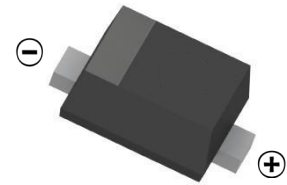
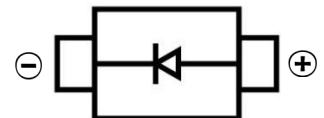


FAST SWITCHING DIODE
FEATURES

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion


SOD-523

MECHANICAL DATA

- Case: SOD-523
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.008 grams (approximate)

MARKING:T4
MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

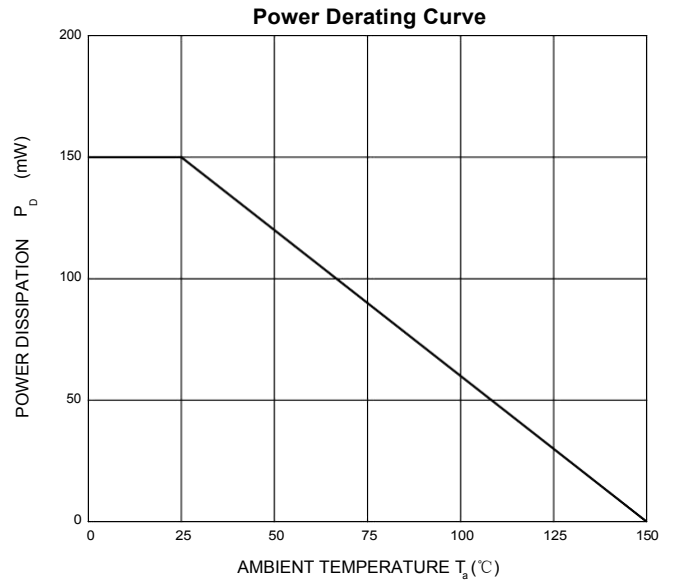
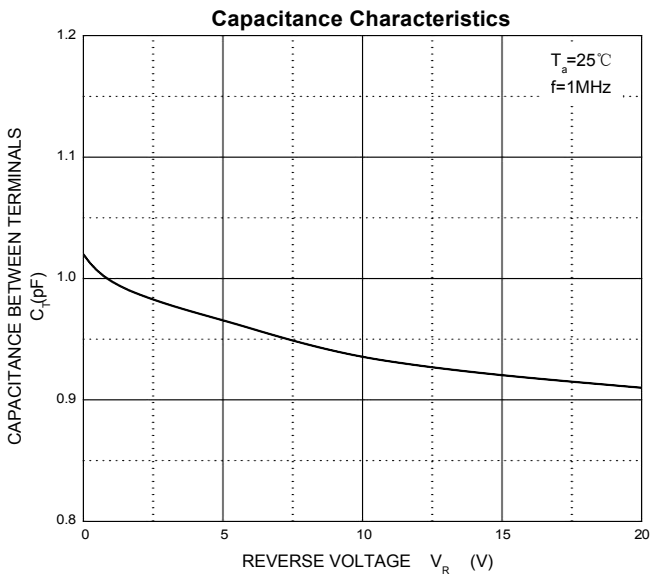
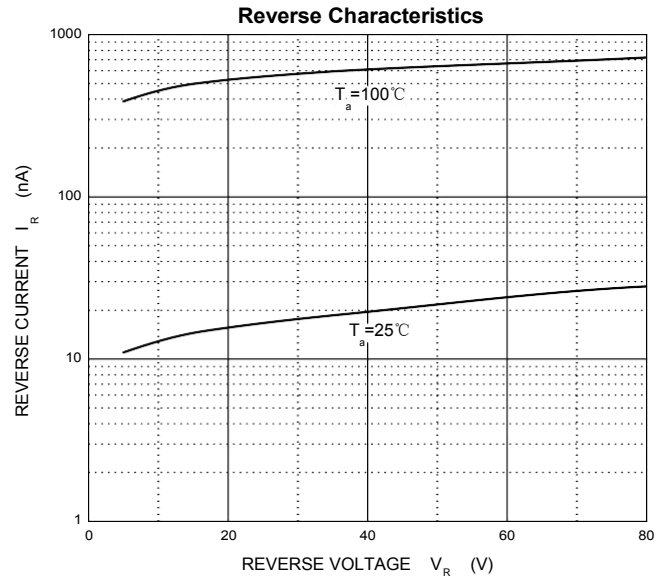
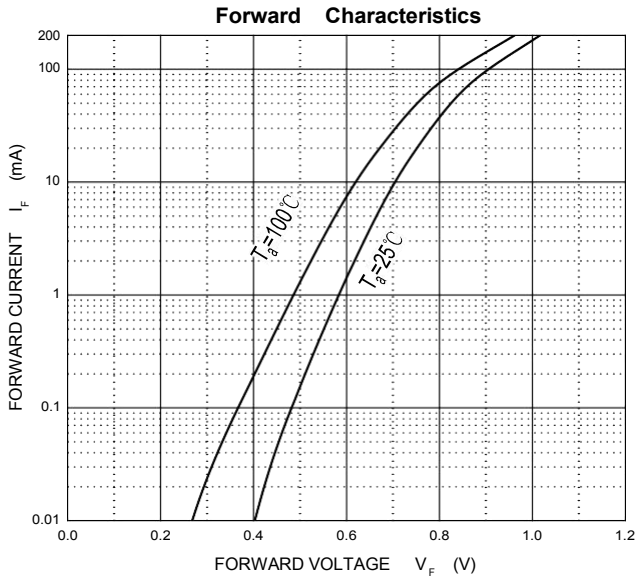
Symbol	Parameter	Value	Unit
V _{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V _R	Reverse Voltage	75	V
V _{RRM}	Peak Repetitive Reverse Voltage		
V _{RWM}	Working Peak Reverse Voltage		
V _{R(RMS)}	RMS Reverse Voltage	53	V
I _o	Average Rectified Output Current	150	mA
I _{FM}	Forward Continuous Current	300	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	2	A
P _D	Power Dissipation	150	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	833	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	I _R =1μA	75			V
Reverse current	I _R	V _R =75V			1	μA
		V _R =20V			25	nA
Forward voltage	V _F	I _F =1mA			0.715	V
		I _F =10mA			0.855	V
		I _F =50mA			1	V
		I _F =150mA			1.25	V
Total capacitance	C _{tot}	V _R =0V, f=1MHz			2	pF
Reverse recovery time	t _{rr}	I _F = I _R =10mA, I _{rr} =0.1*I _R , R _L =100 Ω			4	ns

