

Features

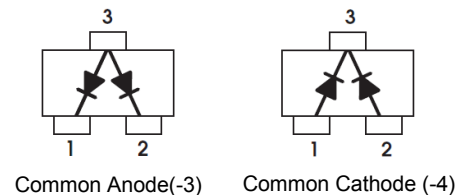
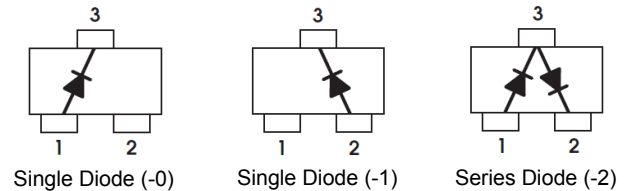
- Low Series Resistance
- Low Capacitance
- Wide Dynamic Range
- Silicon Nitride / Glass Passivation
- SOT23 and SOD323 Surface Mount Package
- RoHS* Compliant

Description

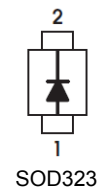
These Schottky diodes are specifically designed for commercial applications requiring devices in the SOT-23 and SOD323 surface mount packages. The series in low profile has options for bulk or tape and reel. This series offers a wide range of specifications and package configurations to give the designer wide flexibility.

Typical applications of these Schottky diodes are up converters, down converters, mixers, detectors, phase detectors, pulse and amplitude modulators, and temperature compensation circuits.

SOT23 Configurations



SOD232 Configuration



Electrical Specifications: @ +25°C, Voltage Breakdown = 2 V min. @ 10 µA

Part # ¹	Typical Forward Voltage @ 1 mA	Maximum Total Capacitance @ 0 V, 1 MHz	Maximum Dynamic Resistance @ 10 mA
	mV	pF	Ω
SMSx3004	270	0.60	10
SMSx3012	270	0.25	15
SMSx4004	350	0.60	10
SMSx4012	350	0.25	15
SMSx6004	600	0.60	10
SMSx6012	630	0.25	15

1. Replace x in part number with T for SOT23 and define which configuration, or with D for SOD323.

* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

SMSTx & SMSDx Series



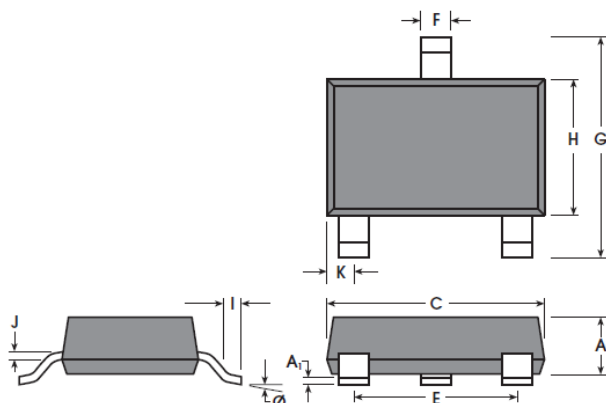
General Purpose Silicon Schottky Diodes

Rev. V1

Absolute Maximum Ratings

Parameter	Absolute Maximum
Forward Current	1 A, 1 μ s pulse
Peak Inverse Voltage	Same as V_{BR}
Power Dissipation	250 mW, derate linearly to 0 @ 150°C
Operating / Storage Temperature	-65°C to +150°C

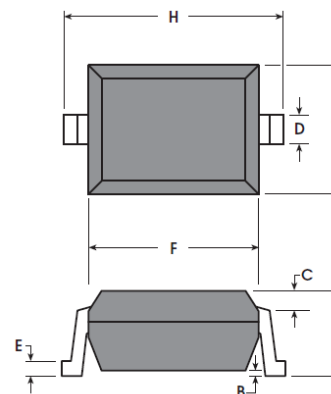
Outline Drawing - SOT23



Dim.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.79	1.02	0.031	0.040
A ₁	0.02	0.10	0.001	0.004
C	2.67	3.05	0.105	0.120
E	1.80	2.00	0.071	0.079
F	0.38	0.54	0.010	0.021
H	2.10	2.50	0.083	0.098
I	0.13	0.25	0.005	0.010
J	0.089	0.15	0.0035	0.059
K	0.44	0.55	0.017	0.022
∅	0.0	8.0	0.0	0.0

Lead Material = Alloy 42
 Lead Finish = Tin-Lead, 60-40%
 Maximum Soldering Temperature = 260°C for 5 sec.
 Minimum Lead Strength = 2 pounds pull
 Typical Package Inductance = 2 nH
 Typical Package Capacitance = 0.10 pF (opposite leads)

Outline Drawing - SOD323



Dim.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	—	1.10	0.034	0.043
B	—	0.10	0.003	0.004
C	—	0.20	0.006	0.010
D	0.25	0.40	0.010	0.016
E	0.08	0.15	0.003	0.006
F	1.60	1.90	0.063	0.075
G	1.15	1.45	0.045	0.057
H	2.30	2.70	0.094	0.106

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