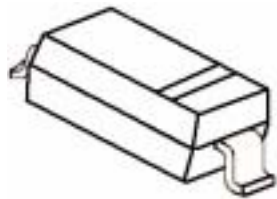


SOD-123 贴片塑封二极管
500mW SOD-123 Fast Switching Diode

SOD-123 1N4148W

**特征 Features**

- 开关速度小于 4.0nS; Fast Switching Device (TRR <4.0 nS)
- 最大功率耗散 500mW; Power Dissipation of 500mW
- 高稳定性和可靠性。High Stability and High Reliability
- 反向漏电流小。Low reverse leakage

机械数据 Mechanical Data

- 封装: SOD-123 封装 Flat Lead SOD-123 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性($T_A = 25$ 除非另有规定)**Maximum Ratings & Thermal Characteristics** (Ratings at 25 ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	V_R	75	V
反向峰值电压 Peak Reverse Voltage	V_{RM}	100	V
功率消耗 Power Dissipation	P_d	500	mW
工作结温 Operating junction temperature	T_j	150	
存储温度 Storage temperature range	T_s	-65-+150	
反向工作电压 Working Inverse Voltage	W_{IV}	75	V
平均整流电流 Average Rectified Current	I_o	200	mA
正向(不重复)电流 Non-repetitive Peak Forward Current	I_{FM}	300	mA
正向(不重复)浪涌电流 Peak Forward Surge Current	I_{FSM}	2.0	A

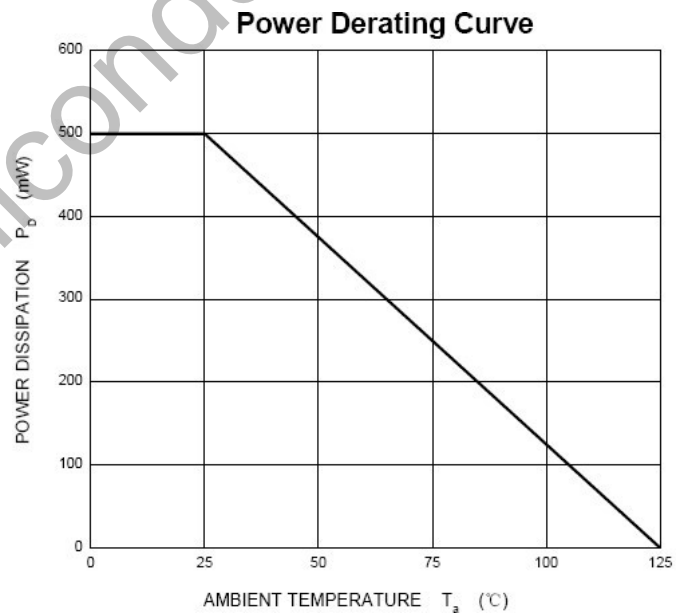
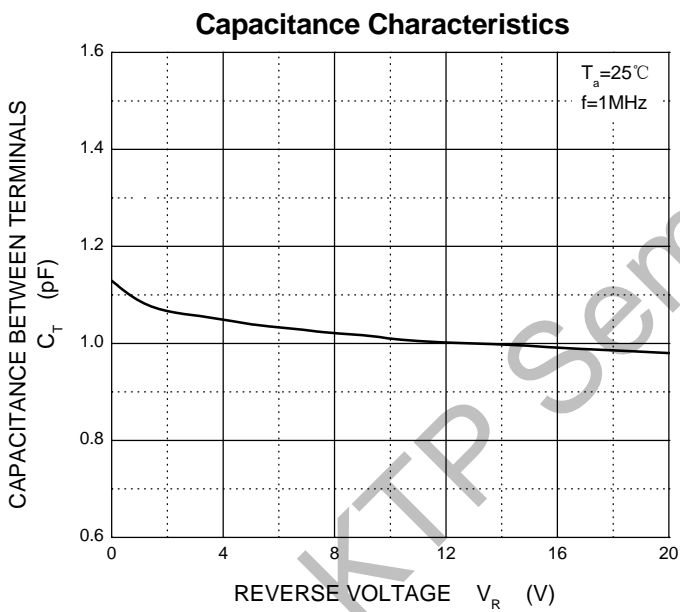
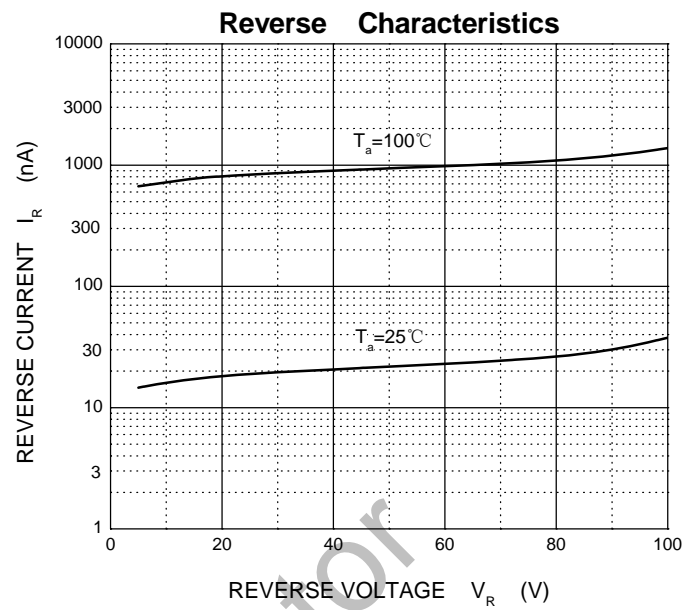
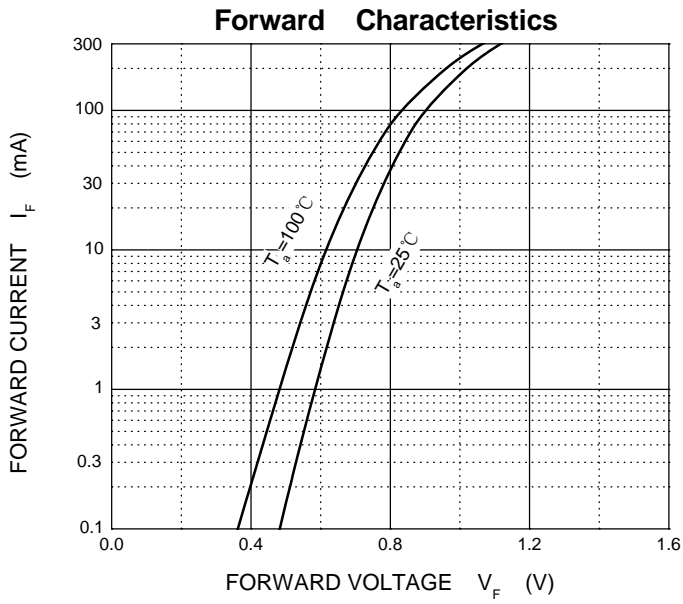
@ $t_p=1\mu s$; $T_A=25$

