

SCHOTTKY BARRIER DIODE

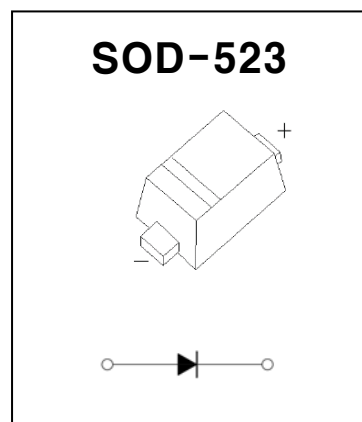
FEATURES

- Low Forward Voltage Drop
- Surface Mount Package Ideally Suited For Automatic Insertion

MARKING:



The marking bar indicates the cathode



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

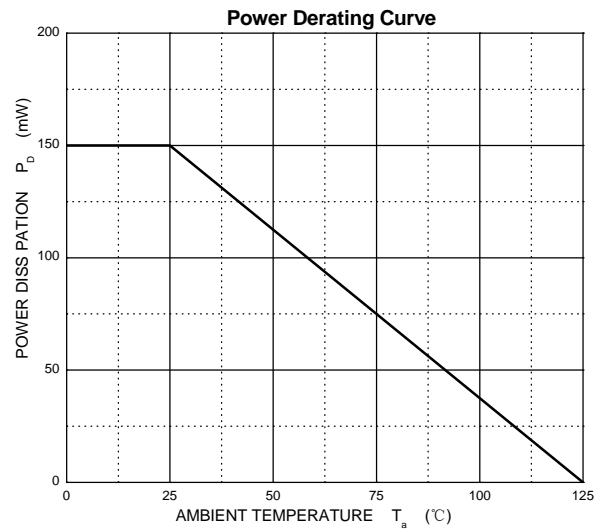
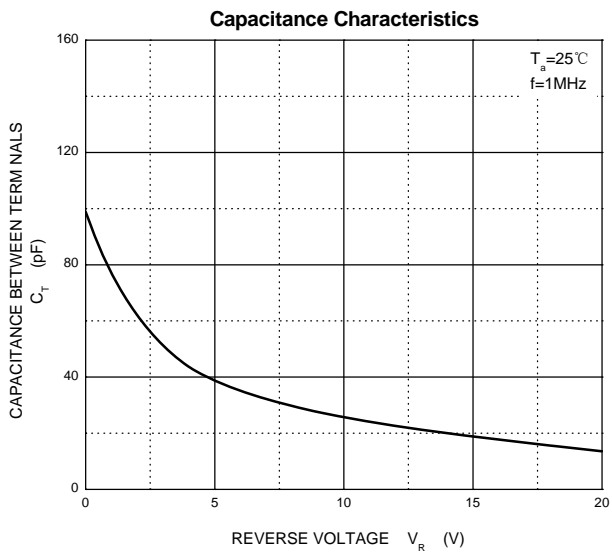
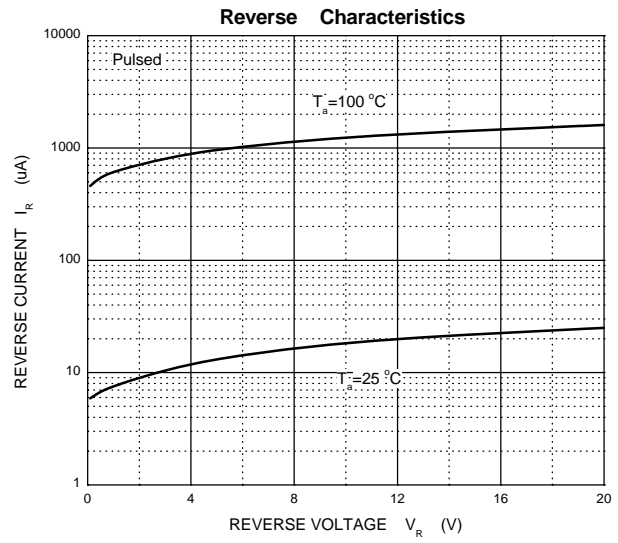
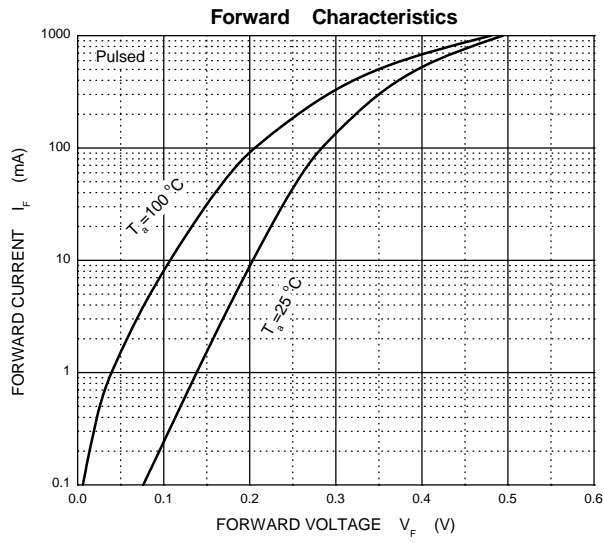
Symbol	Parameter	Limit	Unit
V _{RRM}	Repetitive Peak Reverse Voltage	20	V
V _{RWM}	Working Peak Reverse Voltage		
V _R	DC Blocking Voltage		
V _{R(RMS)}	RMS Reverse Voltage	14	V
I _{FM}	Forward Continuous Current	1.0	A
I _{FSM}	Non-repetitive Peak Forward Surge Current @t=8.3ms	4	A
P _D	Power Dissipation	150	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	667	°C/W
T _j	Junction temperature	125	°C
T _{stg}	Storage Temperature	-55 ~ +150	°C

