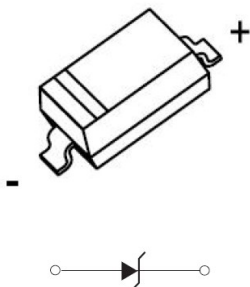


SOD-123



特征 Features

- 齐纳击穿阻抗低; Low Zener Impedance
- 最大功率耗散 500mW; Power Dissipation of 500mW
- 高稳定性和可靠性。High Stability and High Reliability

机械数据 Mechanical Data

- 封装: SOD-123 封装 SOD-123 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性(TA = 25°C 除非另有规定)

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

Parameters	符号 Symbol	数值 Value	单位 Unit
Power Dissipation	Pd	500 ¹⁾	mW
Forward Voltage @IF=10mA	Vf	0.9 ²⁾	V
Storage temperature range	Ts	-65-+150	°C
Thermal resistance junction to ambient air	RthA	400	°C/W ¹⁾

1) Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm²

2) Short duration test pulse used to minimize self-heating effect

3) f=1KHz

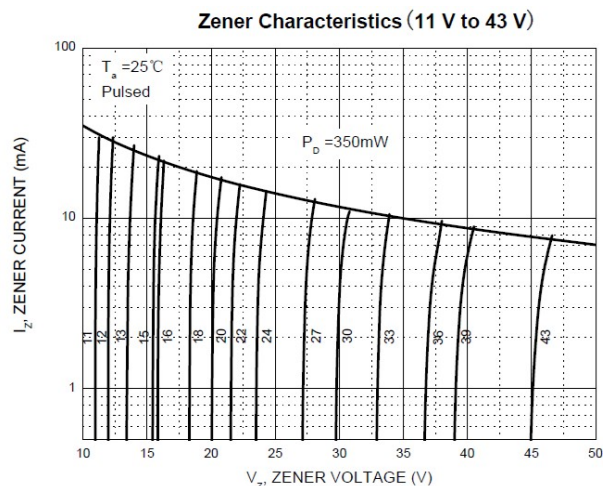
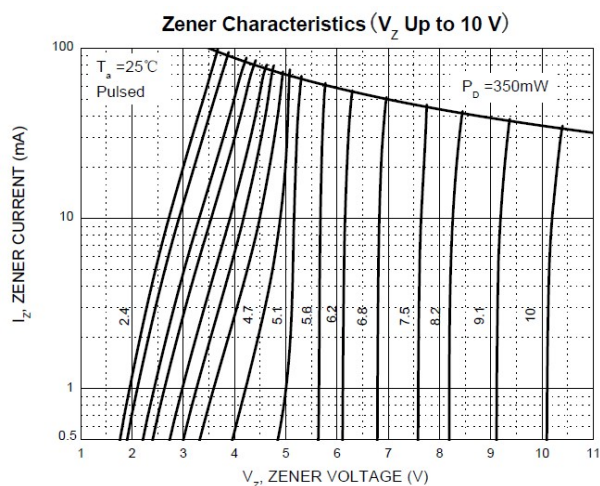
电特性 (TA = 25°C 除非另有规定)

