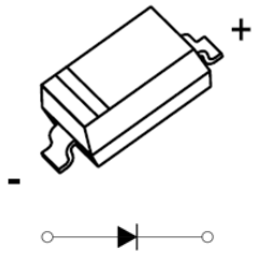
SZCJ

Shenzhen Changji Semiconductor Co., LTD.

SOD-123 Plastic-Encapsulate Diodes

SD101BW SCHOTTKY BARRIER DIODE

SOD-123



FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance
- Ultra-small Surface Mount Package

MARKING: S2



The marking bar indicates the cathode
Solid dot = Green molding compound device.

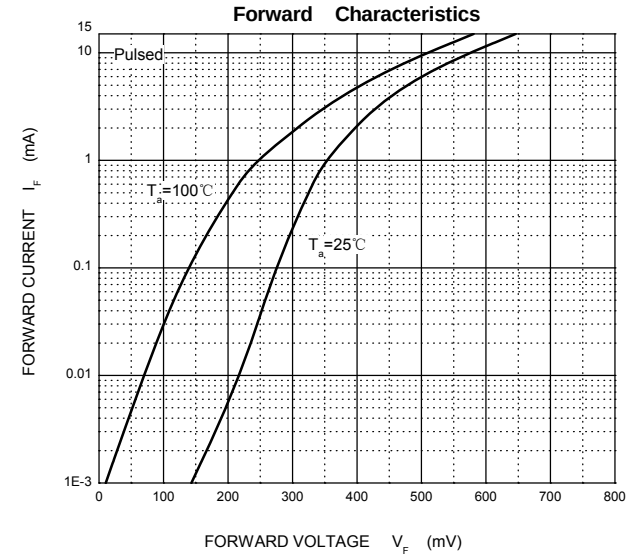
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

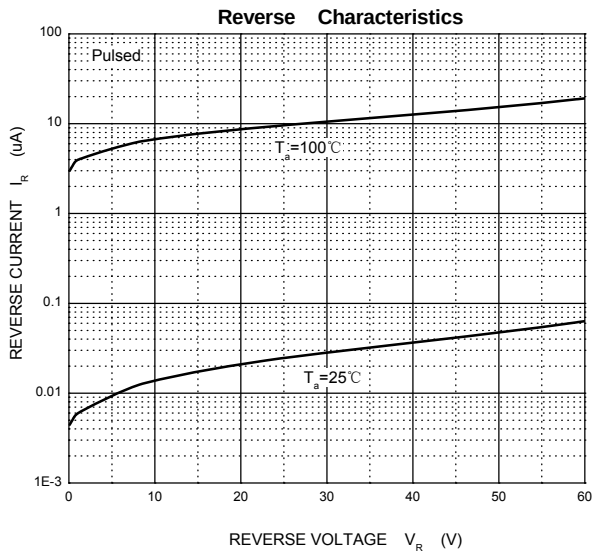
Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	50	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	35	V
I_{FM}	Forward Continuous Current	15	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @t=8.3ms	2	A
P_D	Power Dissipation	400	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	250	℃/W
T_j	Operating Junction Temperature Range	-40 ~ +125	℃
T_{stg}	Storage Temperature Range	-55 ~ +150	℃

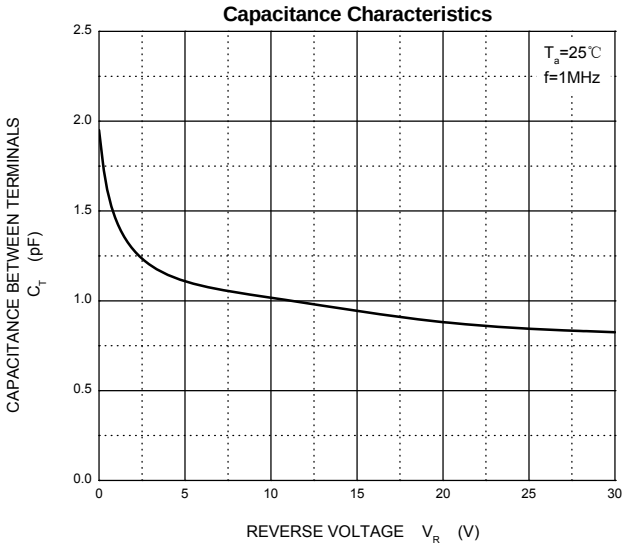
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise specified)

