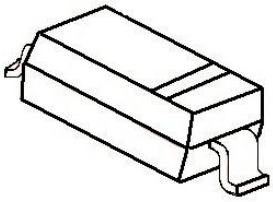
SOD-123 贴片塑封二极管

SOD-123

500mW SOD-123 Fast Switching Diode



MARKING:

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.)

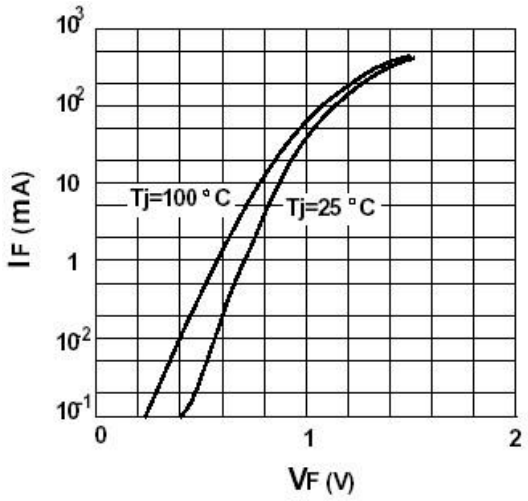
参数 Parameters	符号Symbol	数值 Value	单位Unit
反向峰值电压Peak Reverse Voltage	V_{RM}	100	V
功率消耗Power Dissipation	Pd	500	mW
工作结温Operating junction temperature	Tj	150	℃
存储温度Storage temperature range	T_{STG}	-65-+150	℃
热阻Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	℃/W
平均整流电流Average Rectified Current	I_O	150	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 @tp=1us; TA=25℃	I_{FSM}	2.0	A

Valid provided that electrodes are kept at ambient temperature.

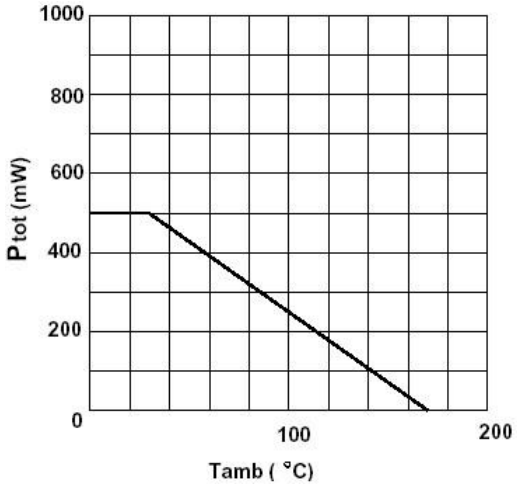
电特性 **Electrical Characteristics** (Ratings at 25℃ ambient temperature unless otherwise specified).

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	IR=100uA	100		V
IR	反向漏电电流 Reverse Leakage Current	VR=20V	---	25	nA
		VR=20V Tj=150℃	---	50	uA
		VR=75	---	5	uA
VF	正向电压 Forward Voltage	IF=10mA	---	1.00	V
		IF=100mA	---	1.25	
TRR	反向恢复时间 Reverse Recovery Time	IF = IR = 10mA, Irr=0.1XIR RL=100Ω	---	4	nS
C	结电容 Capacitance	VR=0V, f=1MHZ	---	4	pF

