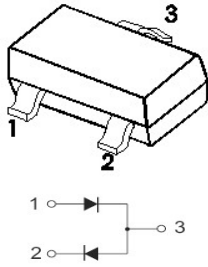


**SOT-23**

**SOT-23 Plastic-Encapsulate Switching Diode**



**MARKING: C3**

**特征 Features**

- 开关速度小于 4nS; Fast Switching Device (TRR <4nS)
- 最大功率耗散 150mW; Power Dissipation of 150mW
- 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: SOT-23 封装 SOT-23 Small Outline Plastic Package
- 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.)

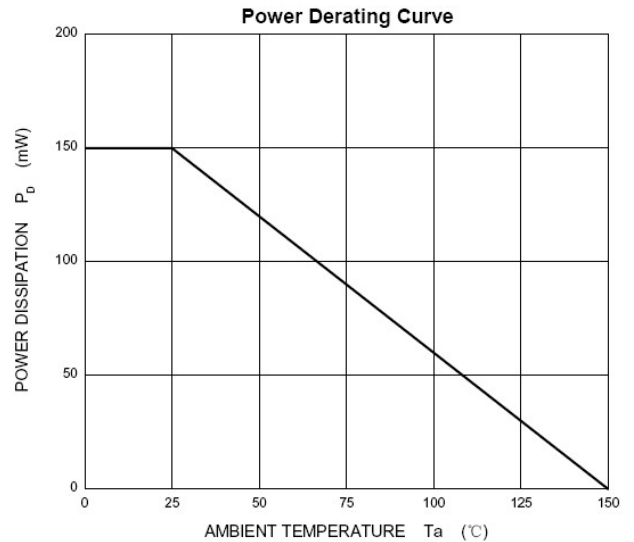
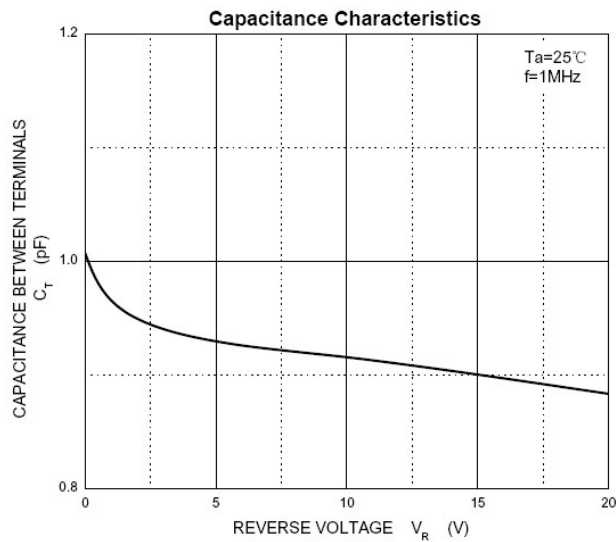
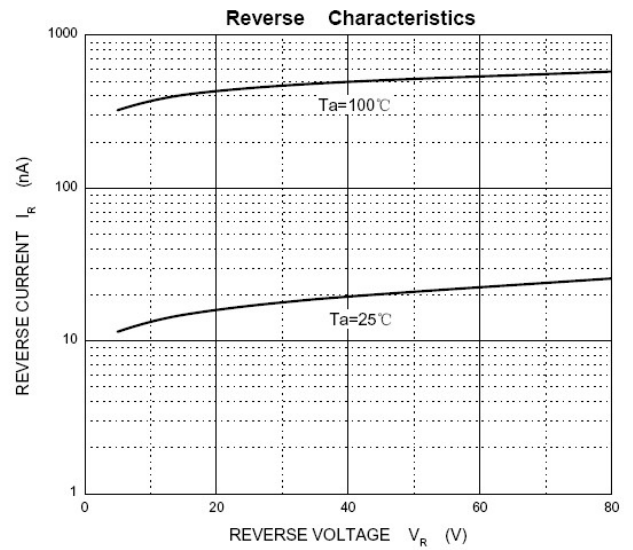
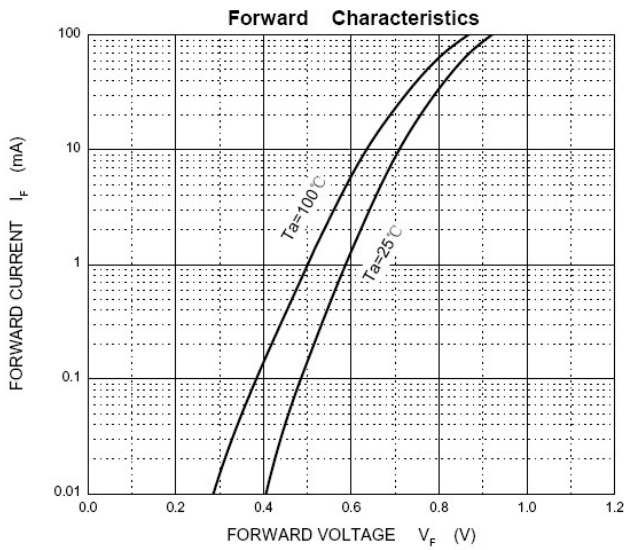
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	VR	85	V
功率消耗 Power Dissipation	Pd	150	mW
工作结温 Operating junction temperature	Tj	150	°C
存储温度 Storage temperature range	Ts	-65-+150	°C
平均整流电流 Average Rectified Current	IO	100	mA
正向(不重复)电流 Non-repetitive Peak Forward Current	IFM	400	mA
正向(不重复)浪涌电流 Peak Forward Surge Current @tp=1ms; TA=25°C	IFSM	2.0	A
典型热阻 Typical thermal resistance	ReJA	833	°C/W

Valid provided that electrodes are kept at ambient temperature.

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

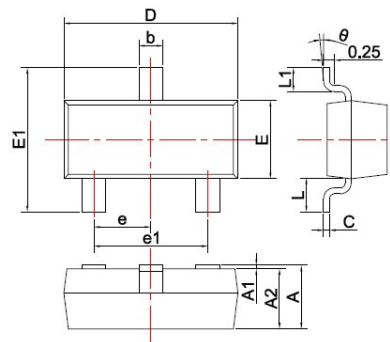
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
VRB	反向击穿电压 Reverse Voltage	IB=100uA	85	---	V
IR	反向漏电流 Reverse Leakage Current	VR=80V	---	2.5	uA
VF	正向电压 Forward Voltage	IF=1mA	---	0.715	V
		IF=10mA	---	0.855	
		IF=100mA	---	1.00	
TRR	反向恢复时间 Reverse Recovery Time	IF= IR=10mA, RL=100Ω IRR=0.1xIR	---	4	nS
CT	结电容 Capacitance	VR=0V, f=1MHZ	---	3	pF

**Typical Characteristics**



**SOT-23 PACKAGE OUTLINE**

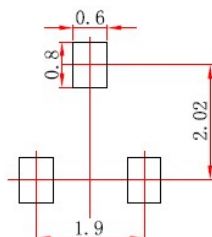
Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN	MAX
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
$\theta$	0°	8°

Unit: mm

焊盘设计参考 Precautions: PCB Design (Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs)



Note:  
1, Controlling dimension; In millimeters.  
2, General tolerance:  $\pm 0.05\text{mm}$ .  
3, The pad layout is for reference purposes only.