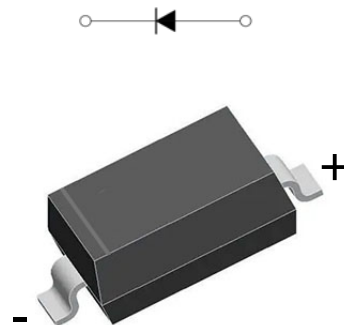


SOD-523 Plastic-Encapsulate Diodes

• Features

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



SOD-523

• MAXIMUM RATINGS (T_C=25°C)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	40	V
Peak Repetitive Reverse Voltage	V _{RRM}	40	V
Working Peak Reverse Voltage	V _{RWM}	40	V
RMS Reverse Voltage	V _{R(RMS)}	28	V
Average Rectified Output Current	I _O	0.35	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I _{FSM}	2	A
Power Dissipation	P _D	150	mW
Thermal Resistance from Junction to Ambient	R _{ΘJA}	500	°C/W
Operation Junction and Storage Temperature Range	T _J , T _{stg}	-55~+150	°C

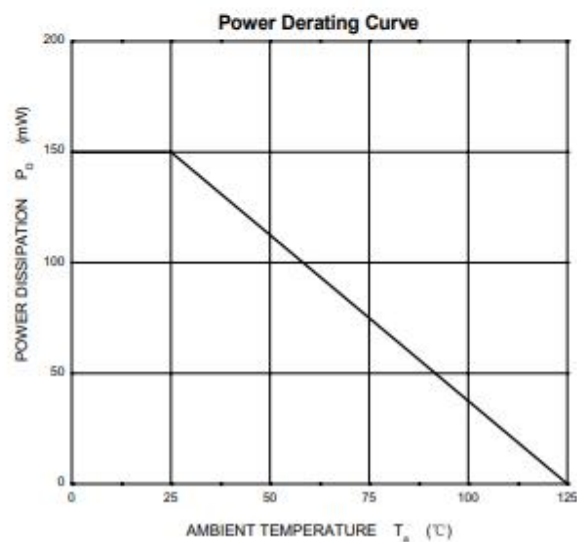
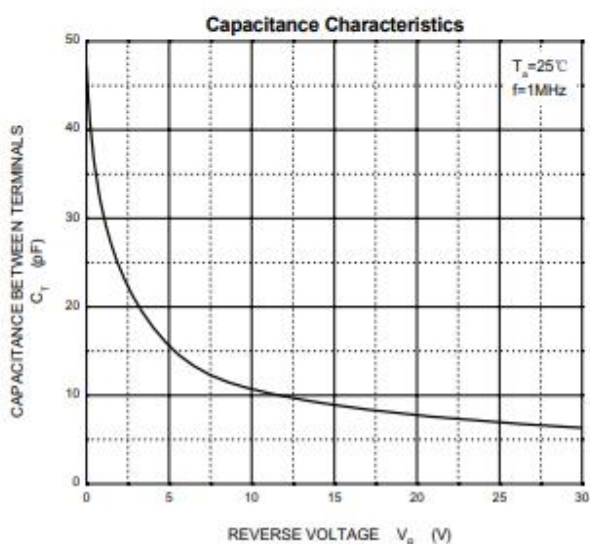
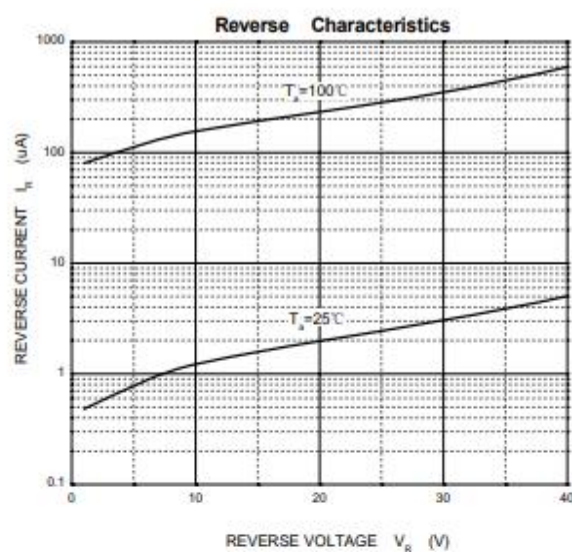
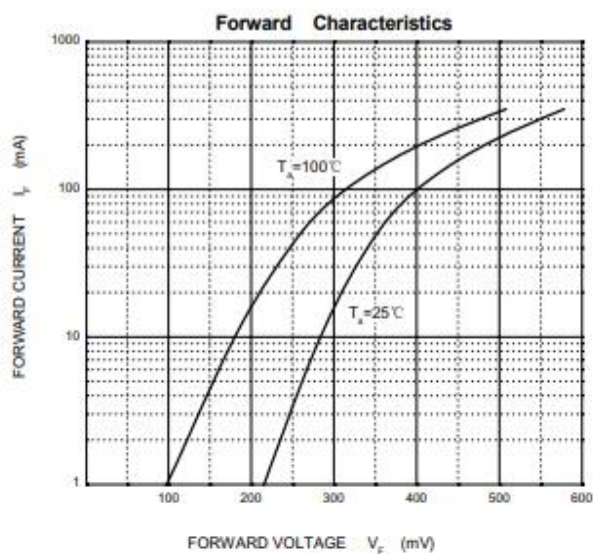
• ELECTRICAL CHARACTERISTICS (T_a=25°C)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	V _(BR)	I _R =100μA	40		V
Reverse voltage leakage current	I _R	V _R =30V		5	uA
Forward voltage	V _F	I _F =20mA I _F =200mA		0.37 0.6	V
Diode capacitance	C _D	V _R =0V, f=1MHz		50	pF
Reverse recovery time	t _{rr}	I _F =I _R =200mA I _{rr} =0.1X I _R , R _L =100Ω		10	ns

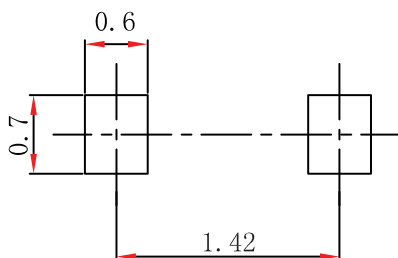
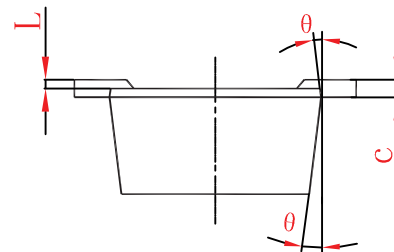
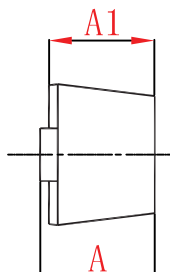
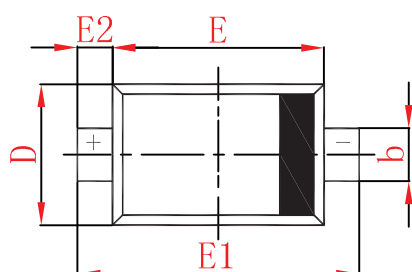
• Ordering Information:

Part NO.	SD103AWT
Marking	S4
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

• Typical Characteristics



SOD-523 Package Outline Dimensions



Note:

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

Sym ol	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	