

Plastic-Encapsulate Diodes

Schottky Barrier Diode

FEATURES

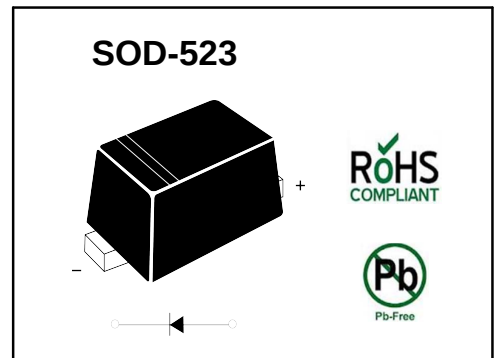
- Small surface mounting type
- Low I_R
- High reliability

MARKING: D1



PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



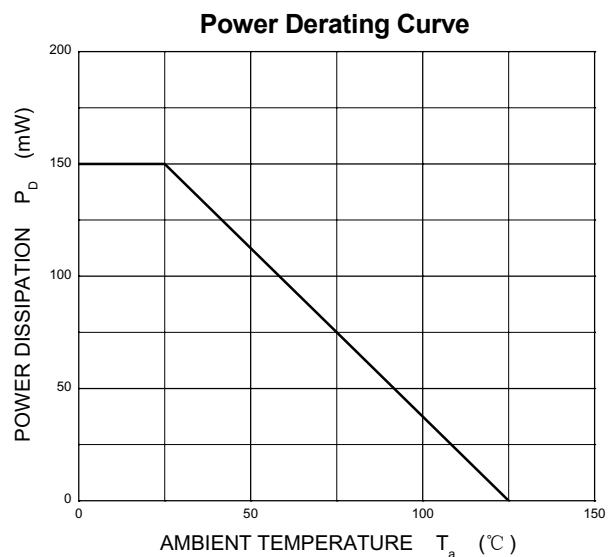
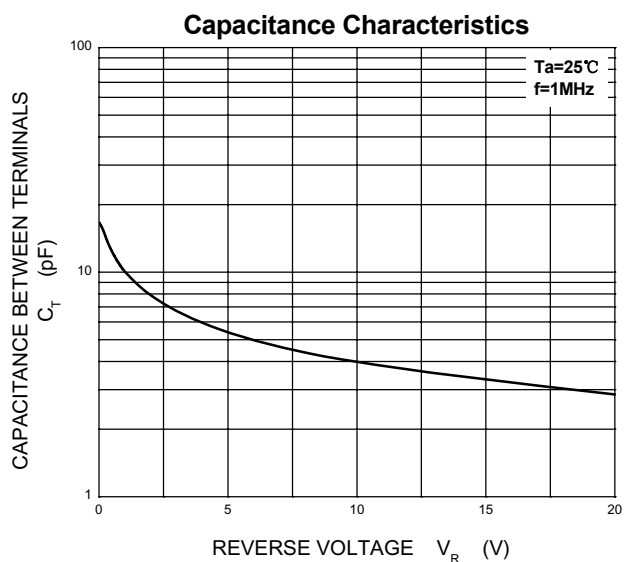
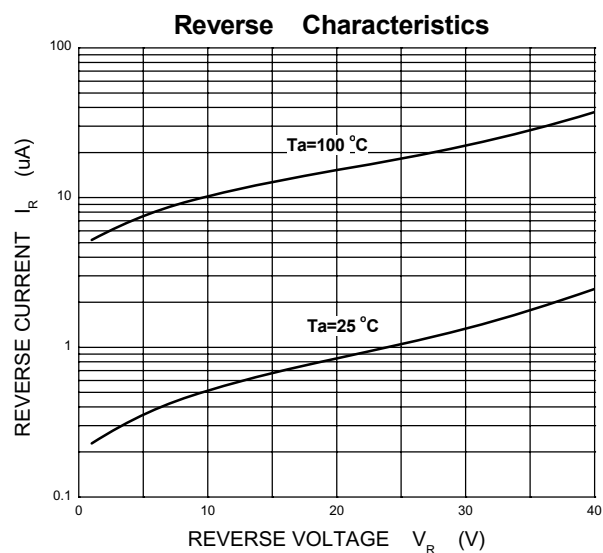
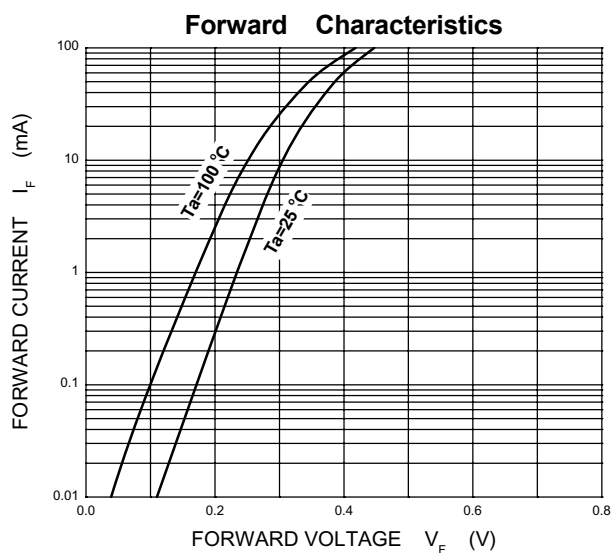
Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Limit	Unit
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	0.2	A
Non-repetitive peak forward surge current@ $t=8.3\text{ms}$	I_{FSM}	1	A
Power Dissipation	P_D	150	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	667	$^\circ\text{C}/\text{W}$
Junction temperature	T_J	125	$^\circ\text{C}$
Storage temperature	T_{STG}	-55~+150	

