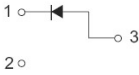
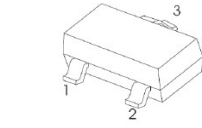
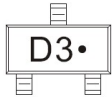


**SOT-23**

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



MARKING: D3•



**特征 Features**

- 开关速度小于 4.0nS; Fast Switching Device (TRR <4.0 nS)
- 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.)

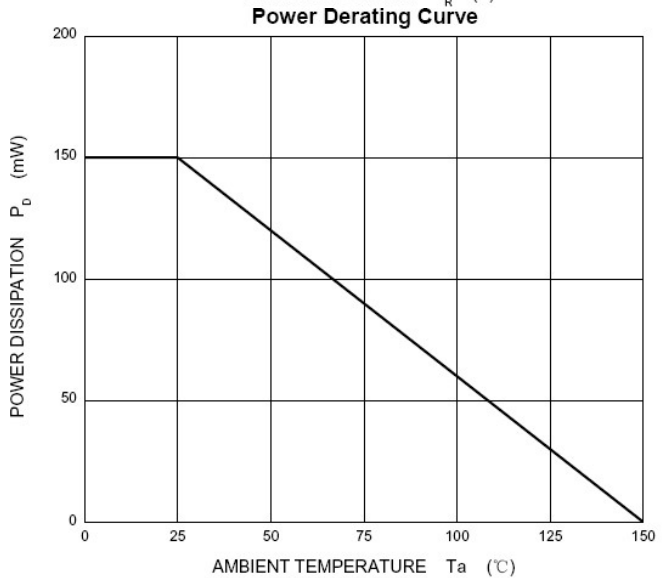
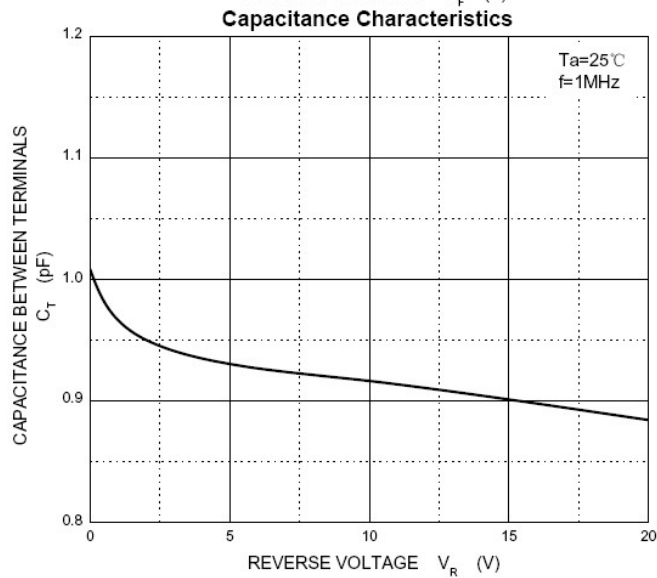
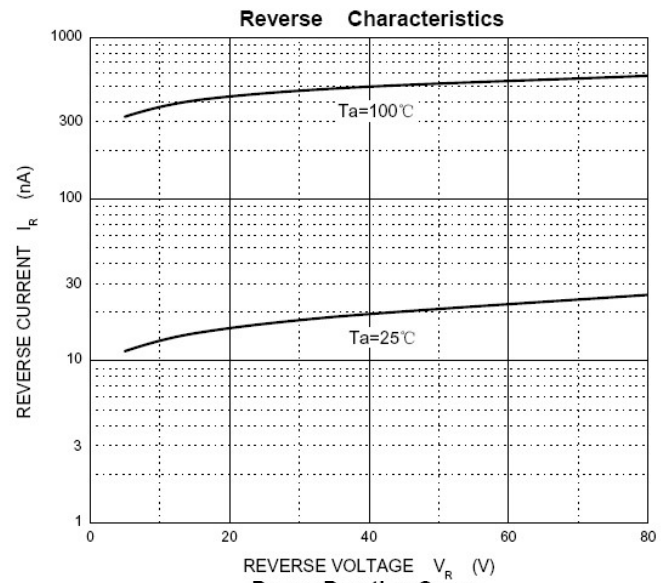
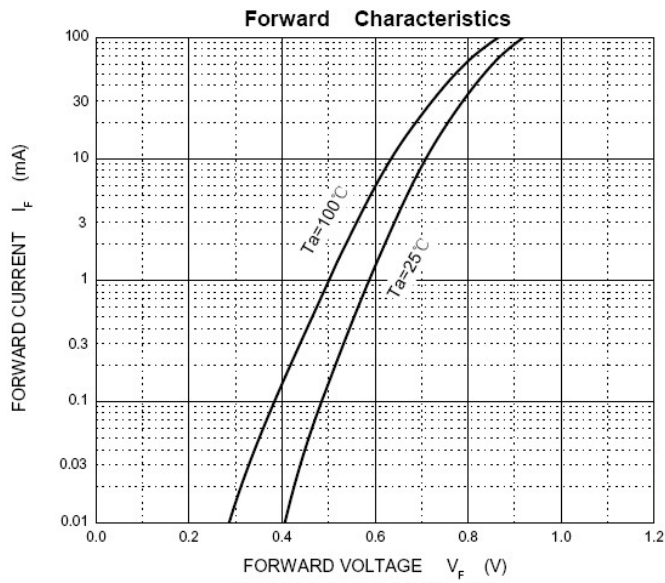
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	V <sub>R</sub>	80	V
反向峰值电压 Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	85	V
功率消耗 Power Dissipation	P <sub>d</sub>	150	mW
平均整流电流 Average Rectified Current	I <sub>O</sub>	150	mA
正向(不重复)浪涌电流 Non-Repetitive Peak Forward Surge Current @t=8.3ms; TA=25°C	I <sub>FSM</sub>	2.0	A
工作结温 Operating junction temperature	T <sub>j</sub>	150	°C
存储温度 Storage temperature range	T <sub>s</sub>	-55-+150	°C
热阻抗 Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	357	°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).

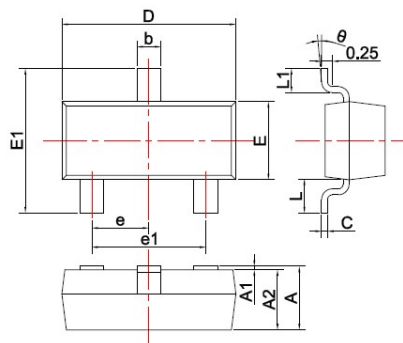
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits			单位 Unit
			Min	Typ	Max	
V(BR)	反向电压 Reverse Voltage	IR=100uA	80			V
I <sub>R</sub>	反向漏电流 Reverse Leakage Current	VR=80V			0.5	uA
		VR=30V			100	nA
V <sub>F</sub>	正向电压 Forward Voltage	IF=1.0mA		0.61		V
		IF=10mA		0.74		
		IF=100mA		0.92	1.20	
TRR	反向恢复时间 Reverse Recovery Time	IF= IR=10mA		1.6	4	nS
		RL=100Ω				
		IRR=0.1 X IR				
CT	结电容 Capacitance	VR=0V, f=1MHZ		2.2	4	pF

**Typical Characteristics**



**SOT-23 PACKAGE OUTLINE**

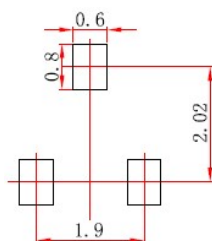
Plastic surface mounted package



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.