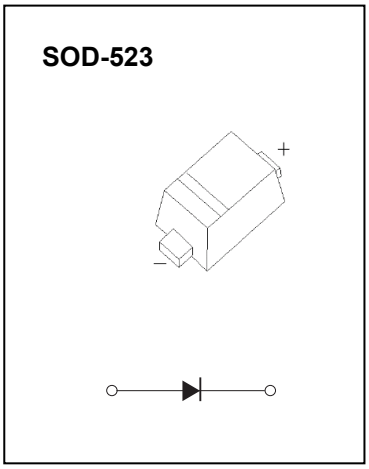
SOD-523 Plastic-Encapsulate Diodes

FEATURES

- Small pacakage
- Low forward voltage
- Low reverse current

MARKING: S3





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

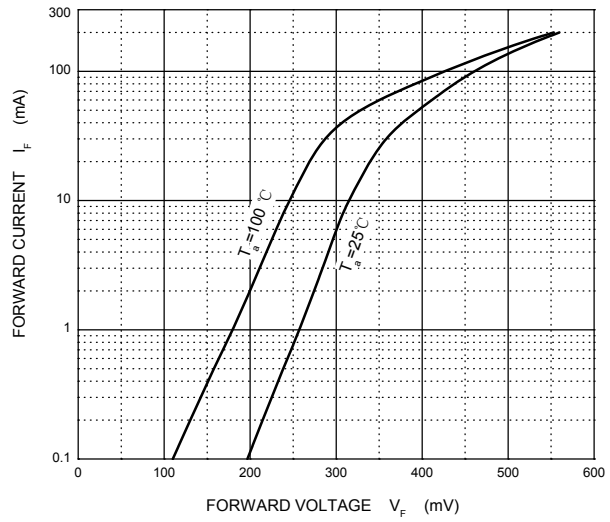
Parameter	Symbol	Limit	Unit
Peak reverse voltage	V_{RM}	45	V
DC reverse voltage	V_R	40	V
Maximum (peak) forward current	I_{FM}	300	mA
Average forward current	I_O	100	mA
Non-repetitive Peak Forward Surge Current@t=8.3ms	I_{FSM}	1000	mA
Power dissipation	P_D	150	mW
Operating Junction Temperature Range	T_j	-40 ~ +125	℃
Storage Temperature Range	T_{stg}	-55 ~ +150	℃

Electrical Ratings @Ta=25℃

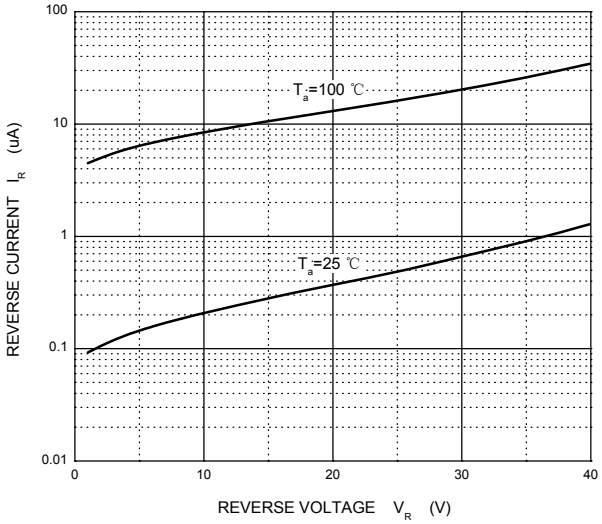
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_{F1}		0.28		V	I_F=1mA
	V_{F2}		0.36		V	I_F=10mA
	V_{F3}		0.54	0.60	V	I_F=50mA
Reverse current	I_R			5	μA	V_R=10V
Total capacitance	C_T		18	25	pF	V_R=0,f=1MHz

Typical Characteristics

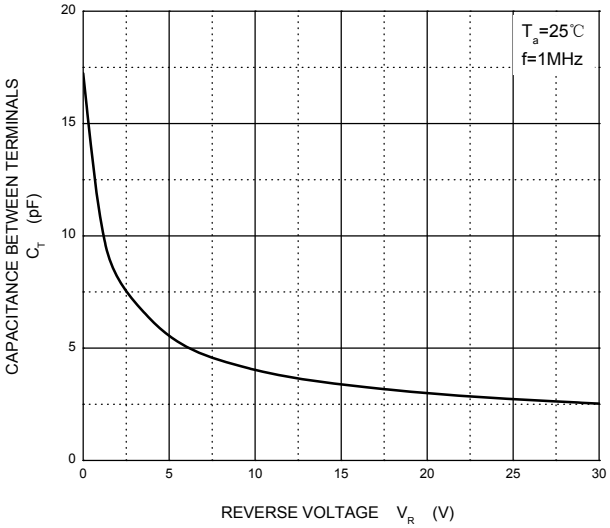
Forward Characteristics



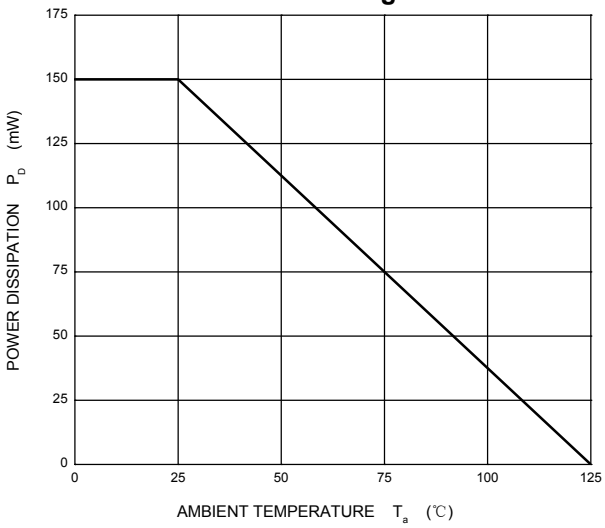
Reverse Characteristics



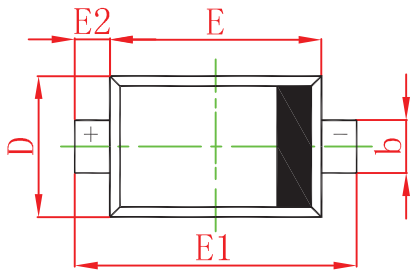
Capacitance Characteristics

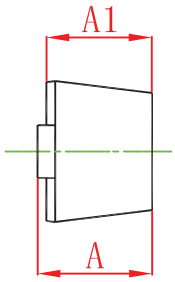


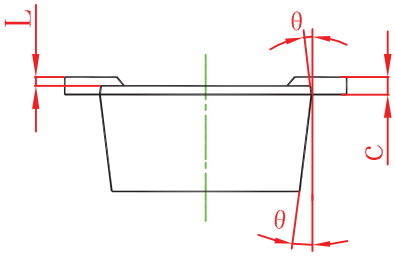
Power Derating Curve



SOD-523 Package Outline Dimensions

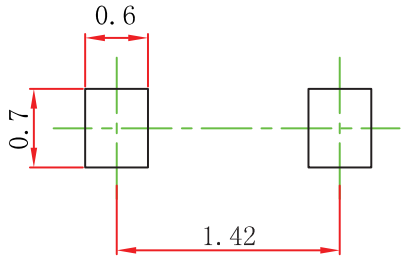






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

SOD-523 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.