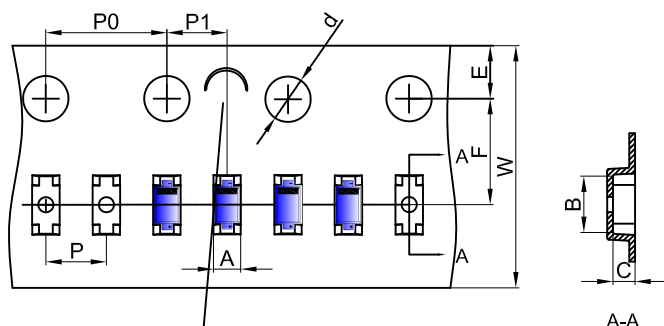
Electrical Ratings @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F		0.304 0.446	0.39 0.55	V	$I_F=10\text{mA}$ $I_F=100\text{mA}$
Reverse current	I_R		0.605 2.837	1 10	μA	$V_R=10\text{V}$ $V_R=40\text{V}$

Typical Characteristics



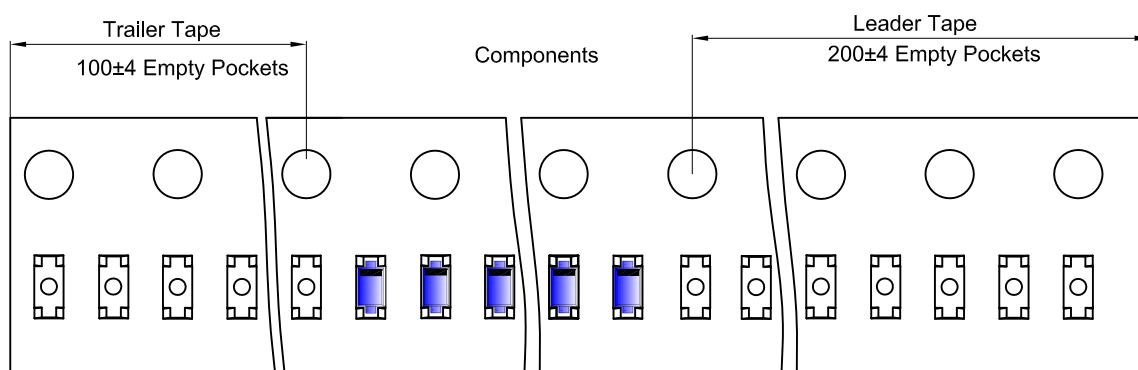
SOD-523 Embossed Carrier Tape



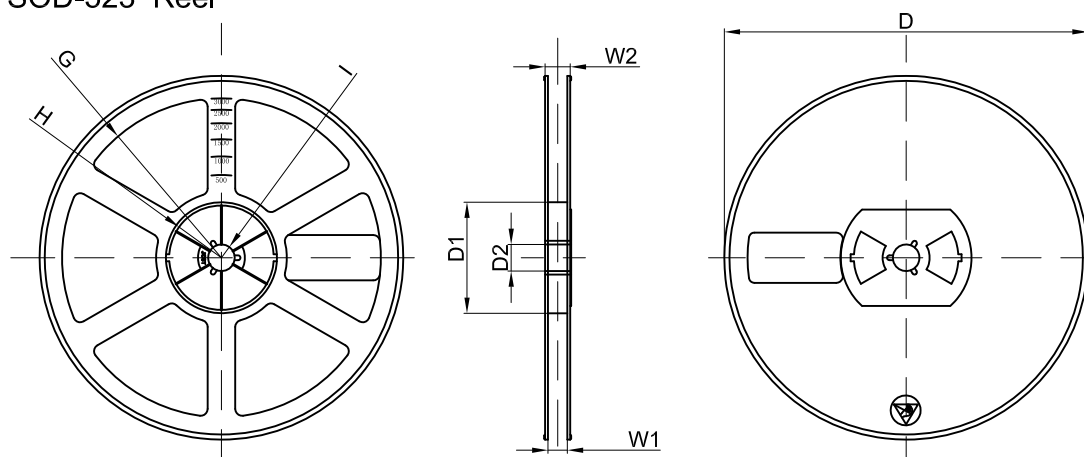
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

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



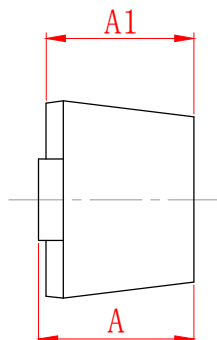
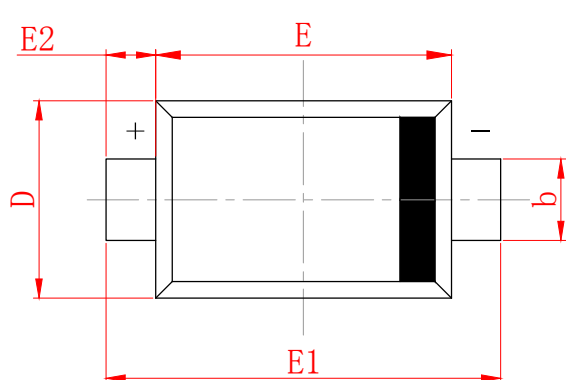
SOD-523 Reel



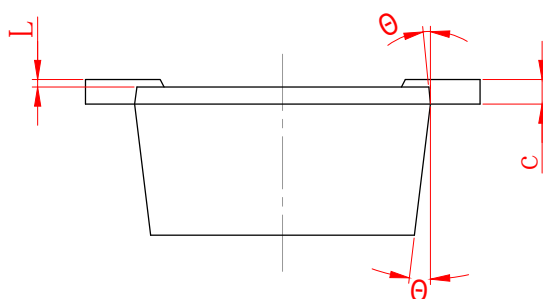
Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

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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