

SOD-323

MARKING: SG

FEATURES

- I Low Forward Voltage Drop
- I Guard Ring Die Construction for Transient Protection
- I Ideal for Low Logic Level Applications
- I Low Capacitance

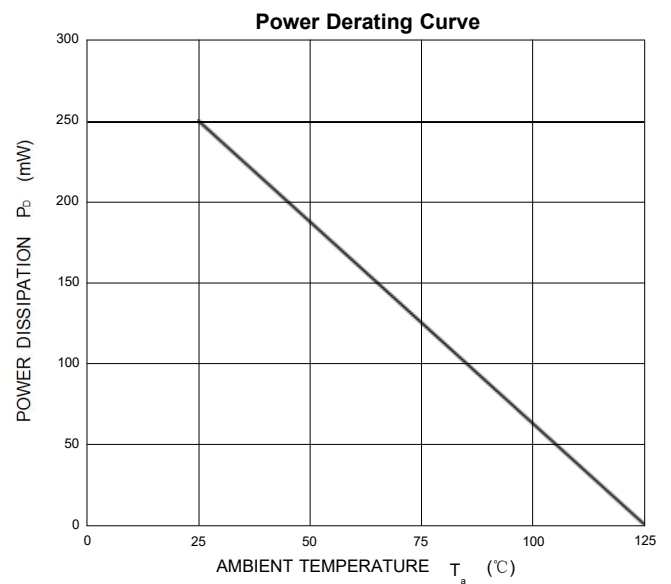
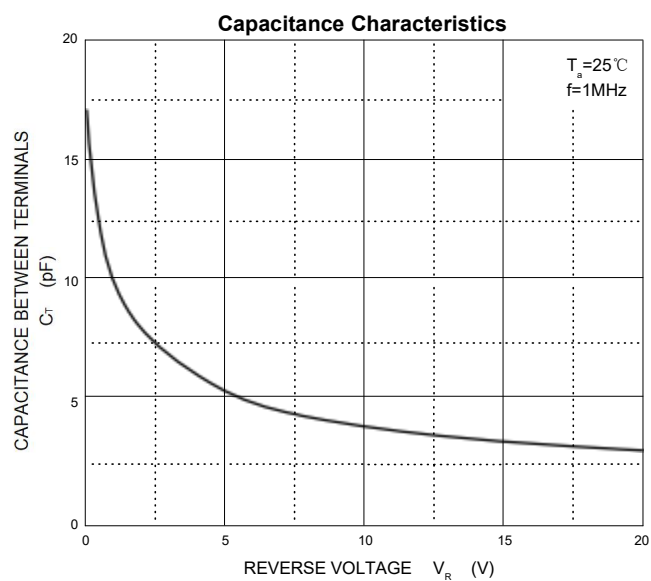
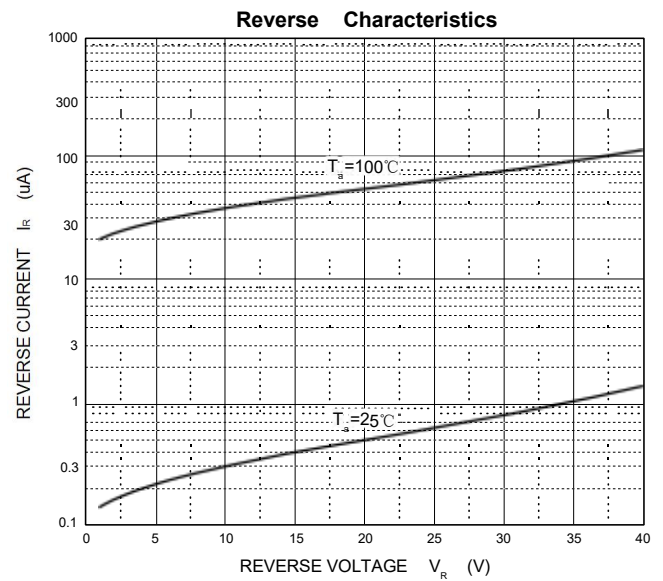
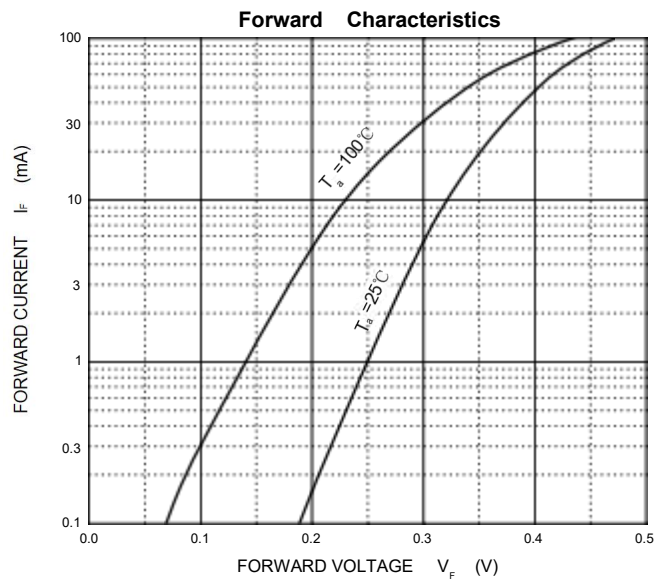
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	Limit	Unit
Non-repetitive peak reverse voltage	V_{RM}	30	V
Forward current	I_{FM}	100	mA
Non-repetitive Peak Forward Surge Current @t = 8.3ms	I_{FSM}	2	A
Power dissipation $T_c=25^{\circ}\text{C}$	P_{tot}	250	mW
Thermal resistance junction to ambient	T_{eJA}	400	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-40 ~ +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

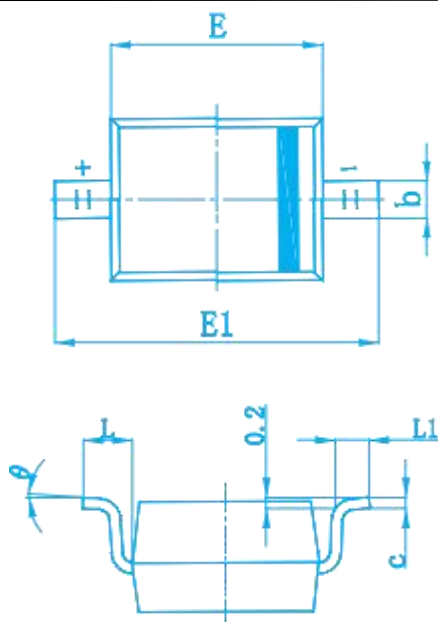
Electrical Ratings @Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	V_R	30			V	$I_R=100\mu\text{A}$
Forward voltage	V_F		300		mV	$I_F=2\text{mA}$
			360			$I_F=15\text{mA}$
			430	550		$I_F=50\text{mA}$
			500	800		$I_F=100\text{mA}$
Reverse current	I_R			1	μA	$V_R=25\text{V}$
Capacitance between terminals	C_T		7		pF	$V_R=10\text{V}, f=1\text{MHz}$

Typical Characteristics

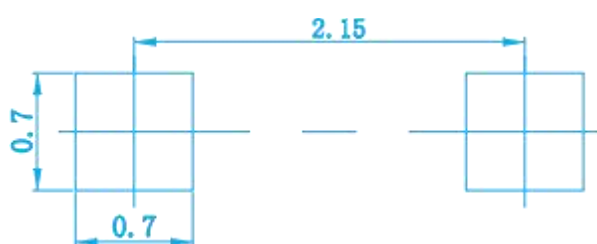


SOD-323 Package Outline Dimensions



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.