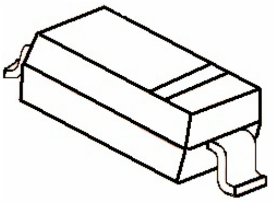
SOD-123 贴片塑封肖特基二极管

SOD-123

SOD-123 Plastic-Encapsulate Schottky Barrier Diode



Marking: 73

特征 Features

- 大电流承受能力.High Current Capability
- 正向压降低.Low Forward Voltage Drop
- 漏电流小.Low IR

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℃ 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
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V_{RRM}	30	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	30	V
最大正向平均整流电流 Maximum average forward rectified current	I_{FM}	1.0	A
峰值正向浪涌电流 8.3ms 单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	30	A
典型热阻 Typical thermal resistance	$R_{\theta JA}$	222	℃/W
功率消耗 Power Dissipation	PD	350	mW
结温 Junction temperature	Tj	125	℃
存储温度 Storage temperature range	T_{STG}	-40-+150	℃

电特性 (TA = 25℃ 除非另有规定)

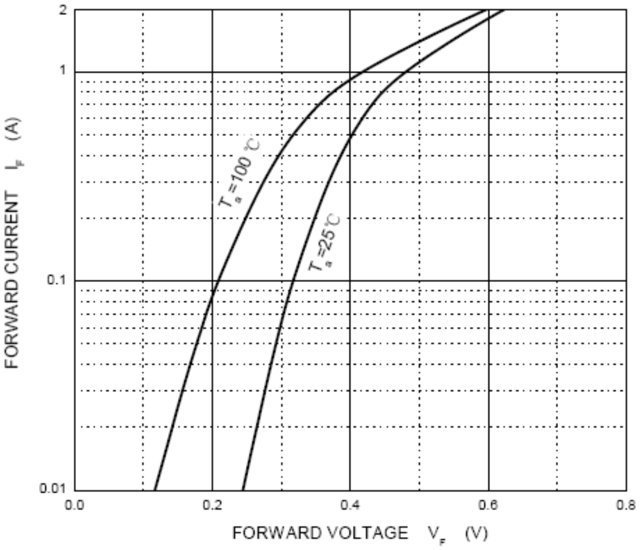
Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

参数 Parameters	符号 Symbol	测试条件 Test conditions	数值 Value	单位 Unit
最大正向电压 Maximum forward voltage	V_F	IF1 = 0.5A IF2 = 1.0A (*)	0.46 0.48	V
最大反向电压 Maximum reverse breakdown voltage	VR	IR=1mA	30	V
最大反向电流 Maximum reverse current	I_R	VR=15V VR=30V	20 50	uA