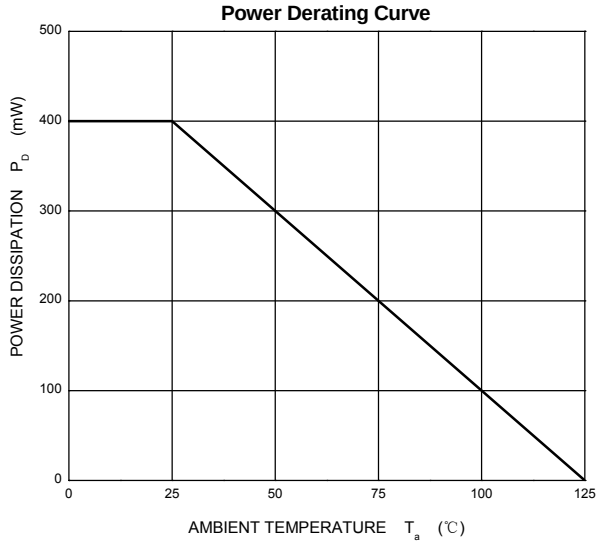
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=10μA	50			V
Reverse current	I_R	V_R=40V			0.2	μA
Forward voltage	V_F	I_F=1mA			0.40	V
		I_F=15mA			0.95	
Total capacitance	C_{tot}	V_R=0V,f=1MHz			2.1	pF
Reverse recovery time	t_{rr}	I_F= I_R=5mA, I_{rr}=0.1×I_R, R_L=100Ω			1	ns

Typical Characteristics

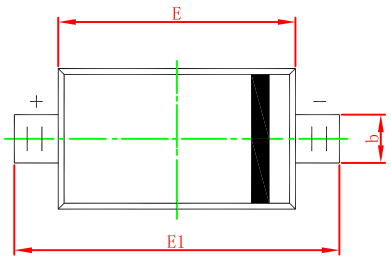


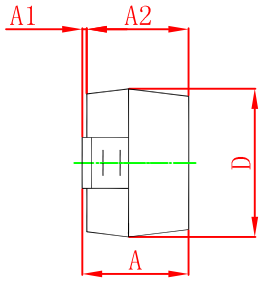


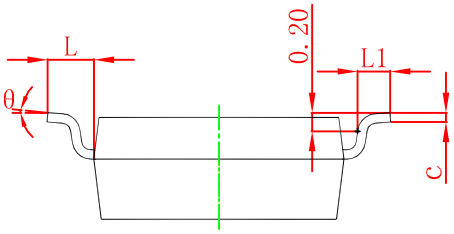




SOD-123 Package Outline Dimensions

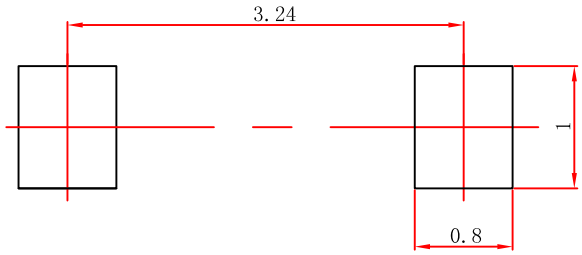






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

SOD-123 Suggested Pad Layout



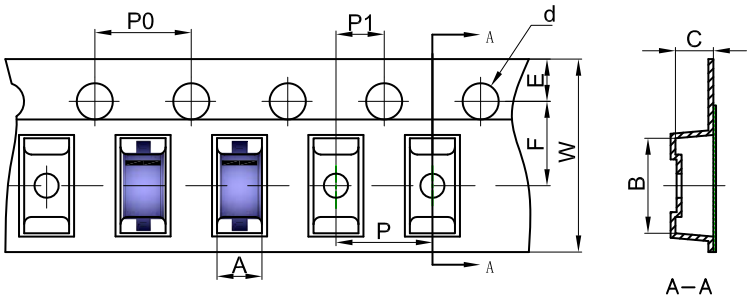
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