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

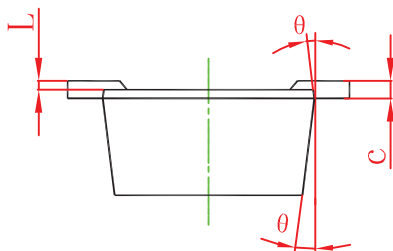
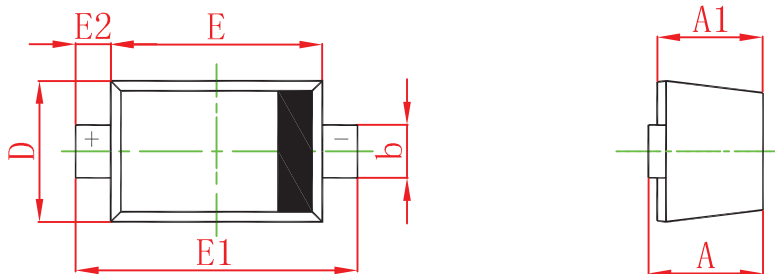
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	V _(BR)	I _R =250μA	20			V
Reverse current	I _R	V _R =10V			80	μA
		V _R =20V			100	μA
Forward voltage	V _F	I _F =10mA			0.23	V
		I _F =100mA			0.305	V
		I _F =1A			0.50	V
Capacitance between terminals	C _T	V _R =0V, f=1MHz			120	pF



Typical Characteristics

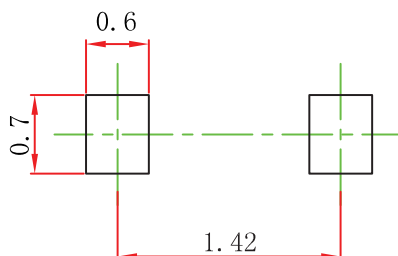


SOD-523 Package Outline Dimensions



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	

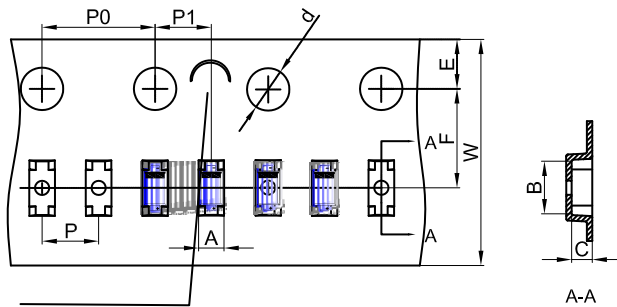
SOD-523 Suggested Pad Layout



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



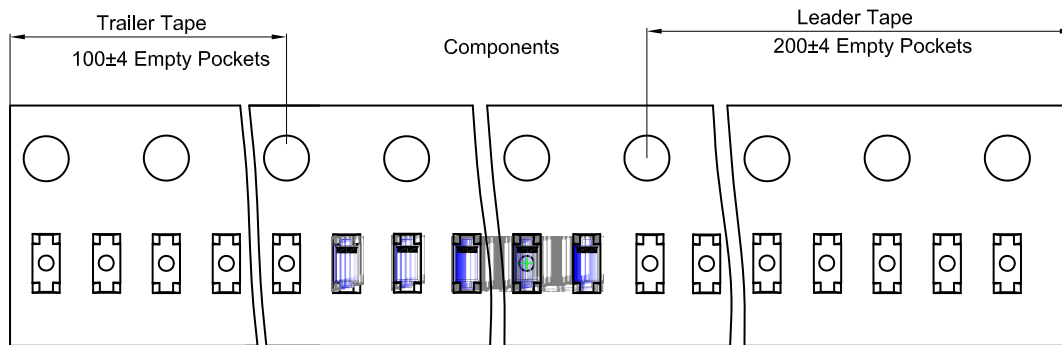
Packaging Description:

SOD-523 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 8,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

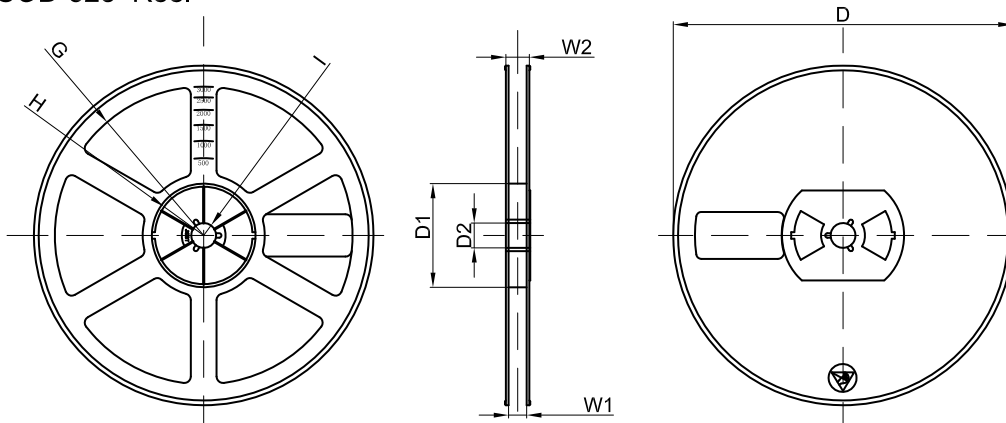
NOTE: TO GIVE 'C' ON CARRIER TAPE PER 120MM

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	