

Silicon Epitaxial Planar Diodes

High Voltage Switching Diode

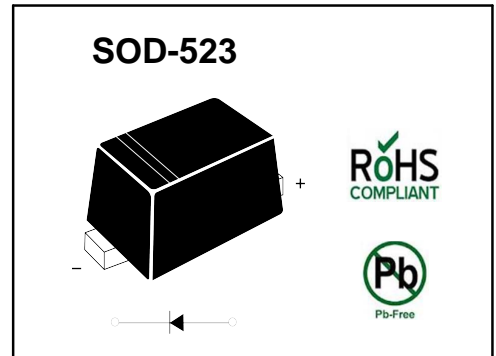
Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion

	BAV19WT	BAV20WT	BAV21WT
MARKING	JX	T2	T3

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



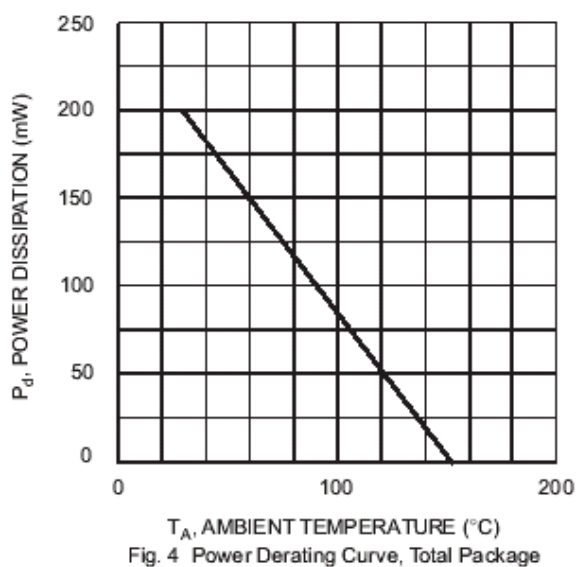
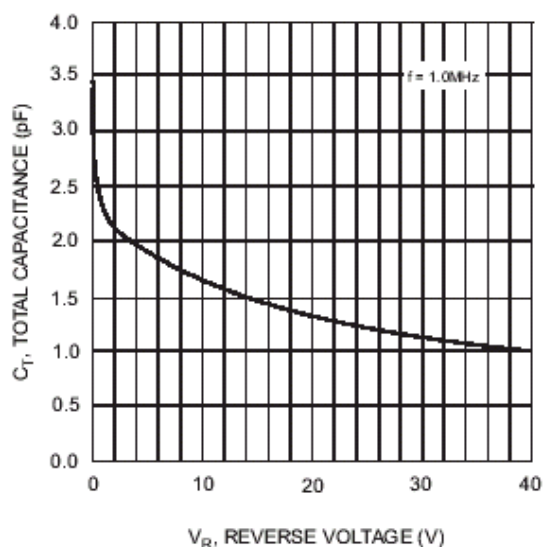
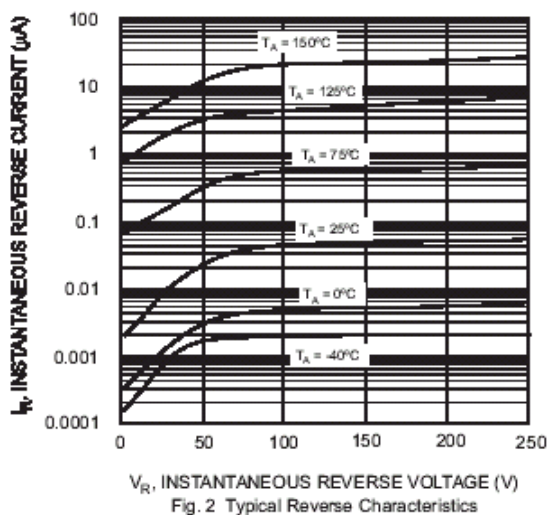
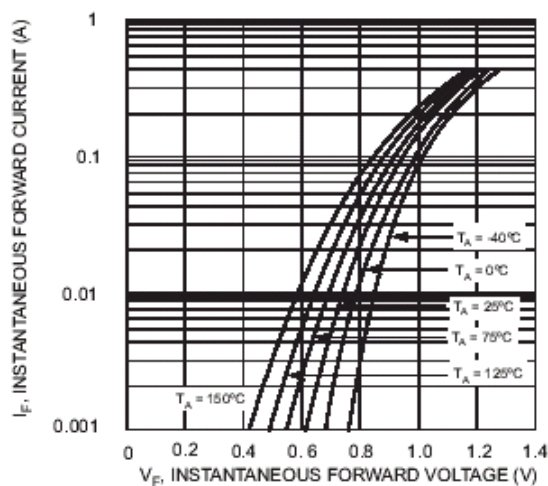
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	120 200 250	V
Reverse Voltage	V_R	100 150 200	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Forward Continuous Current	I_{FM}	400	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	2.5 0.5	A
Power Dissipation	P_{tot}	200	mW
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$