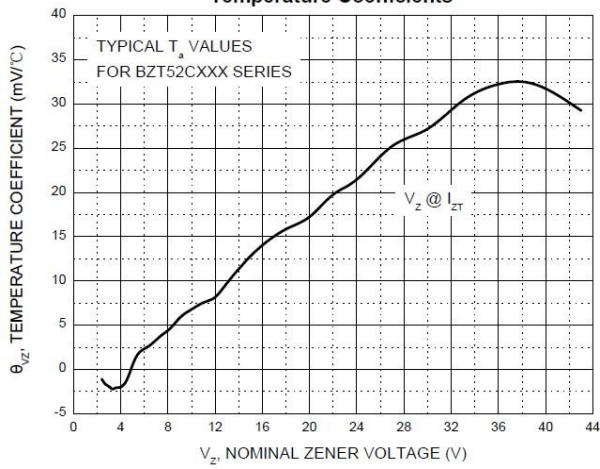
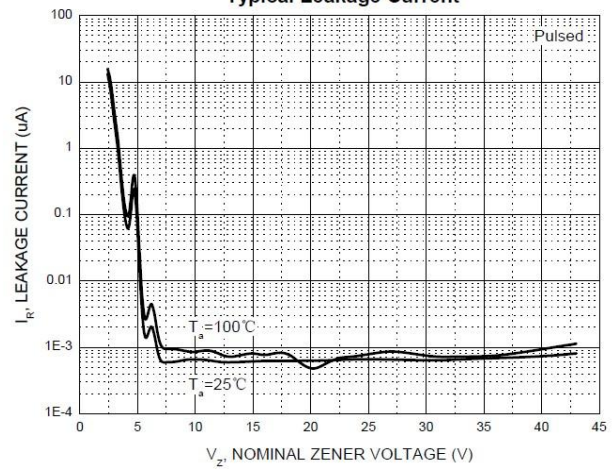
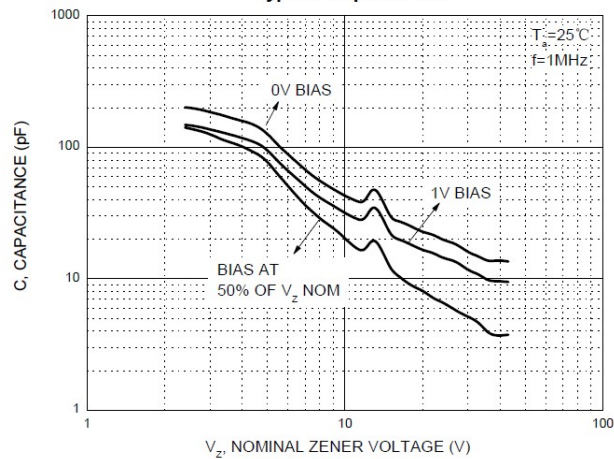
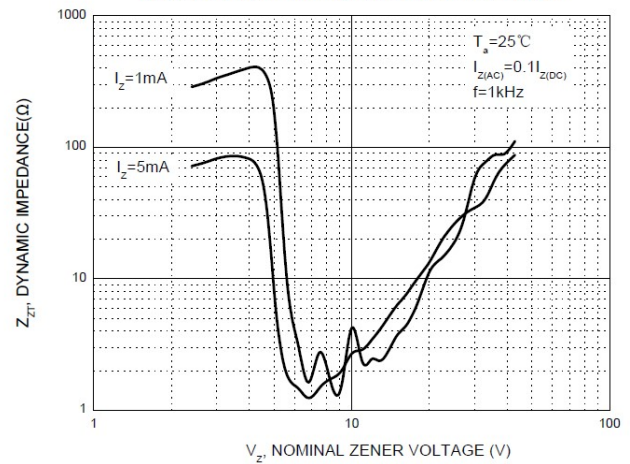
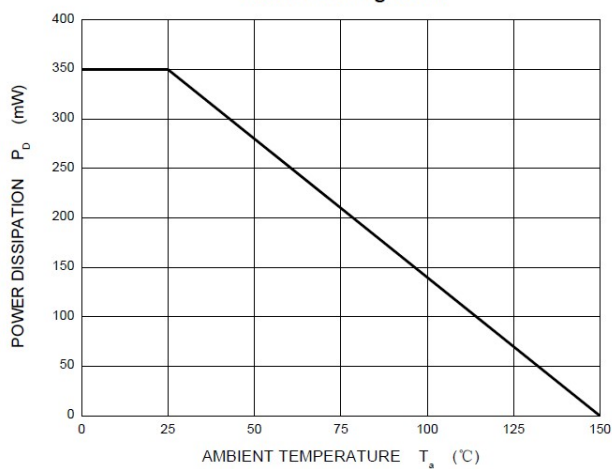
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Device	Marking	Zener Voltage Range				Maximum Zener Impedance ³⁾			Maximum Reverse Current		Typical Temperature coefficient @ IZTC=mV/°C		Test Current IZTC
		Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR	Min	Max	
		Nom(V)	Min(V)	Max(V)	mA	Ω	mA	uA	V				
BZT52C12	WH	12	11.4	12.7	5	25	150	1.0	0.1	8.0	6.0	10.0	5

