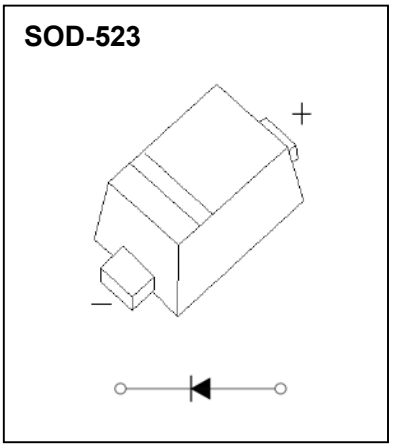
SZCJ

Shenzhen Changji Semiconductor Co., LTD.

SOD-523 Plastic-Encapsulate Diodes

BAS16X

Swithching Diode



FEATURES

- High-Speed Switching Applications
- Lead Finish: 100% Matte Sn (Tin)
- Qualified Reflow Temperature: 260 ℃
- Extremely Small SOD-523 Package

MARKING: A6



The marking bar indicates the cathode

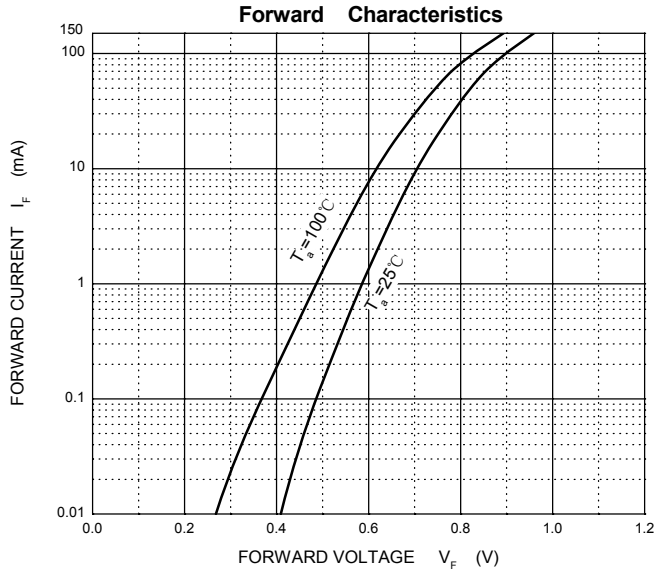
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

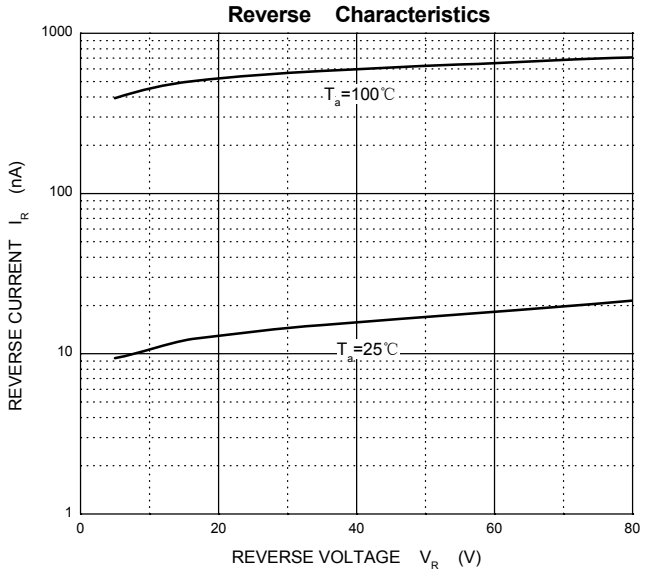
Symbol	Parameter	Value	Unit
V_R	Reverse Voltage	75	V
I_F	Forward Continuous Current	200	mA
I_{FSM}	Non-repetitive Peak Forward SurgeCurrent@t=8.3ms	2	A
P_D	Power Dissipation	150	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	833	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

