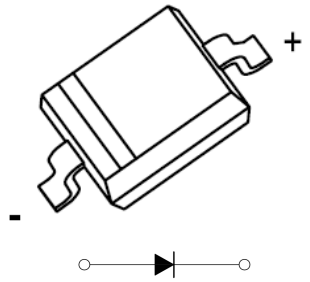
SCHOTTKY BARRIER DIODE

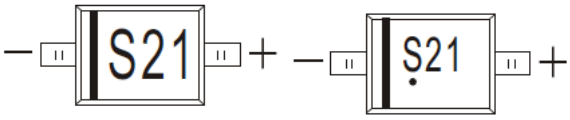
FEATURES

- 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



The marking bar indicates the cathode
Solid dot = Green molding compound device,if none, the normal device.

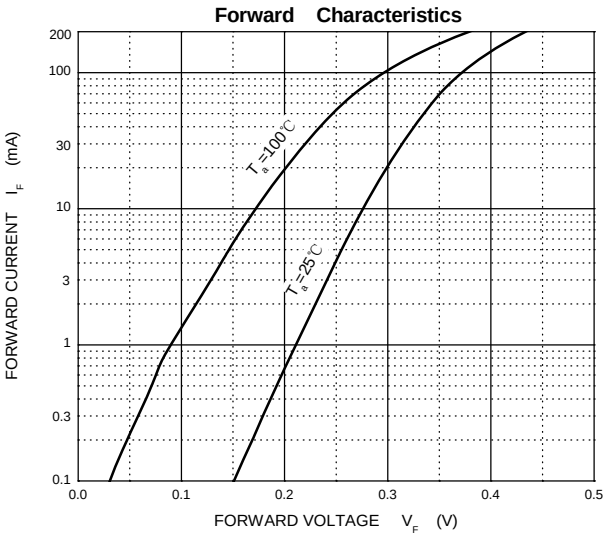
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

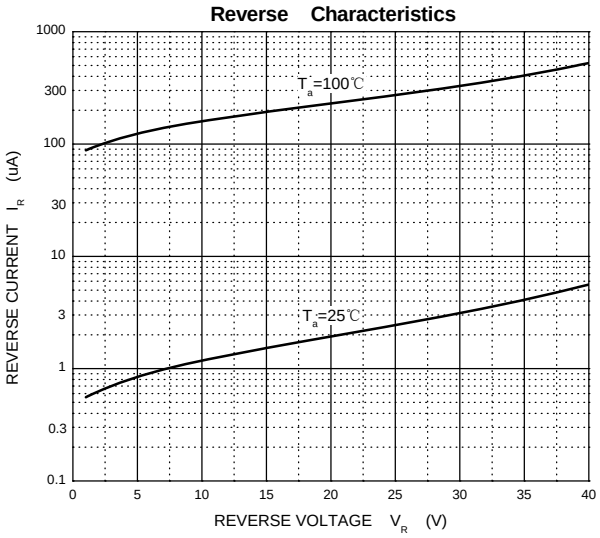
Parameter	Symbol	Limit	Unit
Non-repetitive peak reverse voltage	V_{RM}	30	V
Forward current	I_{FM}	200	mA
Non-repetitive Forward Surge Current @t=8.3ms	I_{FSM}	1	A
Power dissipation	P_{tot}	250	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	400	℃/W
Junction temperature	T_J	125	℃
Storage temperature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

