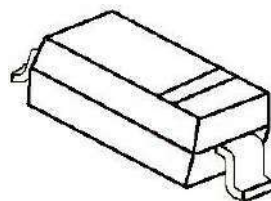


500mW SOD-123 Fast Switching Diode

Features:

- 4.0nS; Fast Switching Device (TRR <4.0 nS)
- 500mW; Power Dissipation of 500mW
- High Stability and High Reliability
- Low reverse leakage
- Mechanical Data

SOD-123



Mechanical Data:

- SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any

MARKING:T4

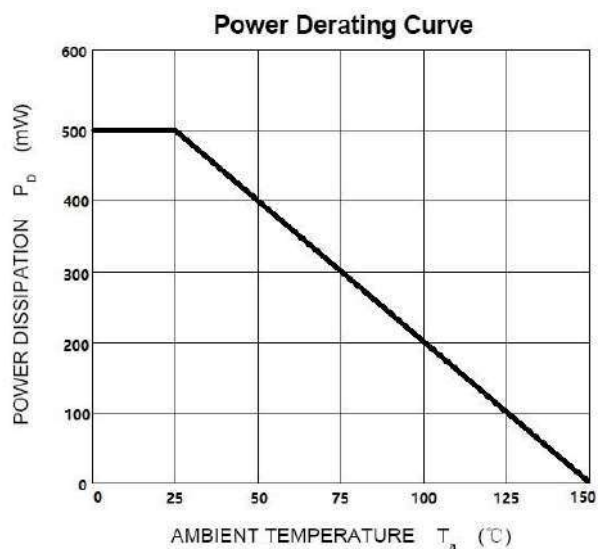
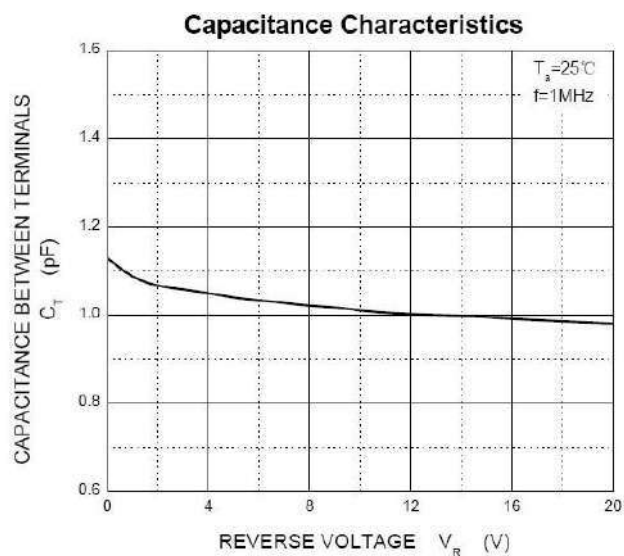
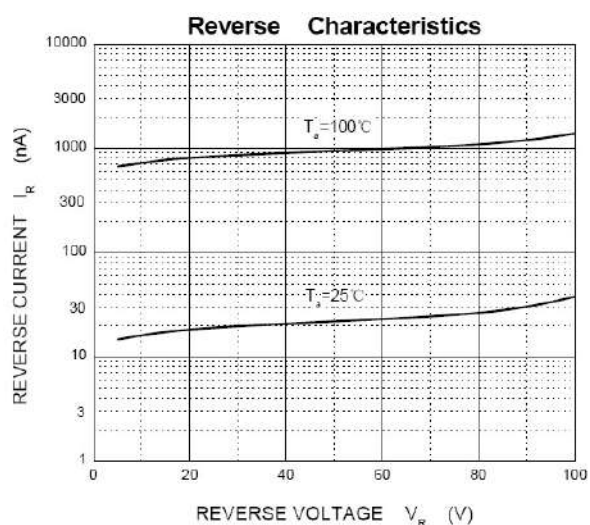
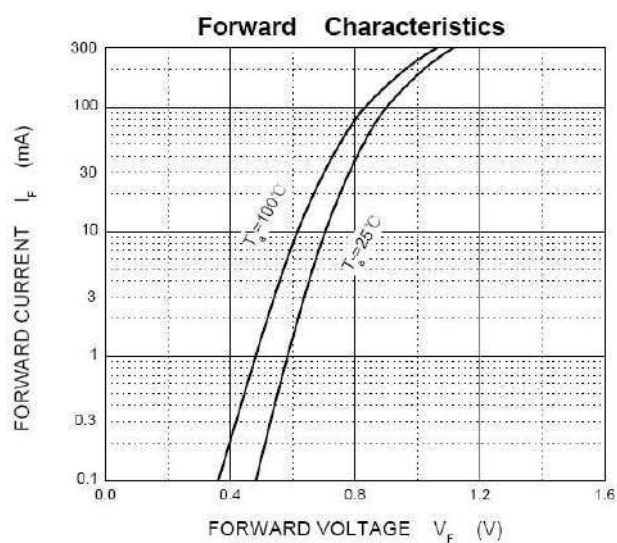
Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Power Dissipation	P_d	500	mW
Operating junction temperature	T_j	150	°C
Storage temperature range	T_{STG}	-65-+150	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	°C/W
Average Rectified Current	I_o	150	mA
Non-repetitive Peak Forward Current	I_{FM}	300	mA
Peak Forward Surge Current @tp=1us; TA=25°C	I_{FSM}	2.0	A