Breakdown characteristics

at Tj=constant (pulsed)



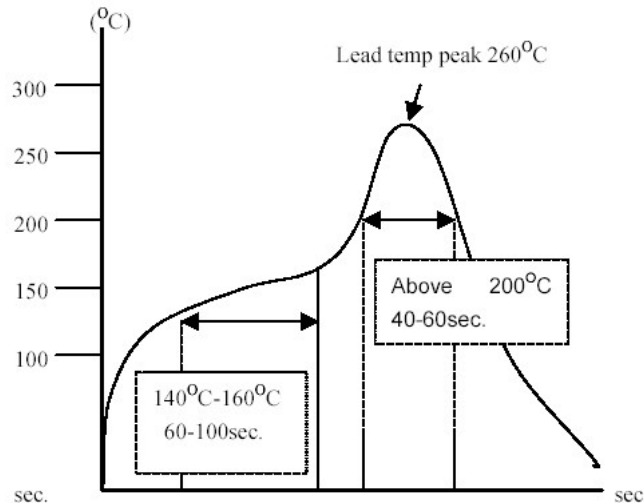
Temperature Coefficients

Typical Leakage Current

Typical Capacitance

Effect of Zener Voltage on Zener Impedance

Power Derating Curve


回流焊推荐条件 Reflow Soldering Instructions (SMT)

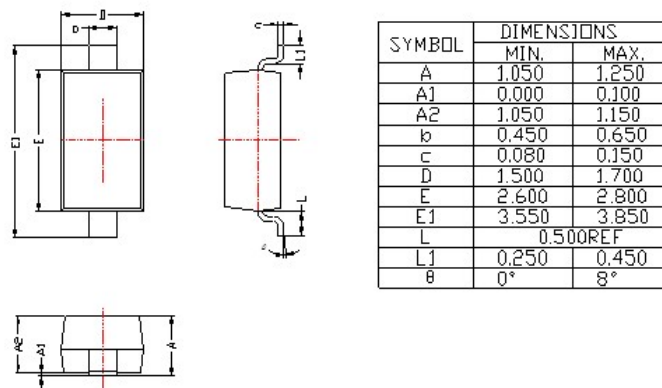
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and Second soldering process.(标准:JEITA ED-4701)

产品最多只可回焊两次,且在首次回焊后须冷却至室温之后方可进行第二次回焊.