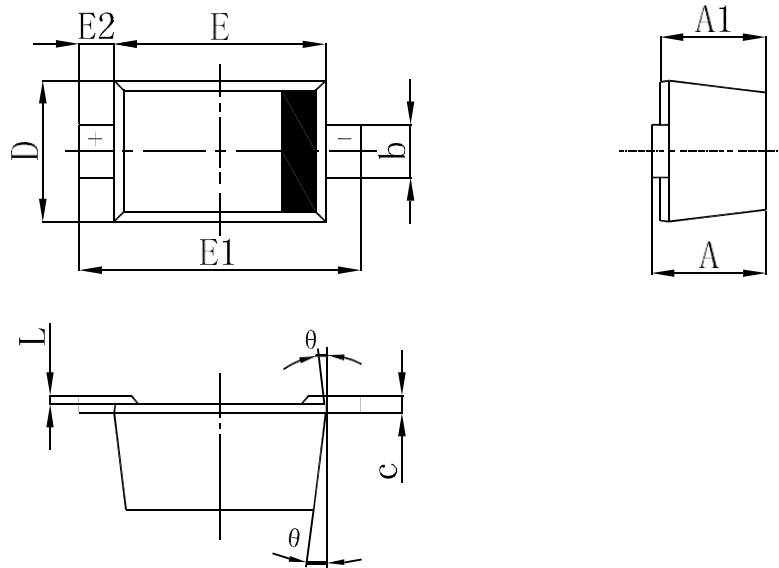
FAST SWITCHING DIODE

Typical Characteristics



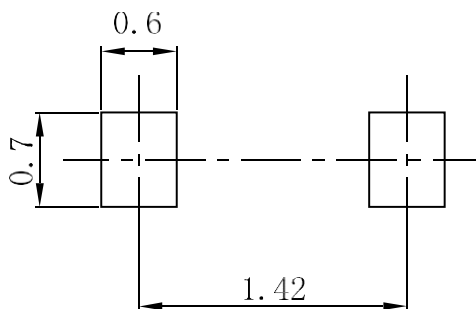
FAST SWITCHING DIODE

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	0.057	0.069
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