Valid provided that electrodes are kept at ambient temperature.

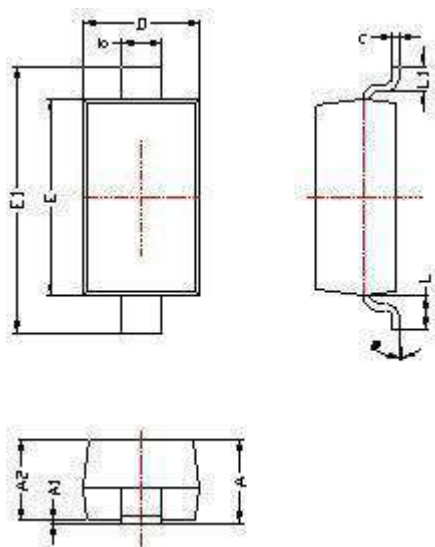
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
BV	Breakdown Voltage	IR=100uA	100		V
IR	Reverse Leakage Current	VR=20V	---	25	nA
		VR=20V Tj=150°C	---	50	uA
		VR=75	---	5	uA
VF	Forward Voltage	IF=10mA	---	1.00	V
		IF=100mA	---	1.25	
TRR	Reverse Recovery Time	IF = IR = 10mA,	---	4	nS
		Irr=0.1XIR			
		RL=100Ω			
C	Capacitance	VR=0V, f=1MHZ	---	4	pF



SOD-123 PACKAGE OUTLINE

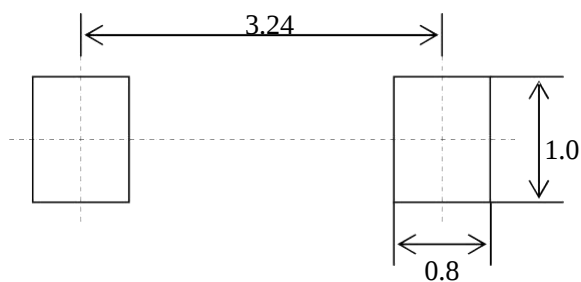
Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°

Precautions: PCB Design

Recommended land dimensions for SOD-123 diode. Electrode patterns for PCBs



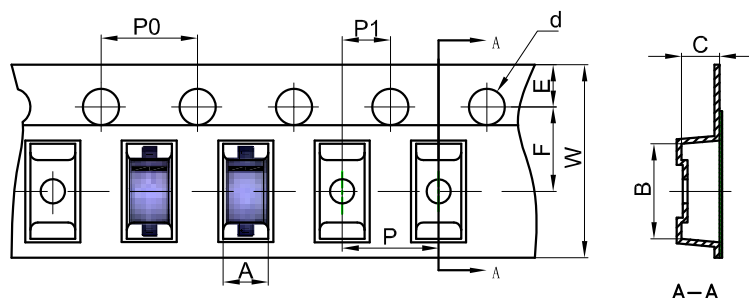
中心距: 3.24
 脚 宽: 0.55
 焊 盘 宽: 1.00
 脚 长: 0.50
 焊 盘 长: 0.80