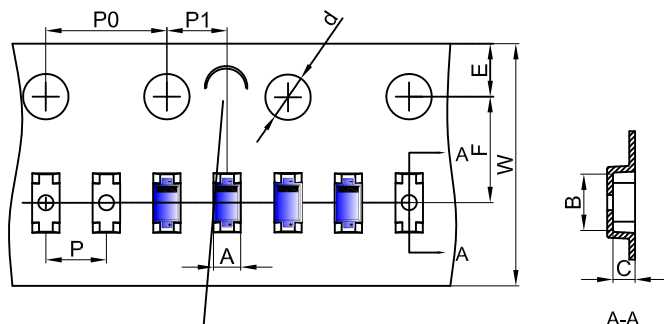
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\ \mu\text{A}$	$V_{(BR)R}$	120 200 250	- - -	V
Reverse Current at $V_R = 100\ \text{V}$ at $V_R = 150\ \text{V}$ at $V_R = 200\ \text{V}$	I_R	- - -	100 100 100	nA
Forward Voltage at $I_F = 100\ \text{mA}$ at $I_F = 200\ \text{mA}$	V_F	- -	1 1.25	V
Total Capacitance at $V_R = 0$, $f = 1\ \text{MHz}$	C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\ \text{mA}$, $I_{RR} = 0.1 \times I_R$, $R_L = 100\ \Omega$	t_{rr}	-	50	ns

Typical Characteristics



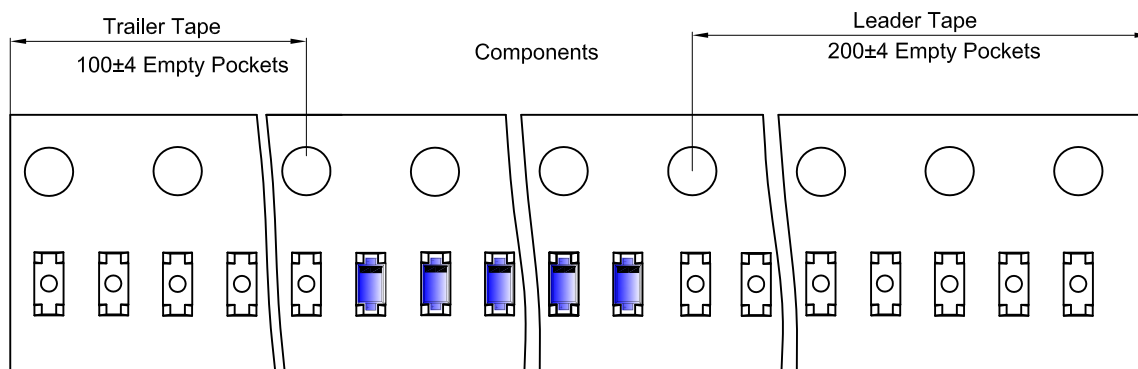
SOD-523 Embossed Carrier Tape



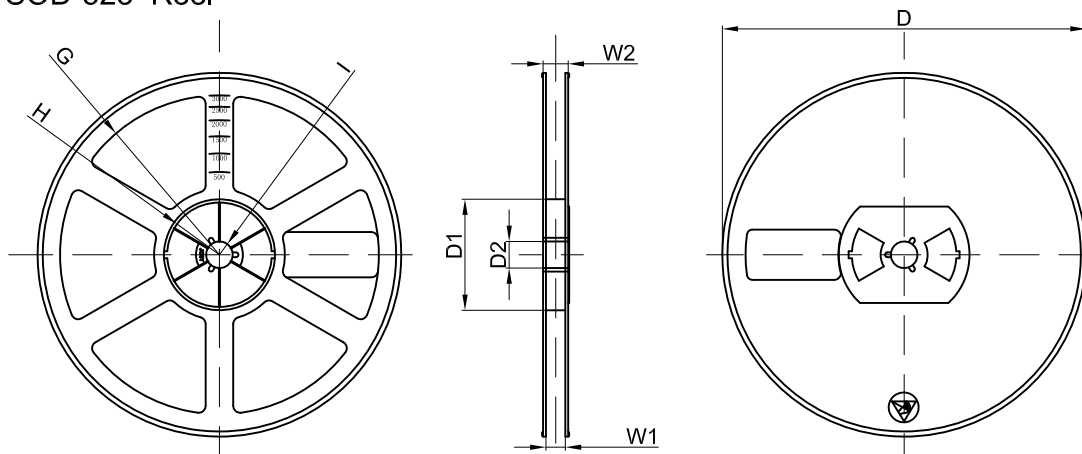
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

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



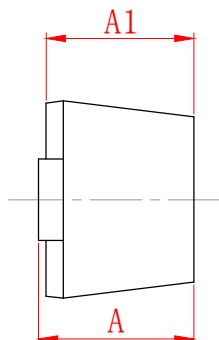
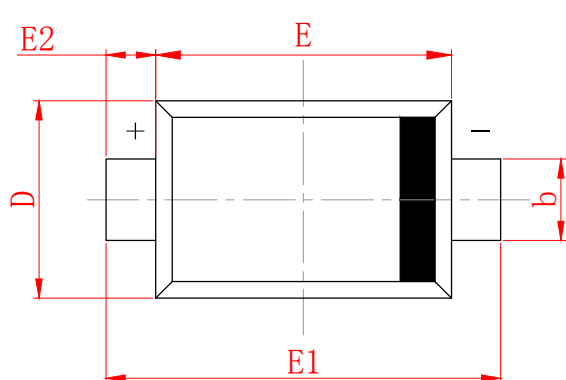
SOD-523 Reel



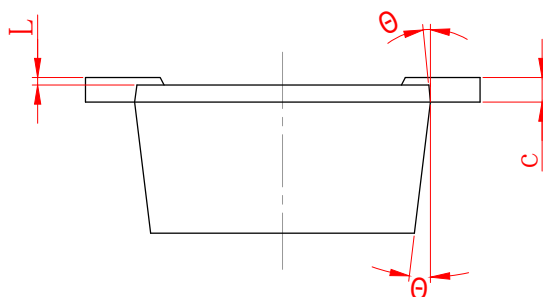
Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

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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