

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

MARKING: S21

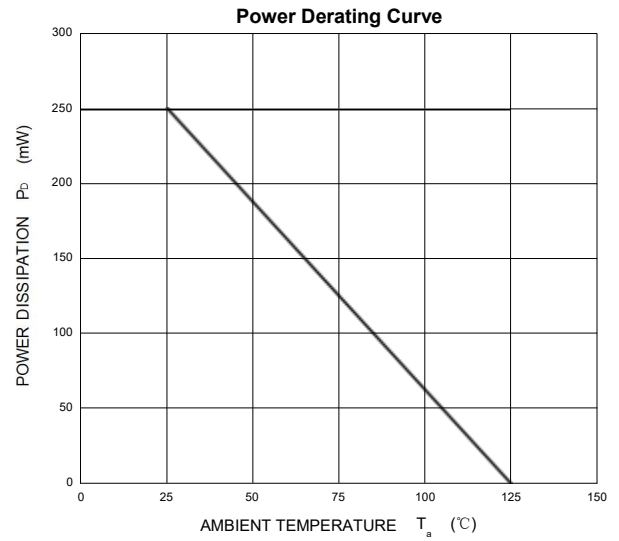
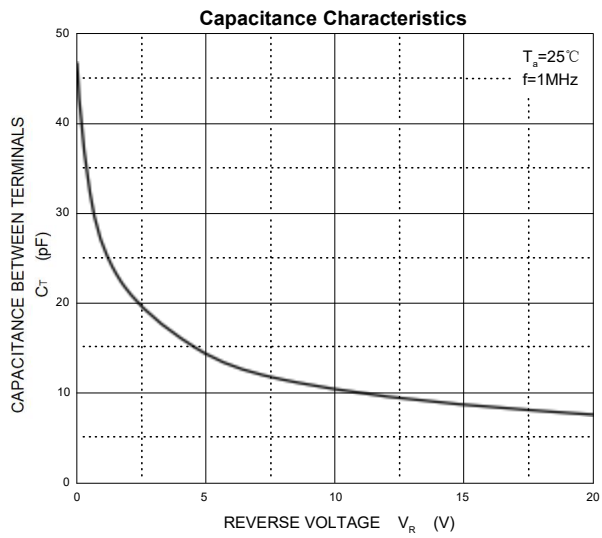
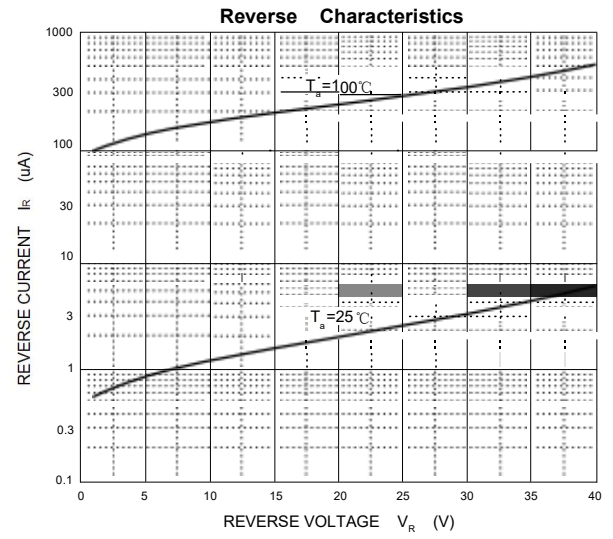
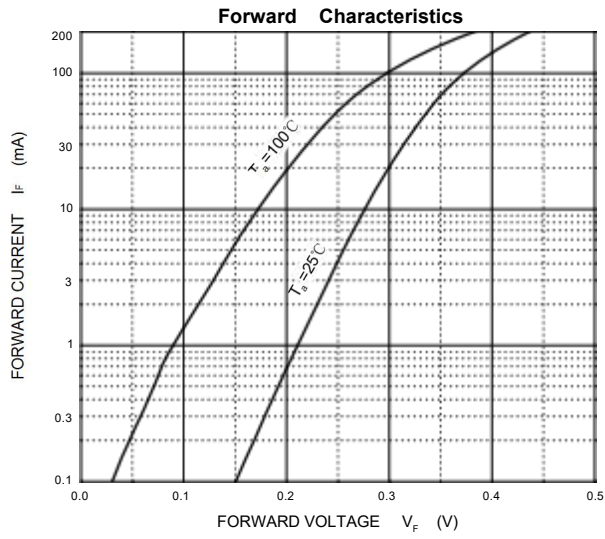
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

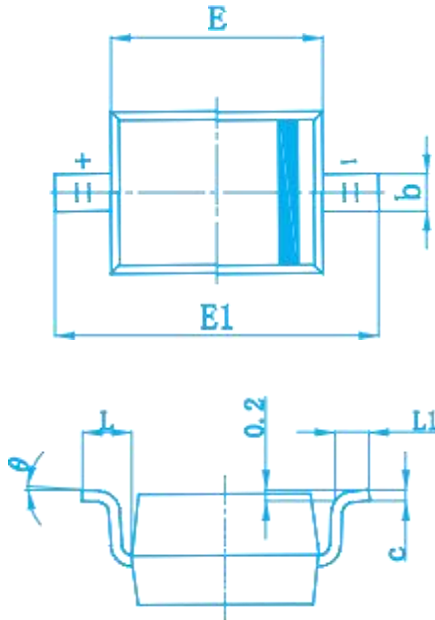
Parameter	Symbol	Limit	Unit
Non-repetitive peak reverse voltage	V_{RM}	30	V
Forward current	I_{FM}	200	mA
Non-repetitive Forward Surge Current @t=8.3ms	I_{FSM}	1	A
Power dissipation	P_{tot}	250	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	400	°C/W
Operating Junction Temperature Range	T_J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

Electrical Ratings @Ta=25°C

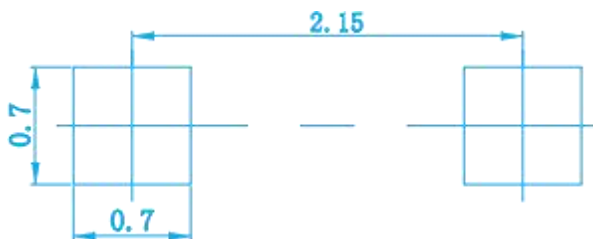
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	V_R	30			V	$I_R=100\mu A$
Forward voltage	V_F		260 320 420 490	550	mV	$I_F=2mA$ $I_F=15mA$ $I_F=100mA$ $I_F=200mA$
Reverse current	I_R			5	μA	$V_R=30V$
Capacitance between terminals	C_T			15	pF	$V_R=10V, f=1MHz$

Typical Characteristics



SOD-323 Package Outline Dimensions


Symbol	Dimensions In Millimeters		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	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout

Note:

1. Controlling dimension: In millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.