时间: 最多 2 次

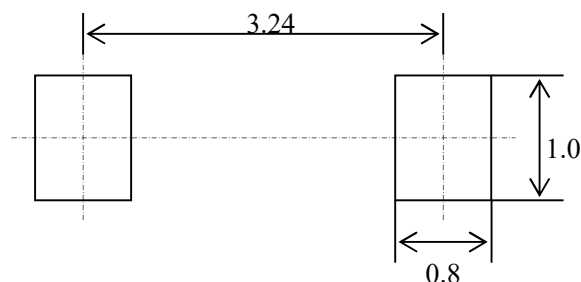


SOD-123 PACKAGE OUTLINE Plastic surface mounted package



焊盘设计参考 Precautions: PCB Design

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

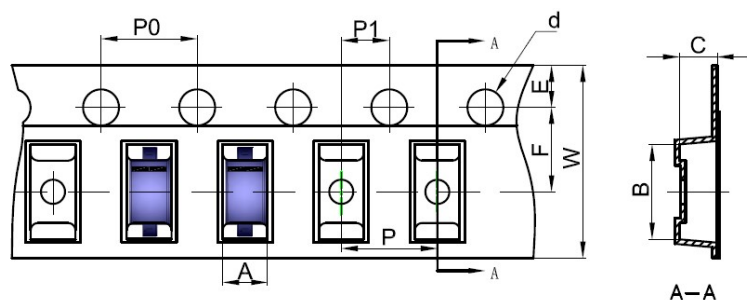


技术要求:
 中心距: 3.24
 脚 宽: 0.55
 焊盘宽: 1.00
 脚 长: 0.50
 焊盘长: 0.80

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

Tape and Reel

SOD-123 Embossed Carrier Tape

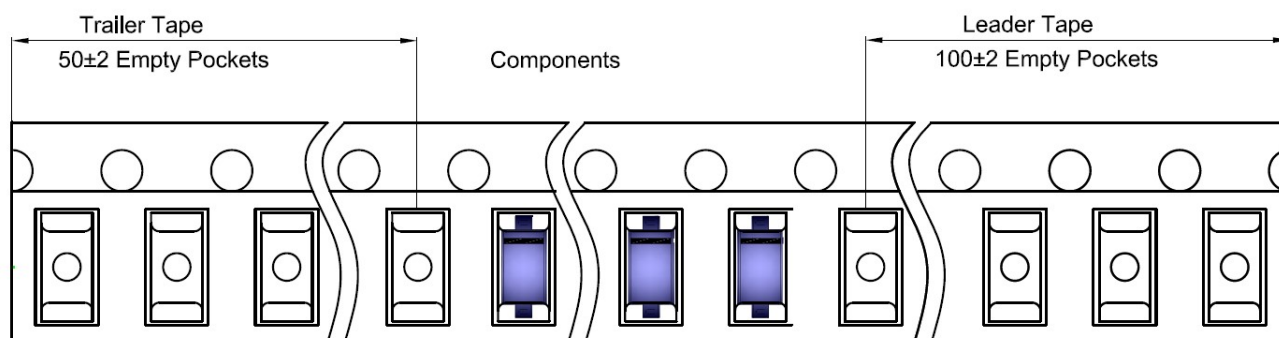


Packaging Description:

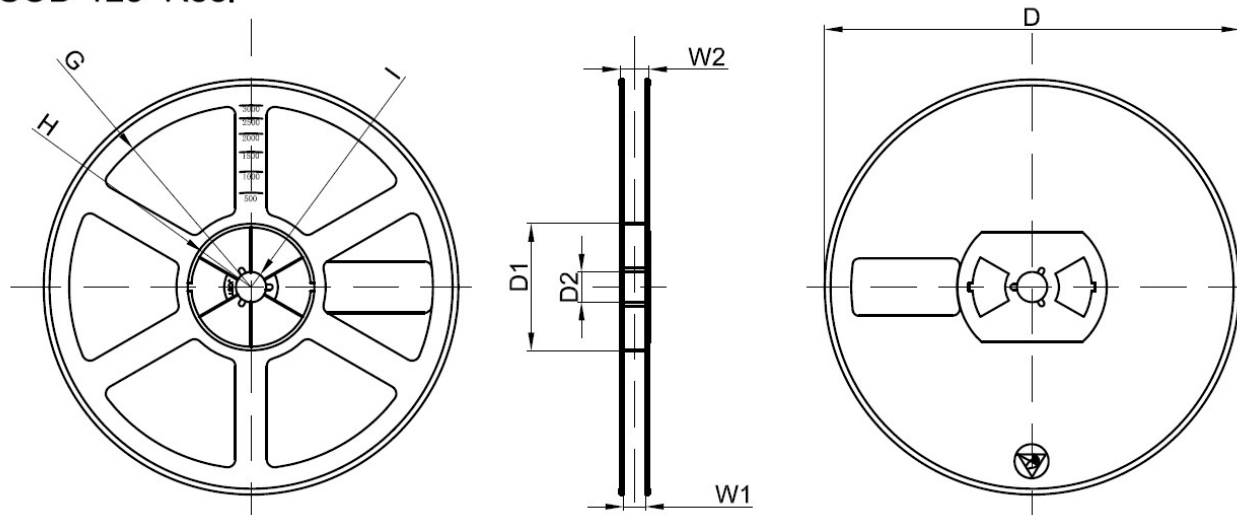
SOD-123 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts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

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