

SOD-323

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time



MARKING: S3

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

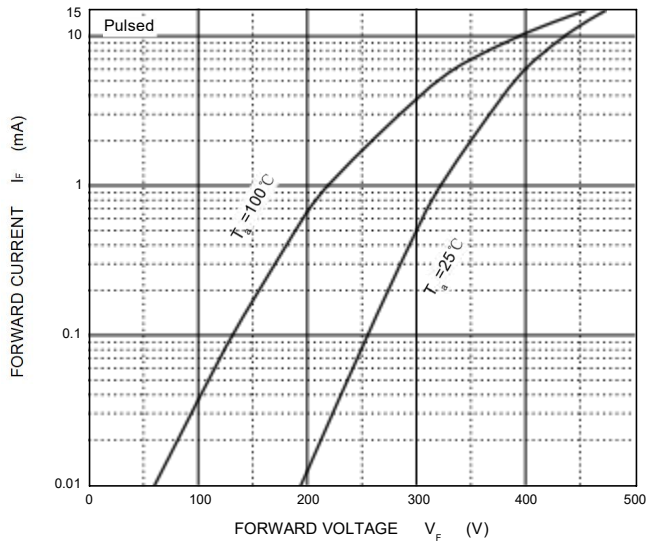
Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Forward Continuous Current	I_{FM}	15	mA
Non-Repetitive Peak Forward Surge Current@t=8..3ms	I_{FSM}	2.0	A
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	℃/W
Operating Junction Temperature Range	T_j	-40 ~ +125	℃
Storage Temperature Range	T_{STG}	-55 ~ +150	℃

Electrical Ratings @Ta=25℃

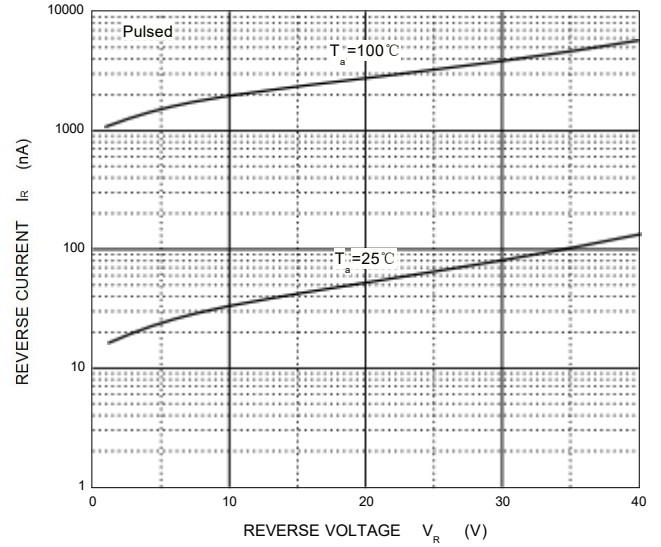
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	V_R	40			V	$I_R=10\mu A$
Forward voltage	V_F			0.39	V	$I_F=1.0mA$
				0.90		$I_F=15mA$
Reverse current	I_R			0.2	μA	$V_R=30V$
Capacitance between terminals	C_T		2.2		pF	$V_R=0V, f=1.0MHz$
Reverse recovery time	t_{rr}			1.0	ns	$I_F=I_R=5mA$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

Typical Characteristics

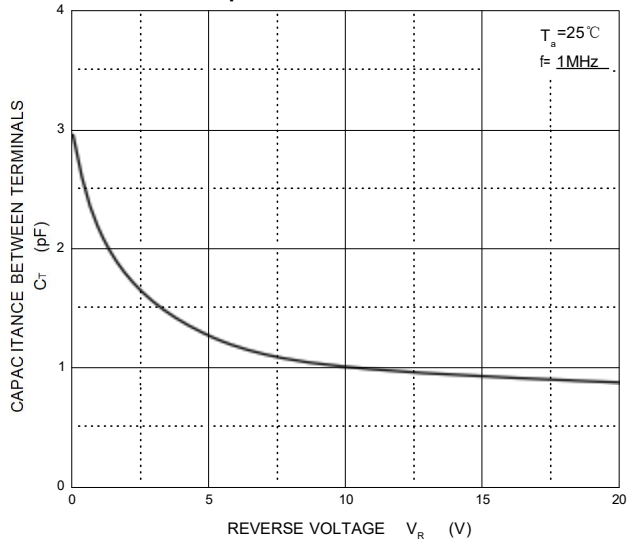
Forward Characteristics



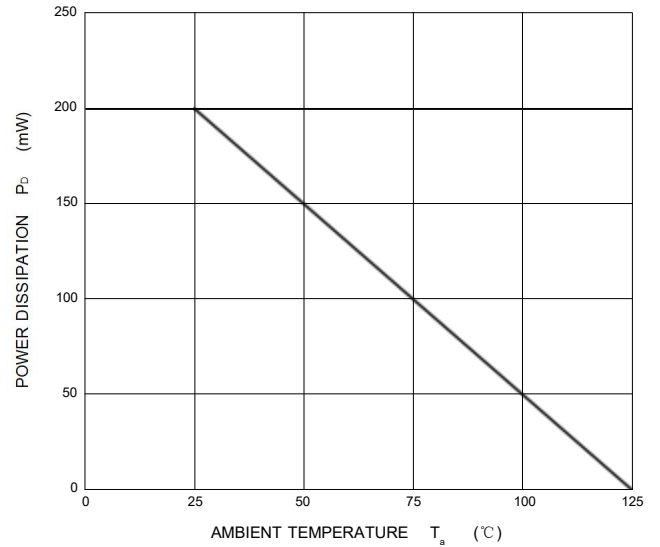
Reverse Characteristics

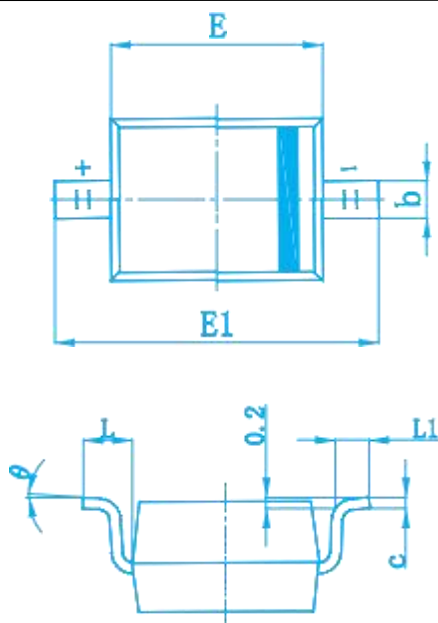


Capacitance Characteristics

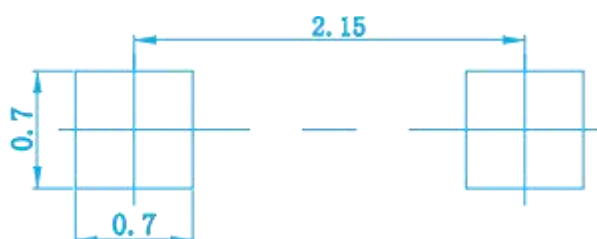


Power Derating Curve



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.