Valid provided that electrodes are kept at ambient temperature.

电特性 Electrical Characteristics (Ratings at 25 ambient temperature unless otherwise specified).

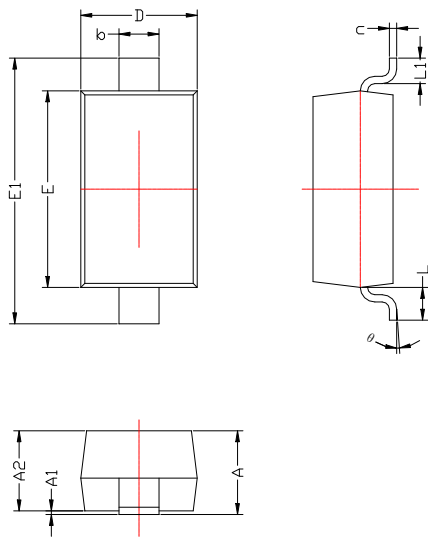
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
BV	反向击穿电压 Breakdown Voltage	$I_R=100\mu A$	100		V
		$I_R=5\mu A$	75		
IR	反向漏电流 Reverse Leakage Current	$V_R=20V$	---	25	nA
		$V_R=75$	---	5	μA
VF	正向电压 Forward Voltage	$I_F=10mA$	---	1.0	V
		$I_F=150mA$	---	1.25	
TRR	反向恢复时间 Reverse Recovery Time	$I_F=10mA, I_R=60mA$ $R_L=100\Omega$ $I_{RR}=1mA$	---	4	nS
C	结电容 Capacitance	$V_R=0V, f=1MHz$	---	4	pF

