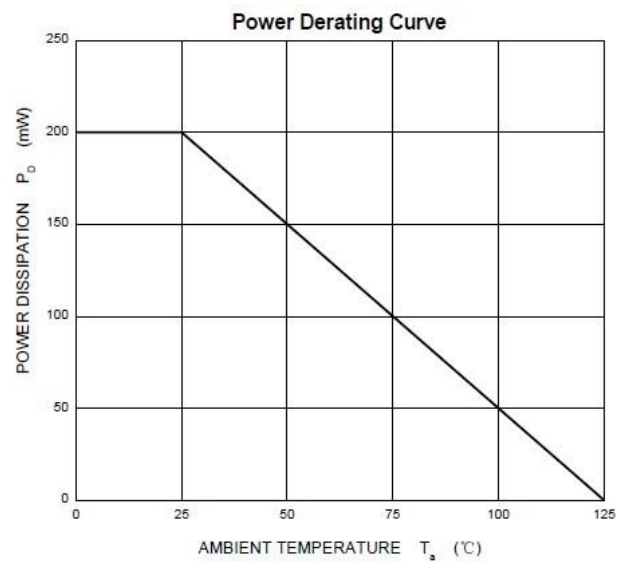
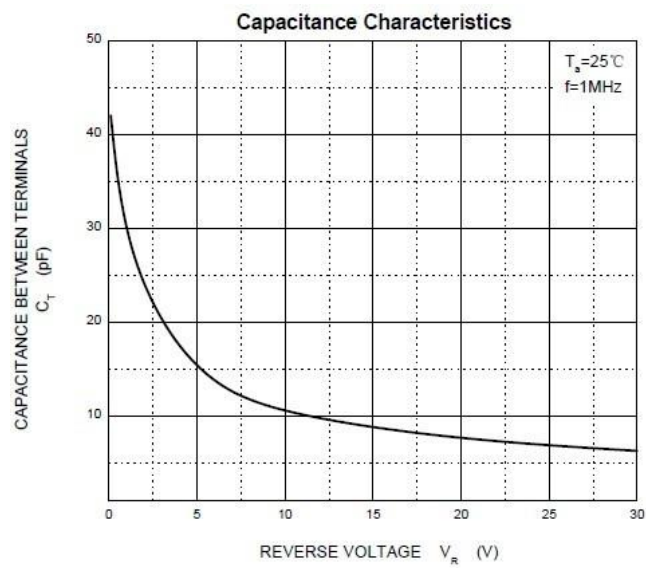
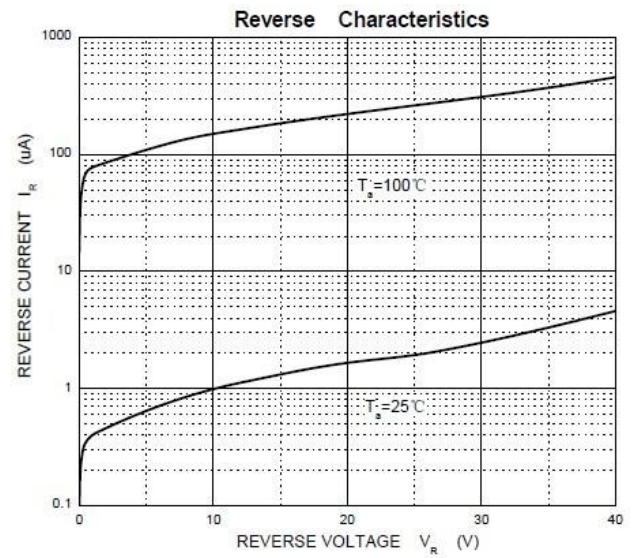
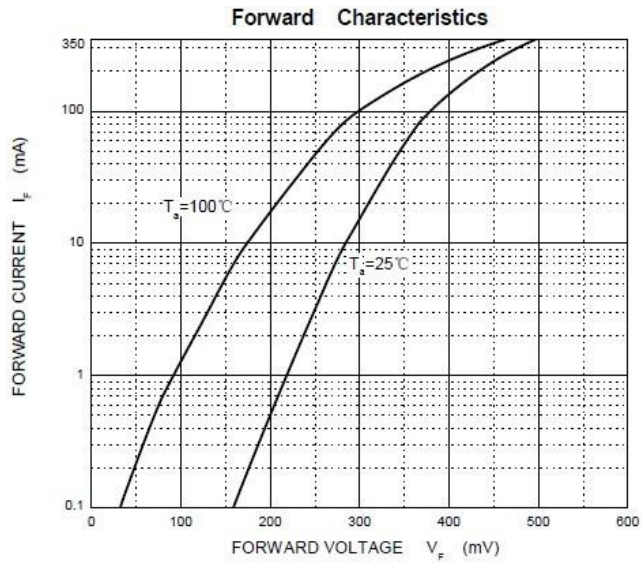
Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	40	V
Maximum RMS voltage	V _{RMS}	28	V
Maximum DC blocking voltage	V _{DC}	40	V
Maximum average forward rectified current	I _{FM}	350	mA
Peak forward surge current 8.3 ms single half sine-wave	I _{FSM}	1.5	A
Typical thermal resistance	R _{θJA}	500	°C/W
Power Dissipation	PD	200	mW
Operating junction temperature	T _J	125	°C
Storage temperature range	T _{STG}	-40~+125	°C

