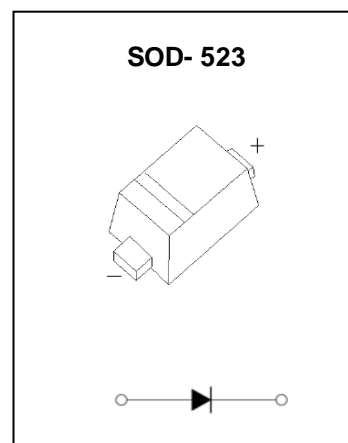


FAST SWITCHING DIODE

FEATURES

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

MARKING:6



MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

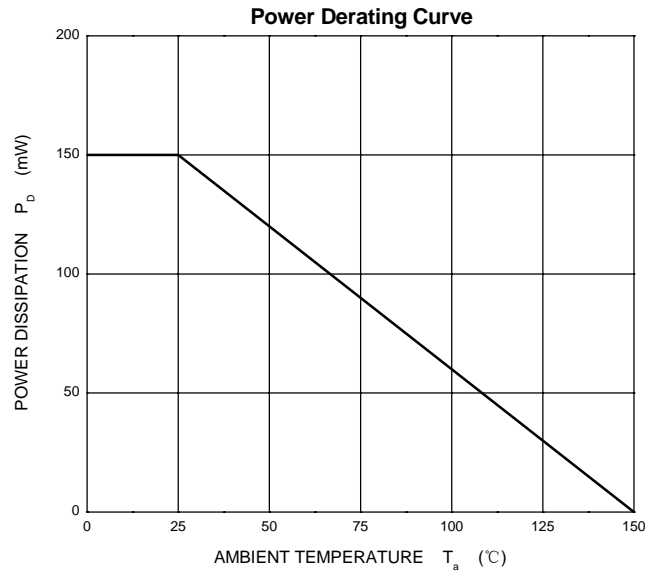
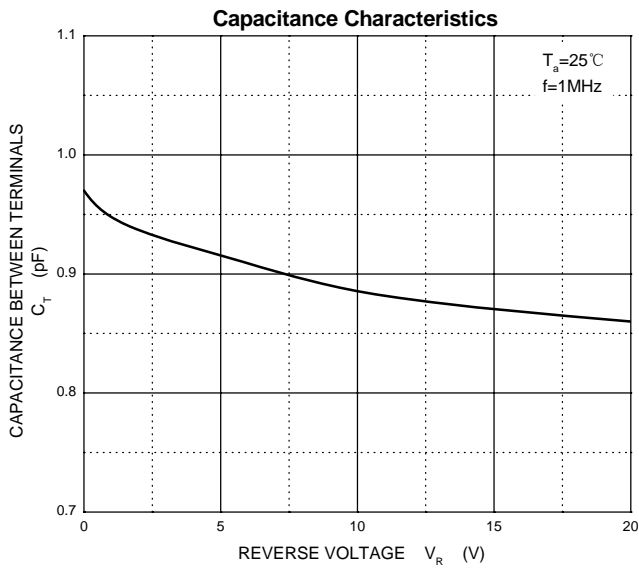
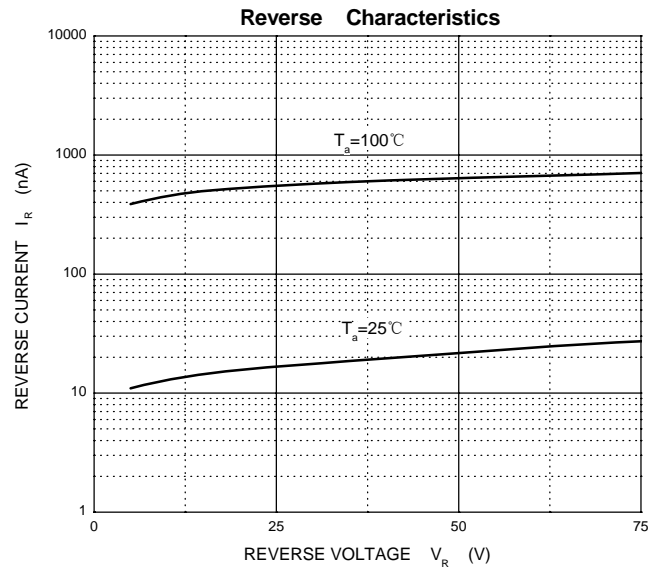
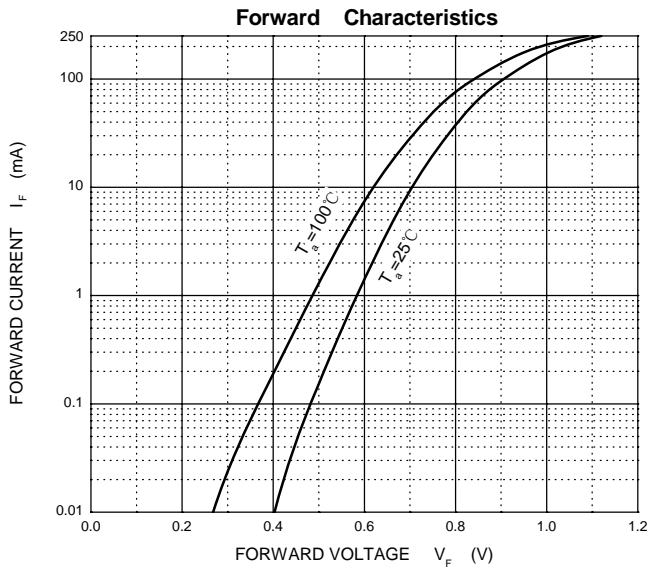
Symbol	Parameter	Value	Unit
V_{RM}	Non- Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Peak Repetitive Reverse Voltage	75	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_o	Average Rectified Output Current	250	mA
I_{FSM}	Non- repetitive Peak Forward Surge Current @t=8.3ms	2,0	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	833	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	- 55~ +150	°C

