

PINNING

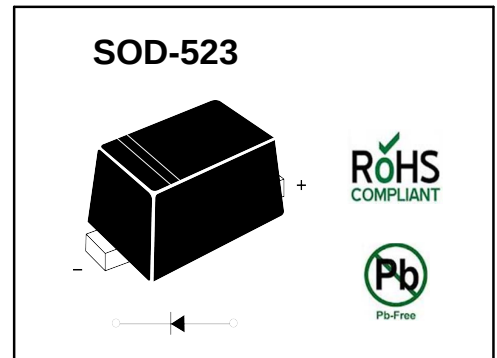
PIN	DESCRIPTION
1	Cathode
2	Anode

Plastic-Encapsulate Diodes

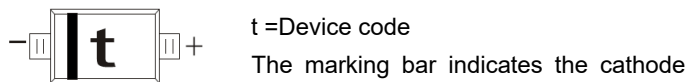
SCHOTTKLY BARRIER DIODE

FEATURES

- For low-loss, fast-recovery, meter protection, bias isolation and clamping application
- Integrated diffused guard ring
- Low forward



MARKING: t



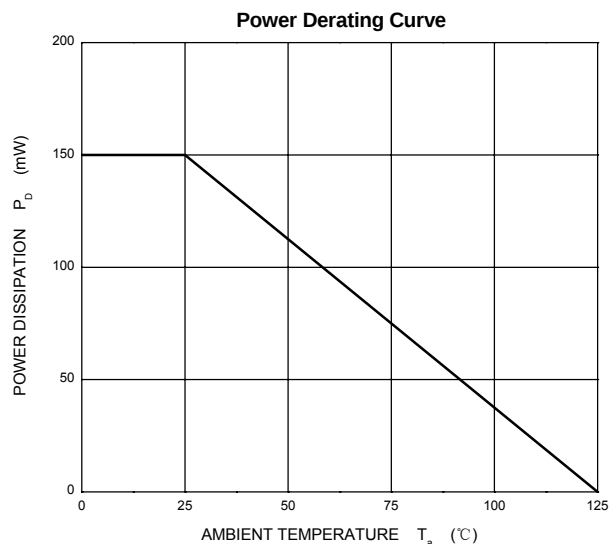
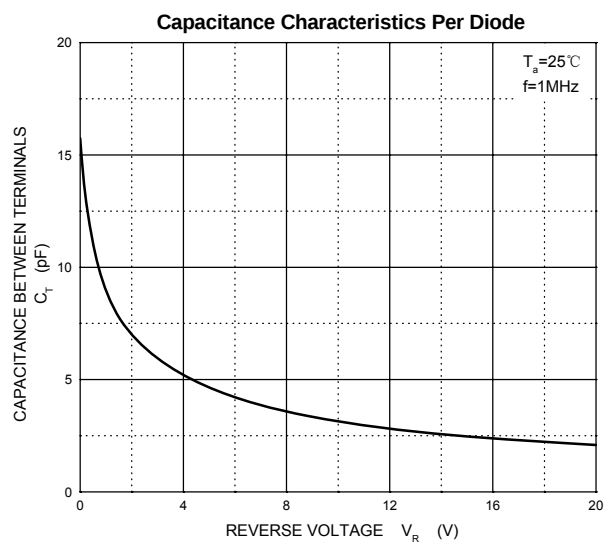
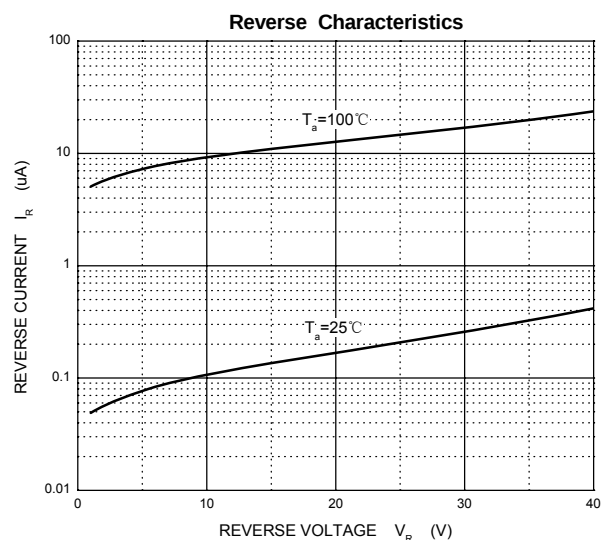
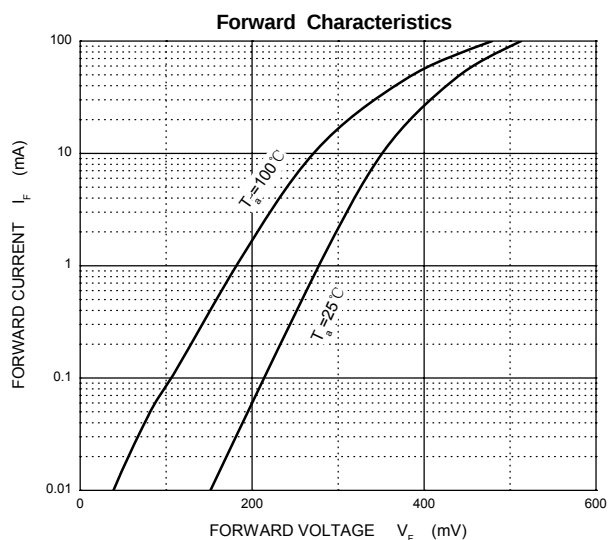
Maximum Ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak reverse voltage DC reverse	V_{RM} V_R	40	V
Non-repetitive Peak surge forward current @t=8.3ms	I_{FSM}	0.8	A
Mean rectifying current	I_o	0.25	A
Power Dissipation	P_D	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	667	$^{\circ}\text{C/W}$
Operating Junction Temperature Range	T_j	-40~+125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55~+150	$^{\circ}\text{C}$