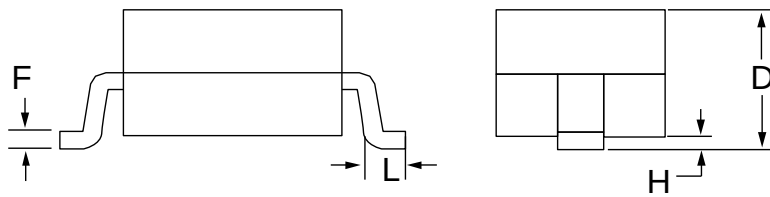
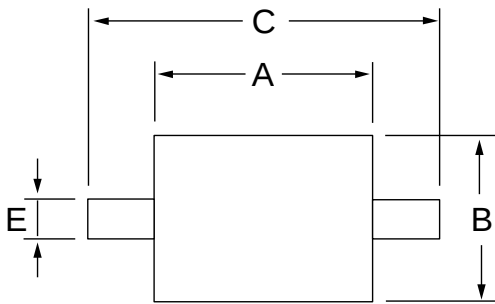
Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Value	Unit
Maximum forward voltage	V _F	I _F = 20mA I _F = 200mA	0.37 0.55	V
Maximum reverse breakdown voltage	V _R	I _R = 100μA	40	V
Maximum reverse current	I _R	V _R = 30V	5.0	μA
Type junction capacitance	C _J	V _R =0V, f = 1MHz	50	pF
Reverse recovery time	T _{rr}	I _F =200mA, I _{rr} =0.1xI _R , R _L =100Ω	10	ns

Typical Performance Characteristics

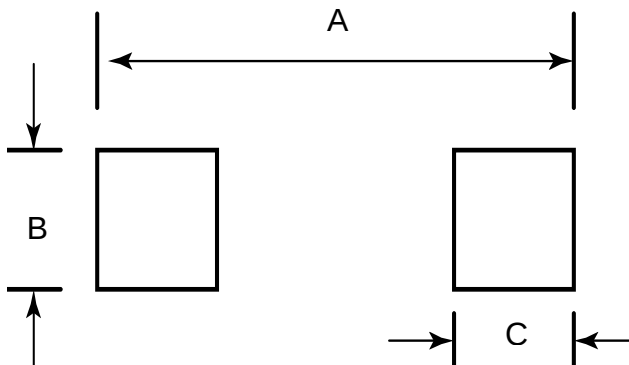


SOD-323 Package Outline Drawing



SYM	DIMENSIONS				
	MILLIMETERS			INCHES	
	MIN	NOM	MAX	MIN	MAX
A	1.50	1.65	1.80	0.060	0.071
B	1.20	1.30	1.40	0.045	0.054
C	2.30	2.50	2.70	0.090	0.107
D	-		1.10	-	0.043
E	0.30		0.40	0.012	0.016
F	0.10		0.25	0.004	0.010
L	0.20		0.40	0.008	0.016
H	-		0.10	-	0.004