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

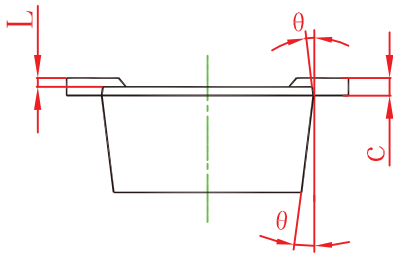
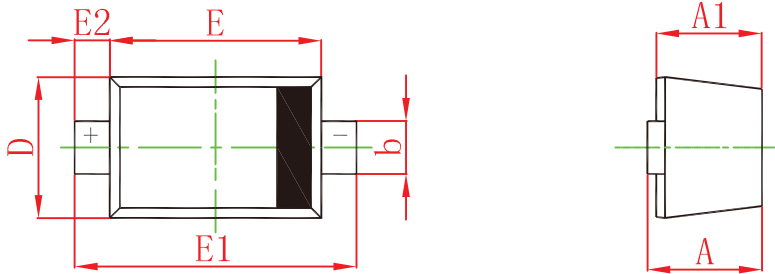
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu A$	75			V
Reverse current	I_R	$V_R=25V$			30	nA
		$V_R=75V$			1	μA
Forward voltage	V_F	$I_F=1mA$			0.715	V
		$I_F=10mA$			0.855	V
		$I_F=50mA$			1	V
		$I_F=150mA$			1.25	V
Total capacitance	C_{tot}	$V_R=0V, f=1MHz$			1	pF
Reverse recovery time	t_{rr}	$I_F= I_R =10mA, I_{rr}=0.1 * I_R, R_L=100 \Omega$			4	ns