技术要求:

- 1, 塑封体尺寸: 2.70 X 1.60
- 2: 未注公差为: ± 0.05
- 3, 所有单位: mm

SOD-123 Tape and Reel

SOD-123 Embossed Carrier Tape

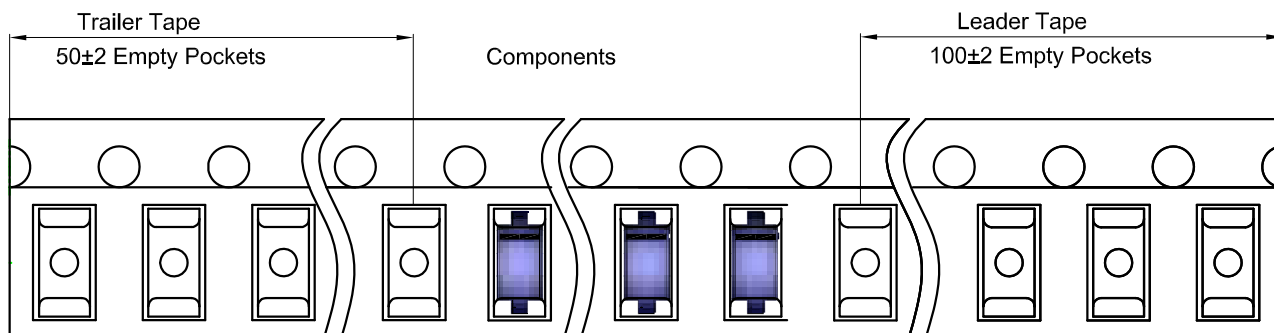


Packaging Description:

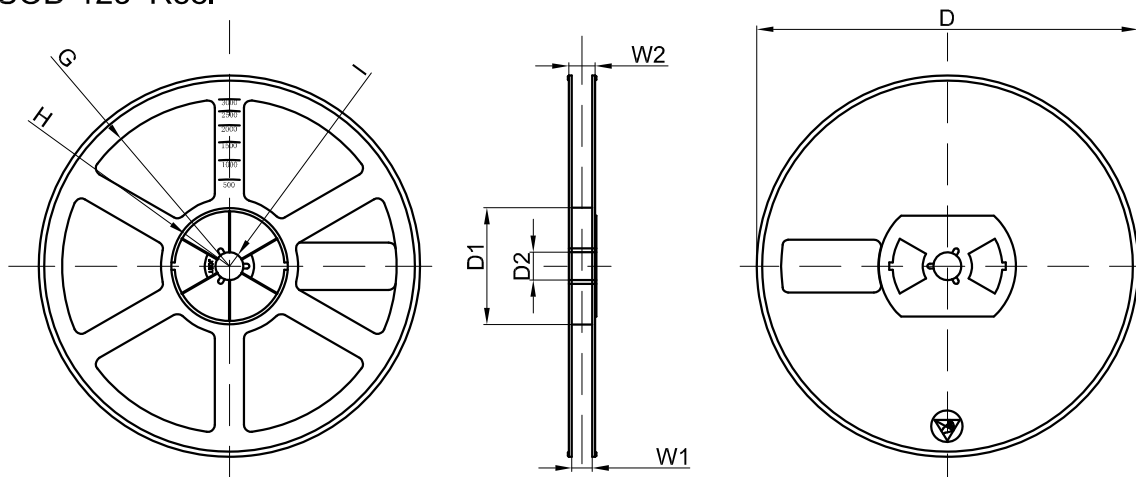
SOD-123 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts 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	