Features

- Low turn-on voltage
- Fast switching
- Microminiature plastic package
- This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge
- Ideal for protection of MOS devices, steering, biasing, and coupling diodes for fast switching and low logic level applications

SOD-323 top view

Schematic diagram

Marking and pin assignment

Pb-Free RoHS Halogen-Free

Maximum Ratings(T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RM}	Peak reverse voltage	30	V
I_{FM}	Peak forward current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	1	A
P_{tot}	Power dissipation TC=25℃	250	mW
$R_{\Theta JA}$	Thermal resistance junction to ambient	400	°C/W
T_J	Operating Junction Temperature Range	-40~+125	°C
T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

ELECTRICAL CHARACTERISTICS(Ta=25℃ unless otherwise specified)

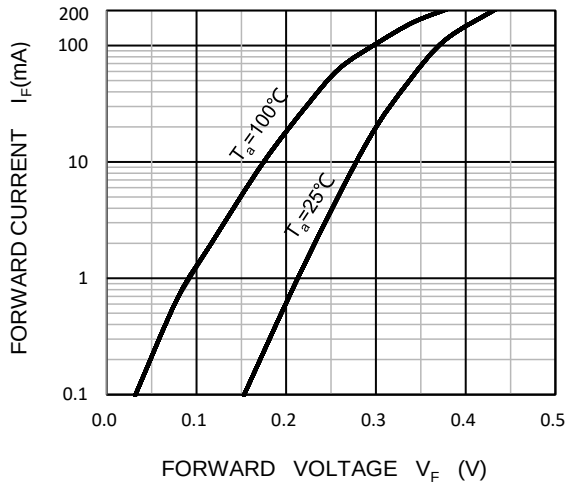
Symbol	Parameter	Condition	Min	Typ	Max	Unit
V_R	Reverse breakdown voltage	I_R = 100μA	30	--	--	V
I_R	Reverse voltage leakage current	V_R=30V	--	--	5	μA
V_F	Forward voltage	I_F=2mA	--	260		mV
		I_F=15mA	--	320	--	
		I_F=100mA	--	420	--	
		I_F=200mA	--	490	550	
C_{tot}	Total capacitance	V_R=10V,f=1MHz	--	--	15	pF

Ordering Information (Example)

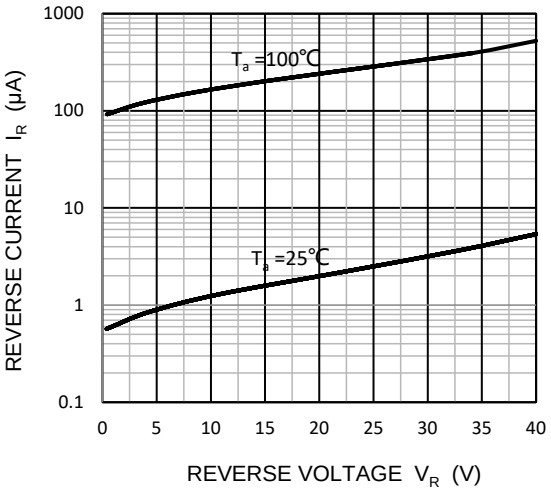
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SD106WS	SOD-323	S21	3,000	45,000	180,000	7"reel