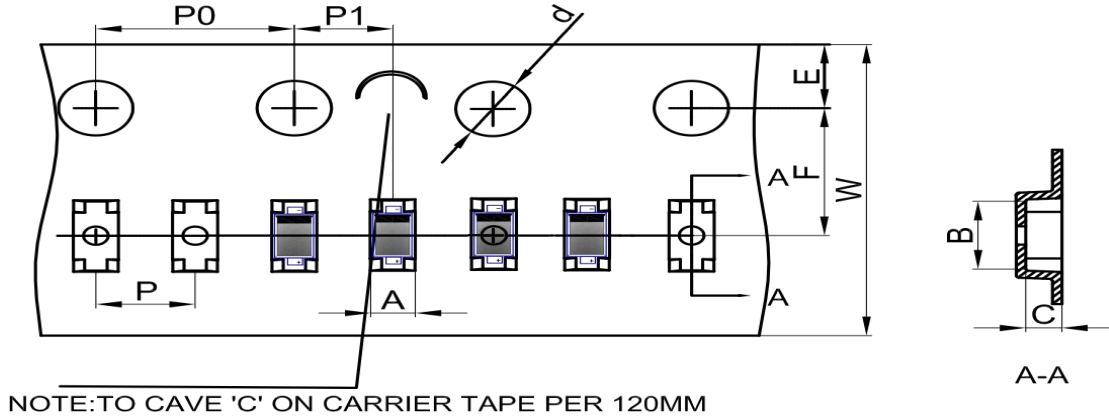
Note:

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

FAST SWITCHING DIODE

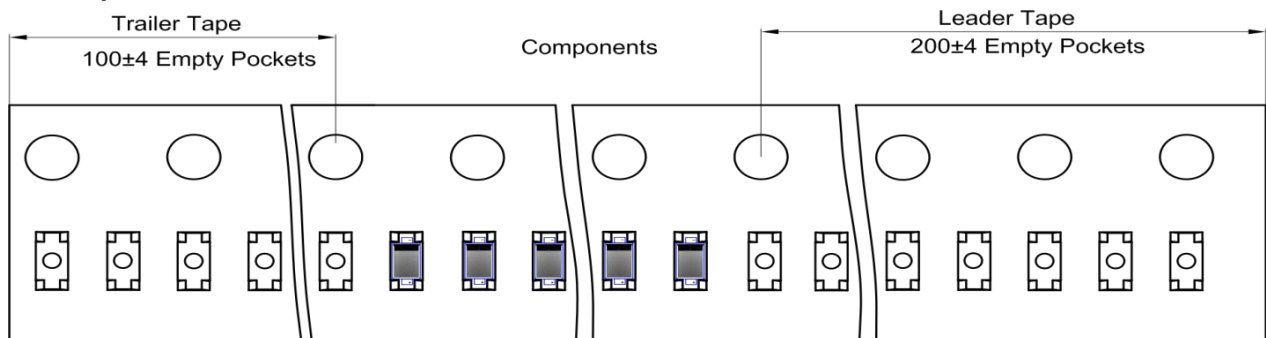
SOD-523 Tape and Reel

SOD-523 Embossed Carrier Tape

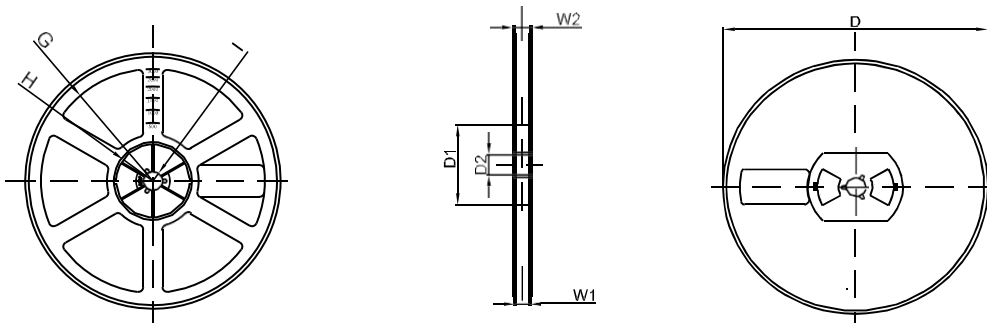


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-523	0.90	1.94	0.73	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SOD-523 Tape Leader and Trailer



SOD-523 Reel



DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1