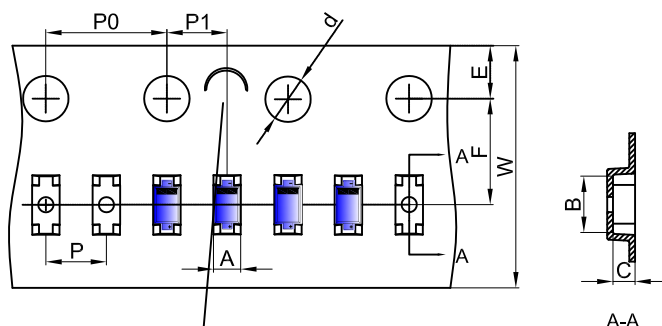
Electrical Ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	V_R	40			V	$I_R=10\mu\text{A}$
Forward voltage	V_F			350 430 520 750	mV	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$
Reverse current	I_R			2	μA	$V_R=30\text{V}$
Capacitance between terminals	C_T			6	pF	$V_R=1\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}			5	ns	$I_F=10\text{mA}, I_R=10\text{mA},$ $I_R=1\text{mA}, R_L=100\Omega$

Typical Characteristics



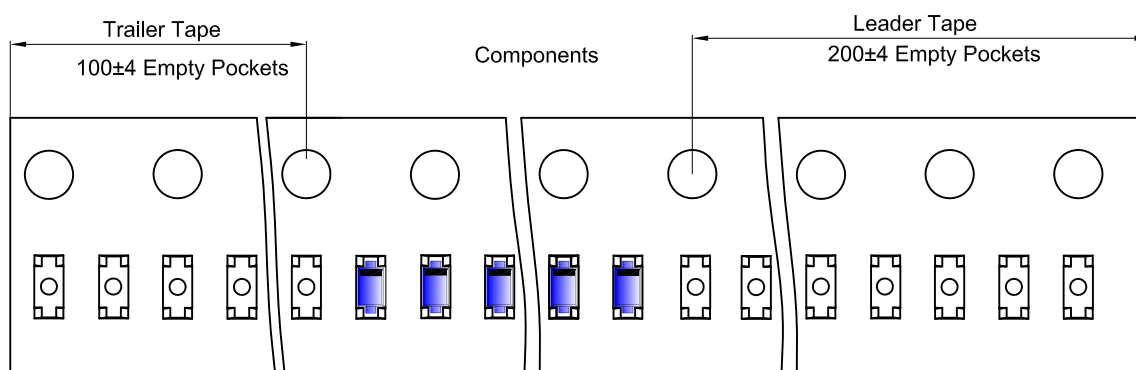
SOD-523 Embossed Carrier Tape



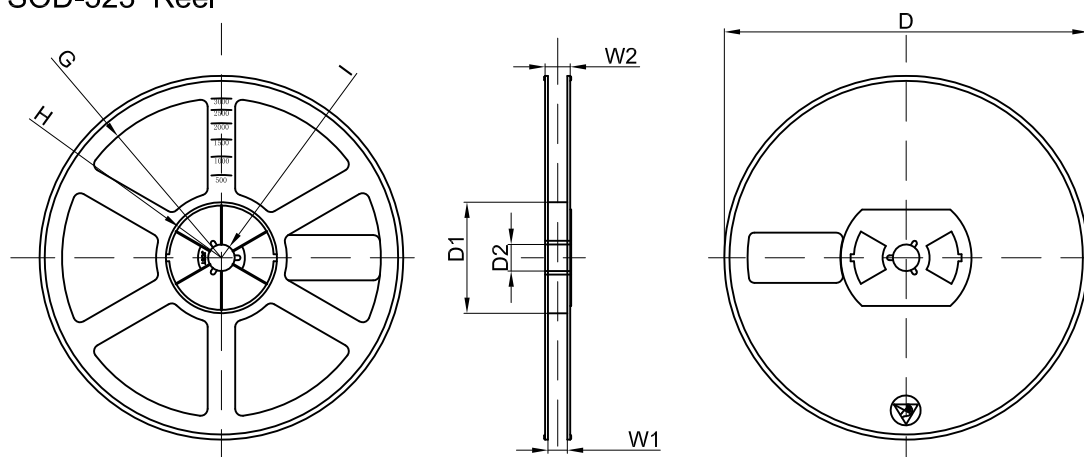