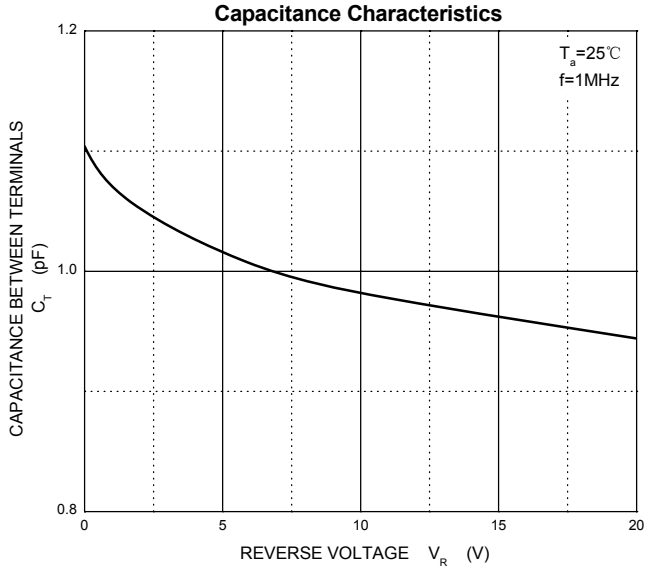
Electrical Ratings @Ta=25℃

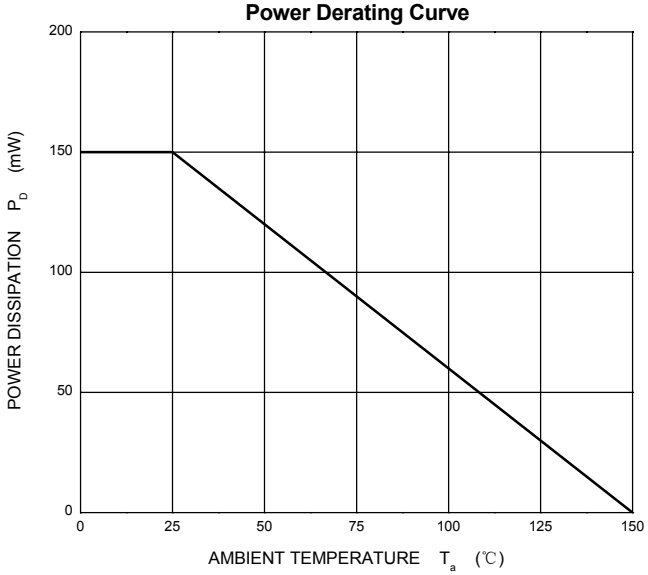
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	75				I_R=100uA
Forward voltage	V_{F1}			715	mV	I_F=1mA
	V_{F2}			855		I_F=10mA
	V_{F3}			1000		I_F=50mA
	V_{F4}			1250		I_F=150mA
Reverse recovery Time	t_{rr}			6.0	ns	I_F=I_R=10mAdc,R_L=50Ω
Reverse current	I_R			1.0	μA	V_R=75V
Forward recovery voltage to	V_{FR}			1.75	V	I_F=10mA, t_r= 20ns
Diode capacitance	C_D			2.0	pF	V_R=0V,f=1MHz
Stored charge	Q_S			45	pC	I_F=10mA, V_R=5.0V ,R_L=500Ω

Typical Characteristics

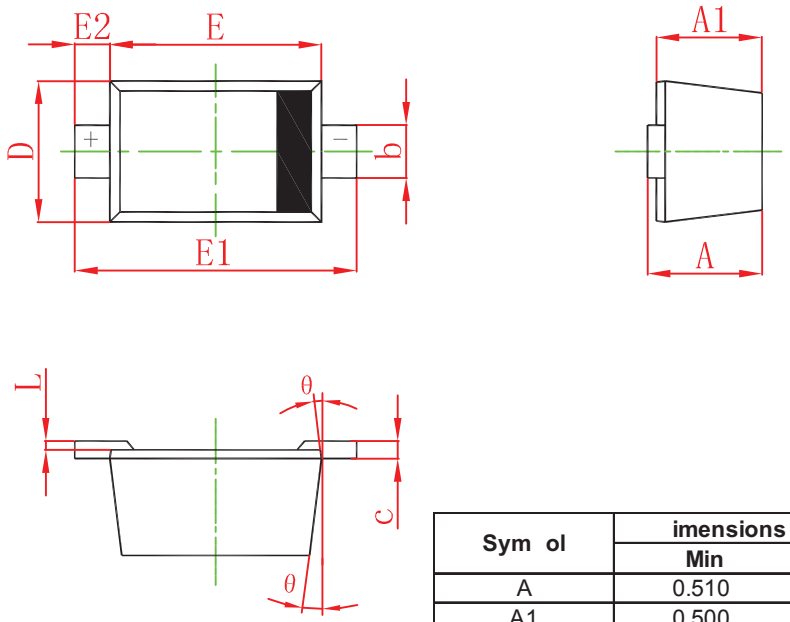






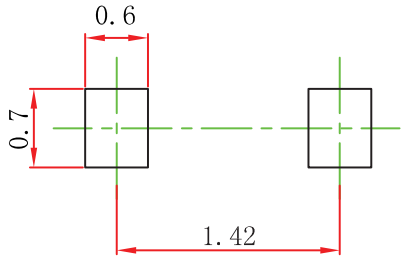


SOD-523 Package Outline Dimensions



Sym ol	imensions In Millimeters		imensions 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