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-123 Tape and Reel

SOD-123 Embossed Carrier Tape

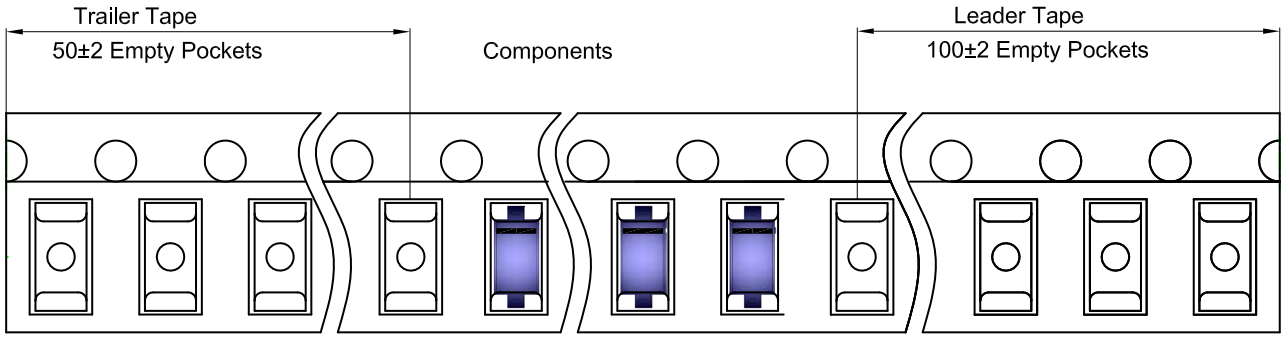


Packaging Description:

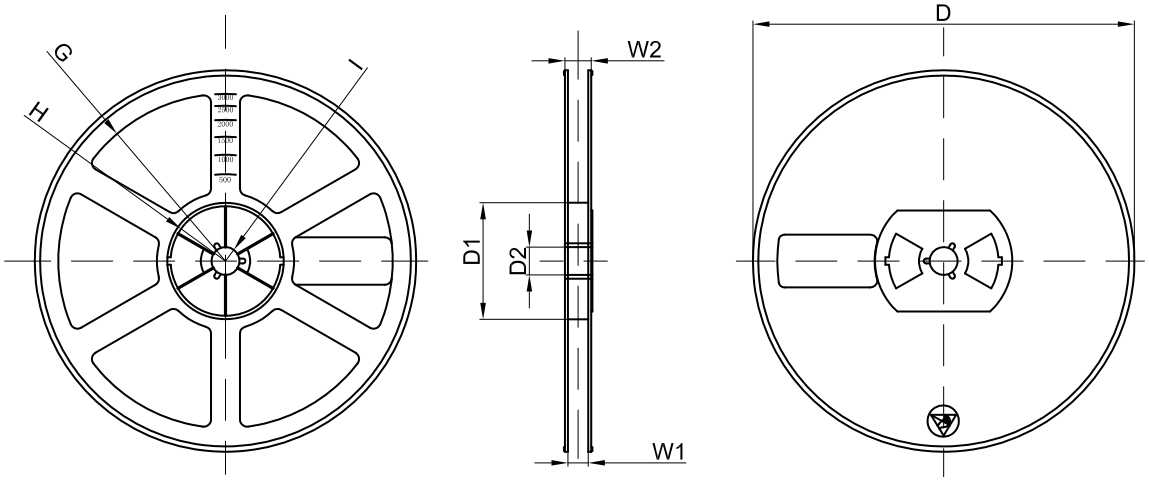
SOD-123 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 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-123	1.85	3.95	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

SOD-123 Tape Leader and Trailer



SOD-123 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)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	