Typical Operating Characteristics

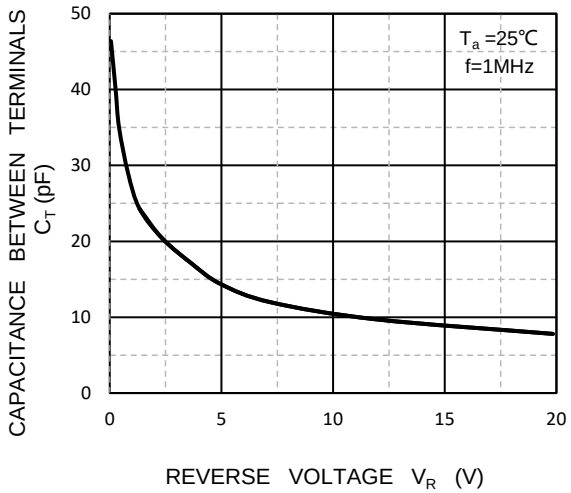
Forward Characteristics



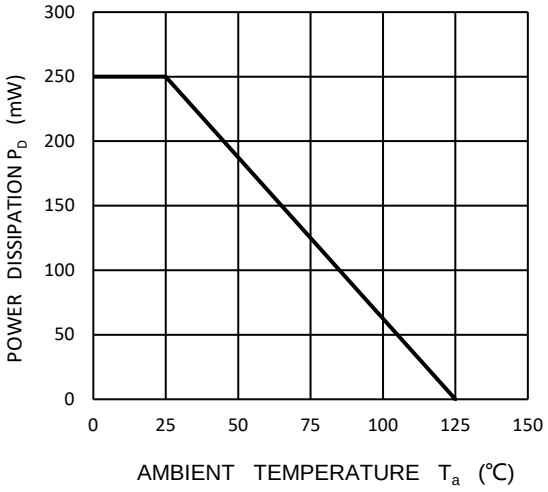
Reverse Characteristics



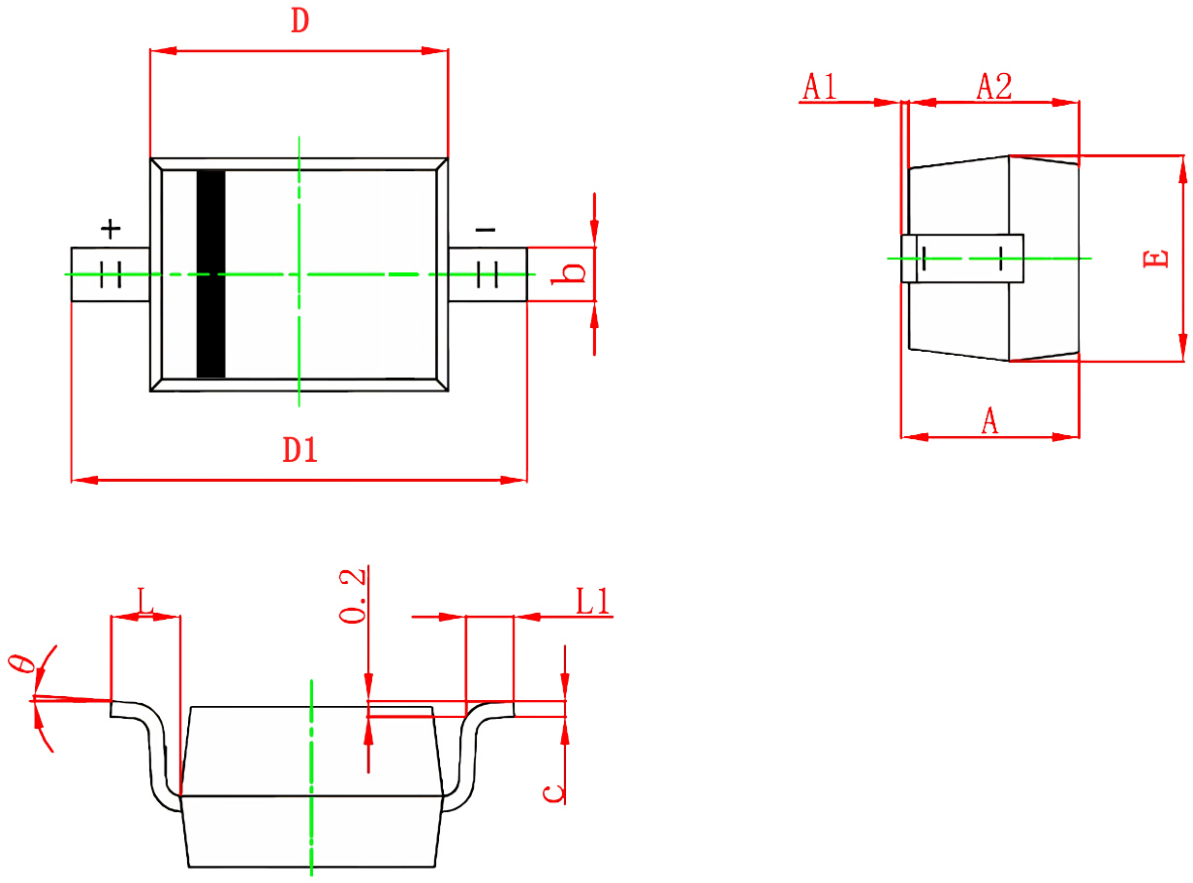
Capacitance Characteristics



Power Derating Curve



SOD-323 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	-	1.100	-	0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.600	1.800	0.063	0.071
D1	2.500	2.750	0.098	0.108
E	1.200	1.400	0.047	0.055
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°