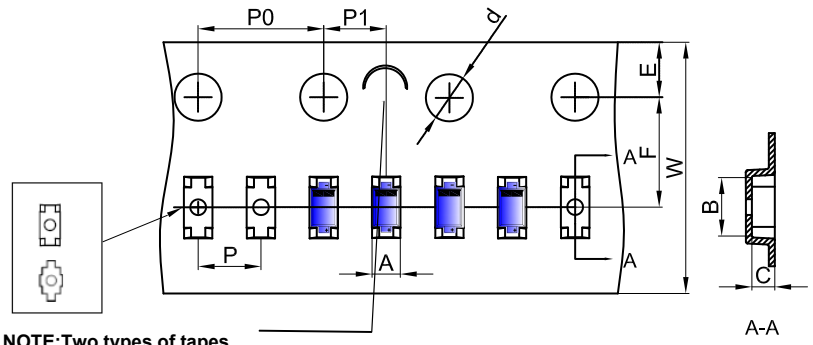
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

NOTICE

SZCJ reserves the right to make modifications,enhan nts,improvements,corrections or other es without further notice to any product herein. SZCJ does not assume any liability arising out of the application or use of any product described h

SOD-523 Tape and Reel

SOD-523 Embossed Carrier Tape



NOTE:Two types of tapes coexist side by side.

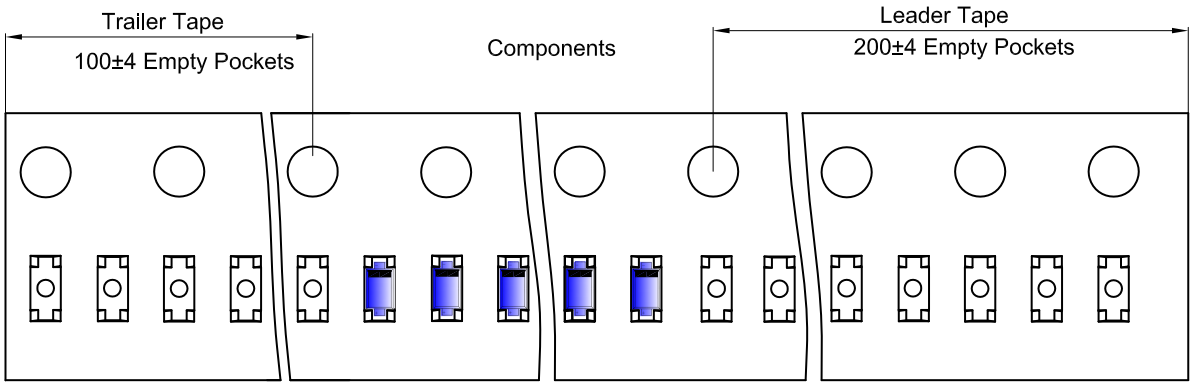
NOTE:TO CAVE 'C' ON CARRIER TAPE PER 120MM

Packaging Description:

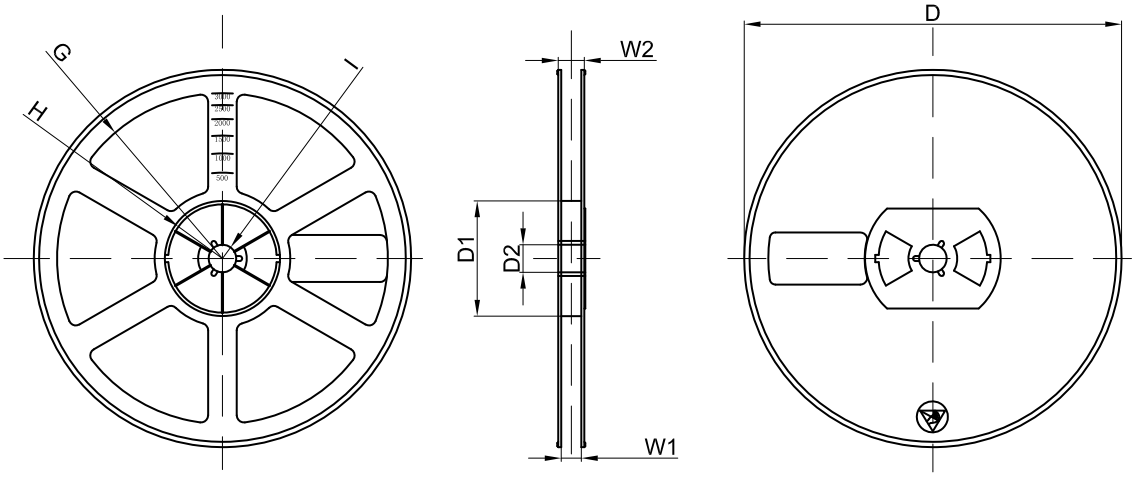
SOD-523 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts 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).

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	