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

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



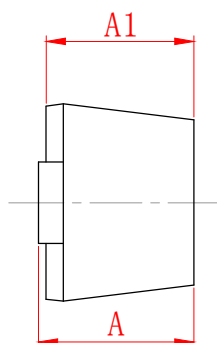
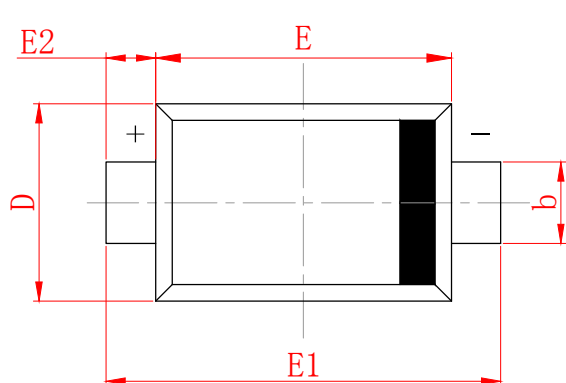
SOD-523 Reel



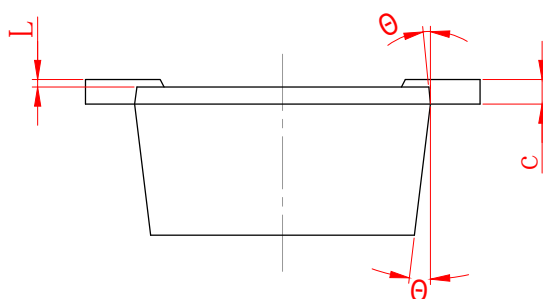
Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

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	

SOD-523 Package Outline Dimensions



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.530	0.730
A1	0.500	0.700
b	0.280	0.380
c	0.080	0.150
D	0.750	0.850
E	1.100	1.300
E1	1.500	1.700
E2	0.200 REF	
L	0.010	0.070
θ	7° REF	



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