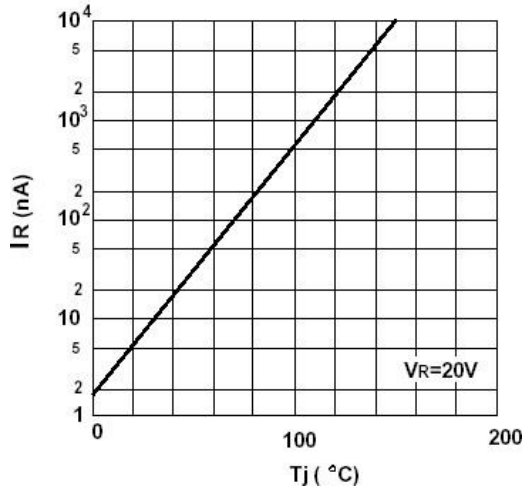
Forward characteristics



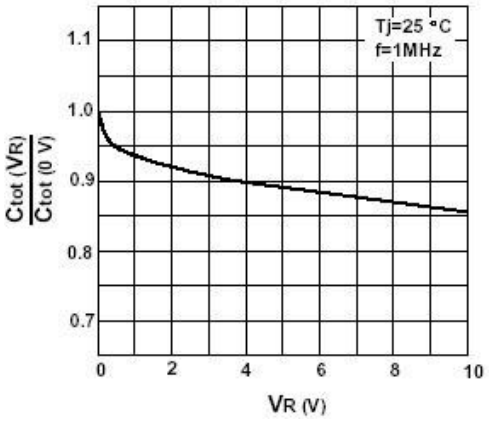
Admissible power dissipation versus ambient temperature



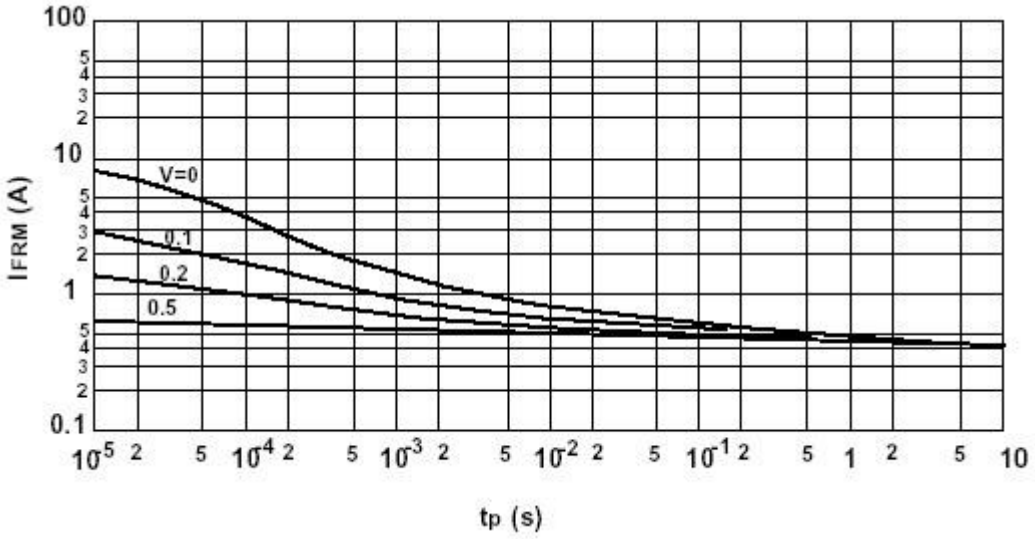
Leakage current versus junction temperature



Reverse capacitance VS. reverse boltage

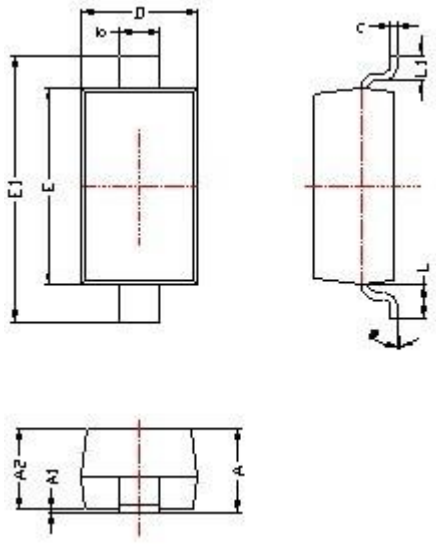


Admissible repetitive peak forward current VS. pulse duration



SOD-123 PACKAGE OUTLINE

Plastic surface mounted package

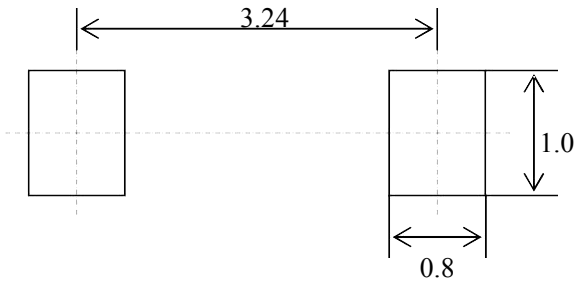


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°

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