Typical Characteristics

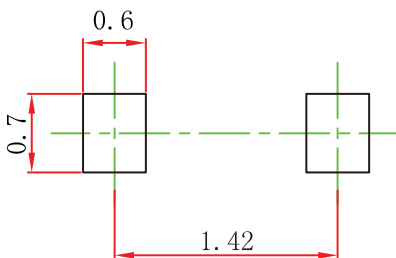


SOD-523 Package Outline Dimensions



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	

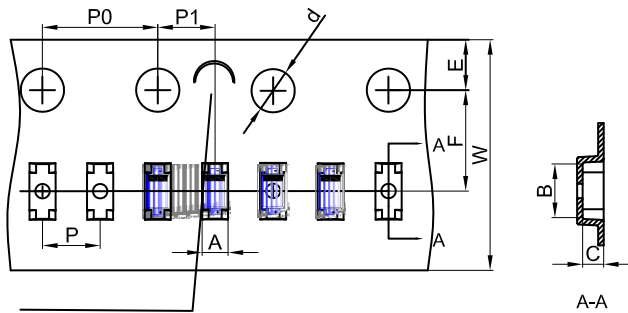
SOD-523 Suggested Pad Layout



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

SOD-523 Tape and Reel

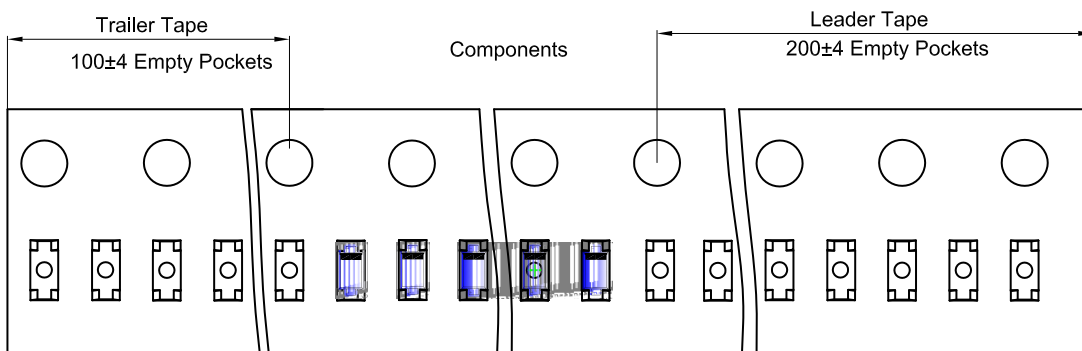
SOD-523 Embossed Carrier Tape



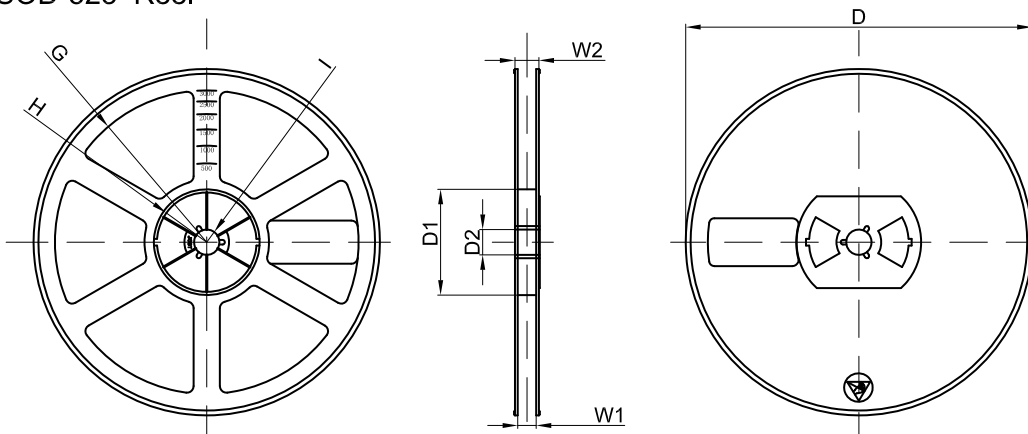
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-523	0.9	1.94	0.73	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00

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	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
8000 pcs	7 inch	120,000 pcs	203×203×195	480,000 pcs	438×438×220	