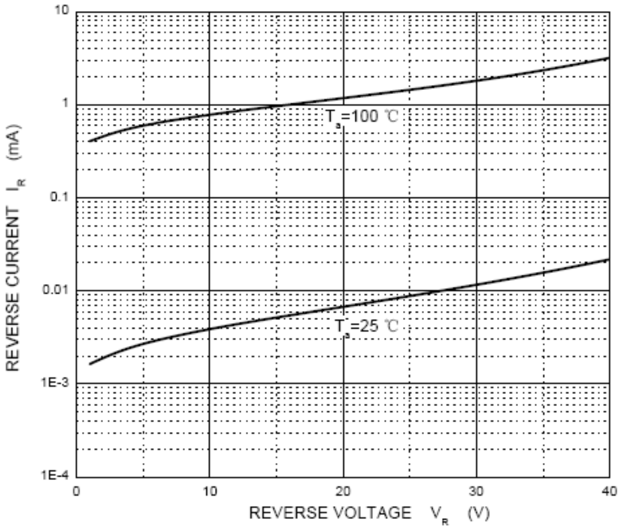
(*) Pulse test

特性曲线Characteristic Curves

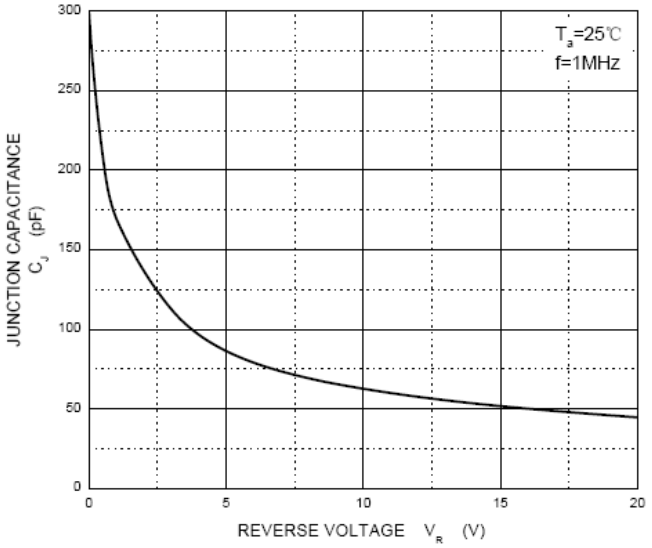
Forward Characteristics



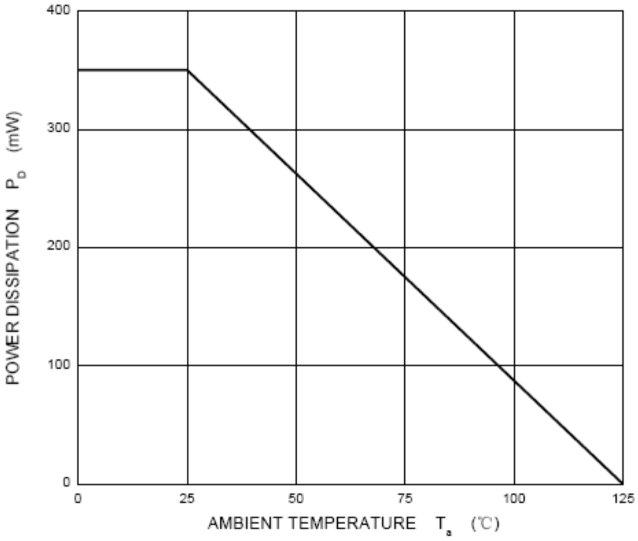
Reverse Characteristics



Capacitance Characteristics

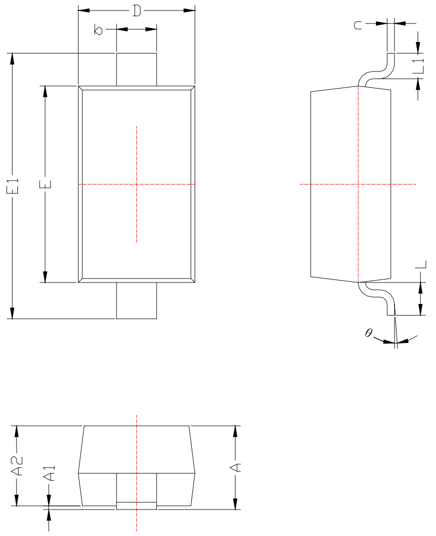


Power Derating Curve



SOD-123 PACKAGE OUTLINE

Plastic surface mounted package

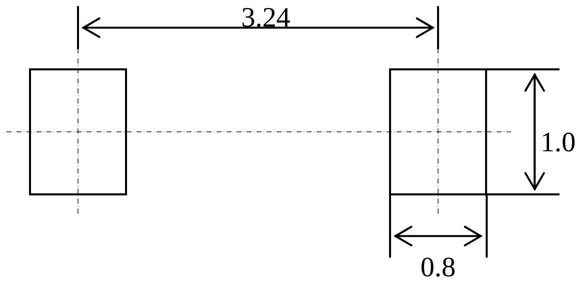


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°

焊盘设计参考

Precautions: PCB Design

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



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