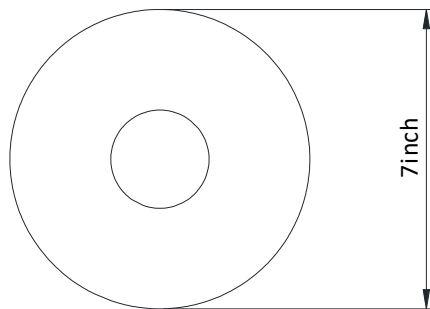
Suggested Land Pattern



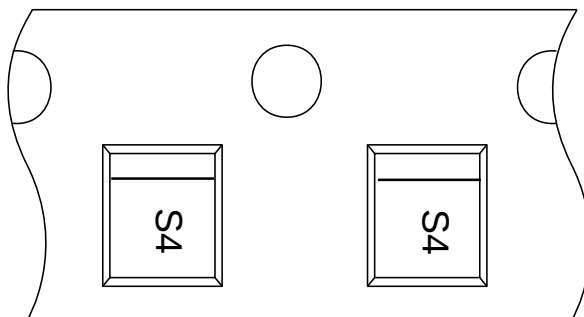
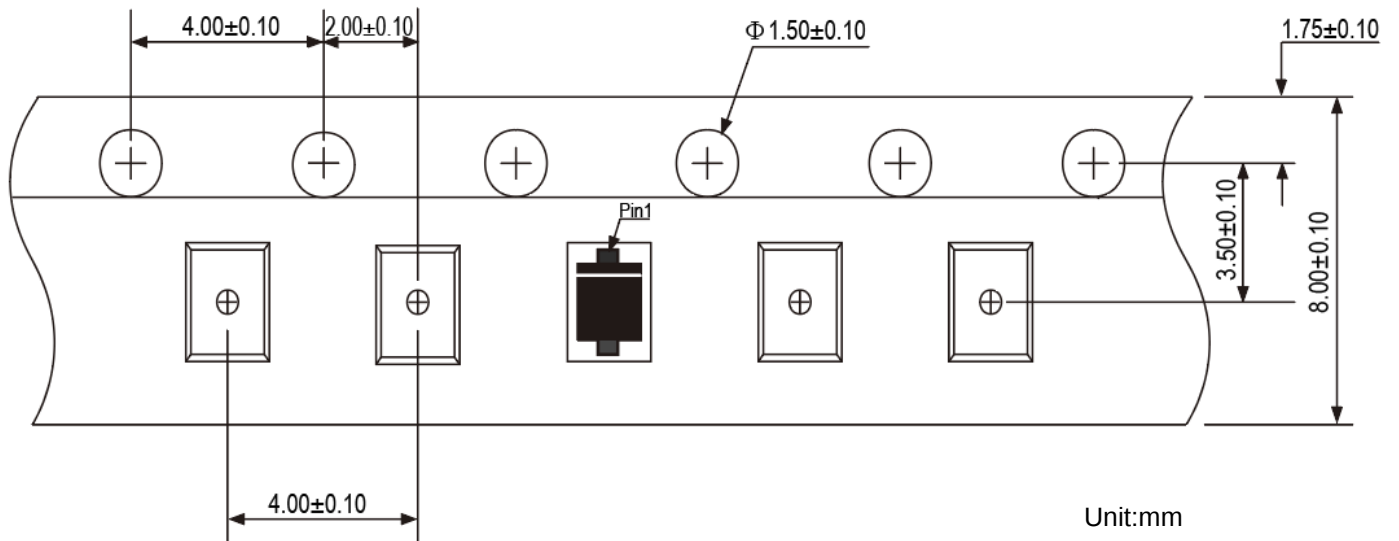
SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	3.15	0.120
B	0.80	0.031
C	0.80	0.031

TAPE AND REEL INFORMATION

Reel Dimensions



Tape Dimensions



➔
User Direction of Feed

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