Typical Characteristics



SOD-123 PACKAGE OUTLINE

Plastic surface mounted package

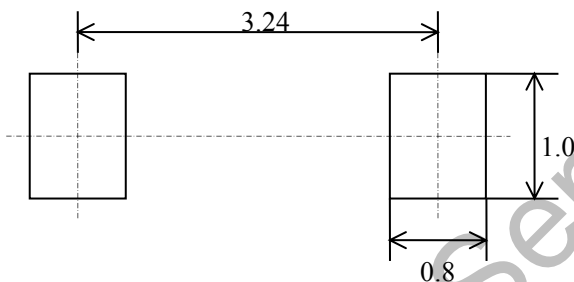


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°

焊盘设计参考

Precautions: PCB Design

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



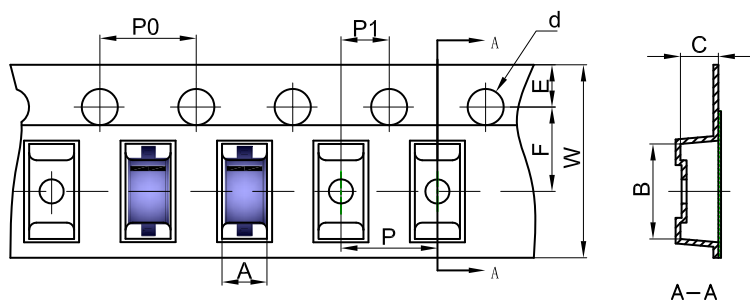
技术要求:
 中心距: 3.24
 脚宽: 0.55
 焊盘宽: 1.00
 脚长: 0.50
 焊盘长: 0.80

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



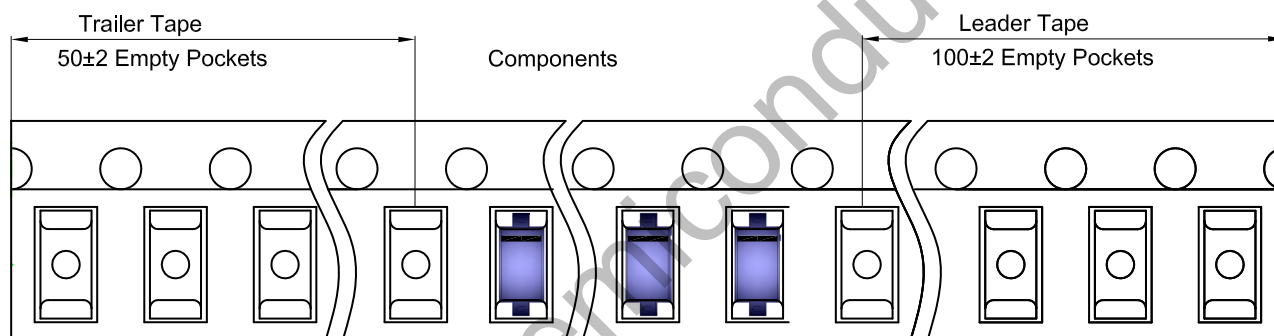
Packaging Description:

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).

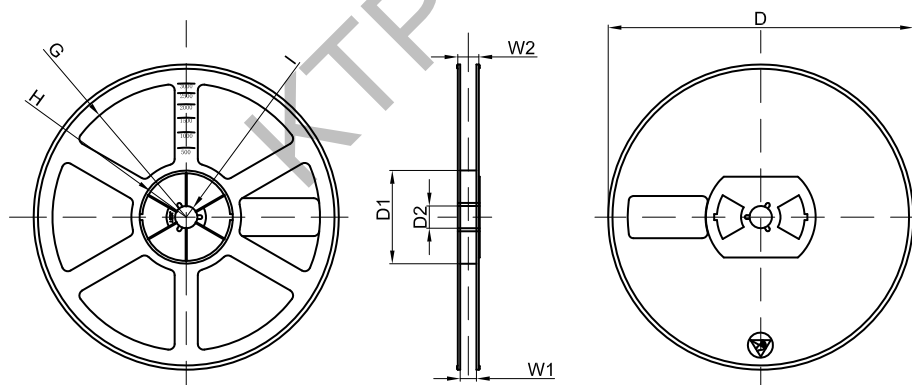
Dimensions are in millimeter

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	