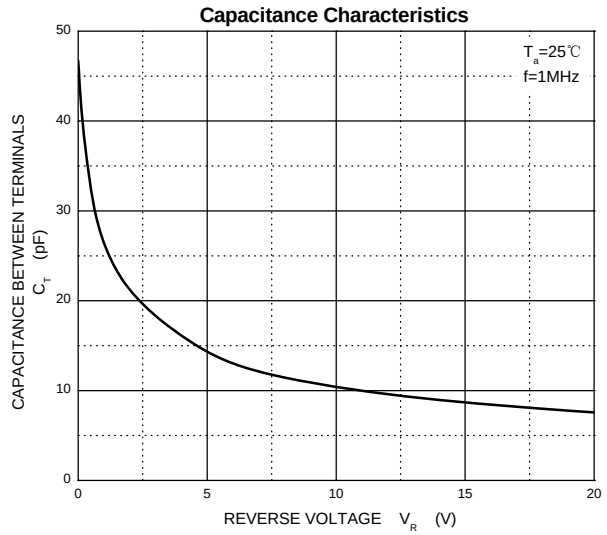
Electrical Ratings @Ta=25℃

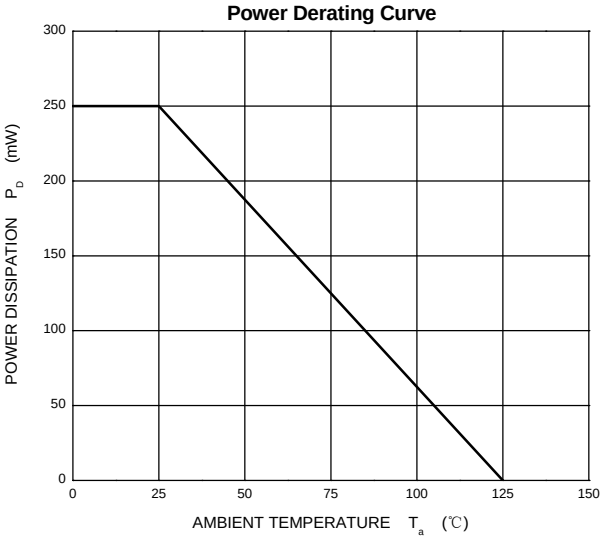
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	V_R	30			V	IR=100uA
Forward voltage	V_F		260 320 420 490	 550	mV	I_F=2mA I_F=15mA I_F=100mA I_F=200mA
Reverse current	I_R			5	μA	V_R=30V
Capacitance between terminals	C_T			15	pF	V_R=10V,f=1MHz

Typical Characteristics

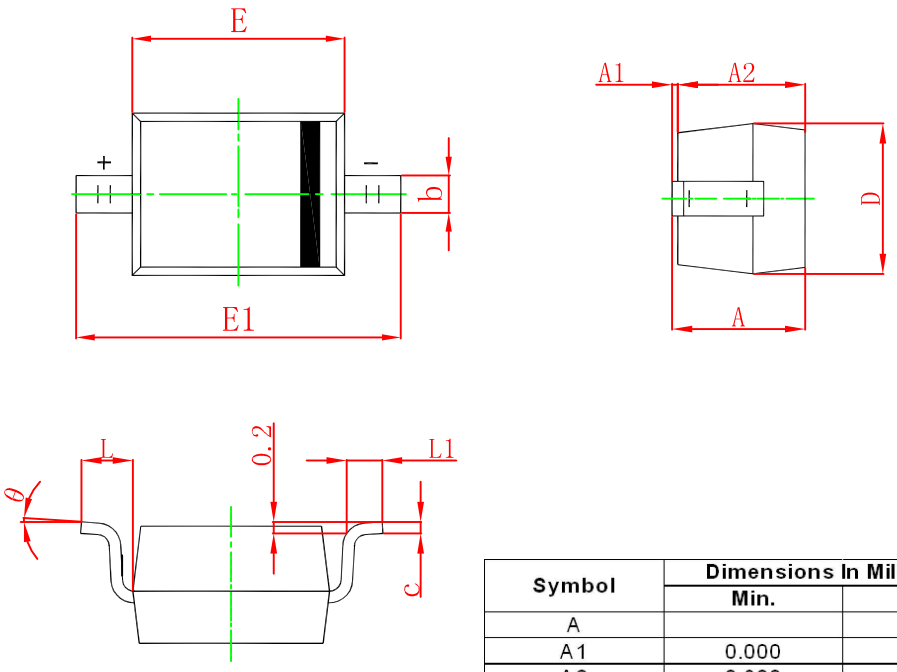






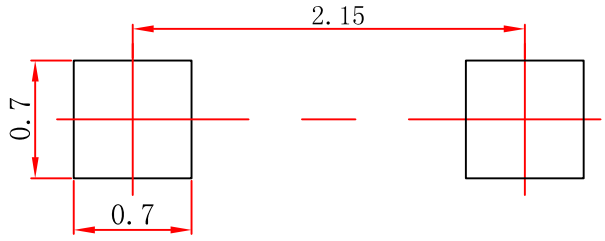


SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		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	2.550	2.750	0.100	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:± 0.05mm.
3.The pad layout is for reference purposes only.