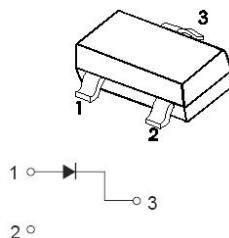


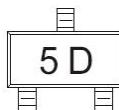
SOT-23 Plastic-Encapsulate Switching Diode

特征 Features

- 开关速度小于 4.0nS; Fast Switching Device (TRR <4.0 nS)
- 最大功率耗散 350mW; Power Dissipation of 350mW
- 高稳定性和可靠性。High Stability and High Reliability
- 反向漏电流小。Low reverse leakage



MARKING: 5D



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($T_A = 25^\circ\text{C}$ 除非另有规定)Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

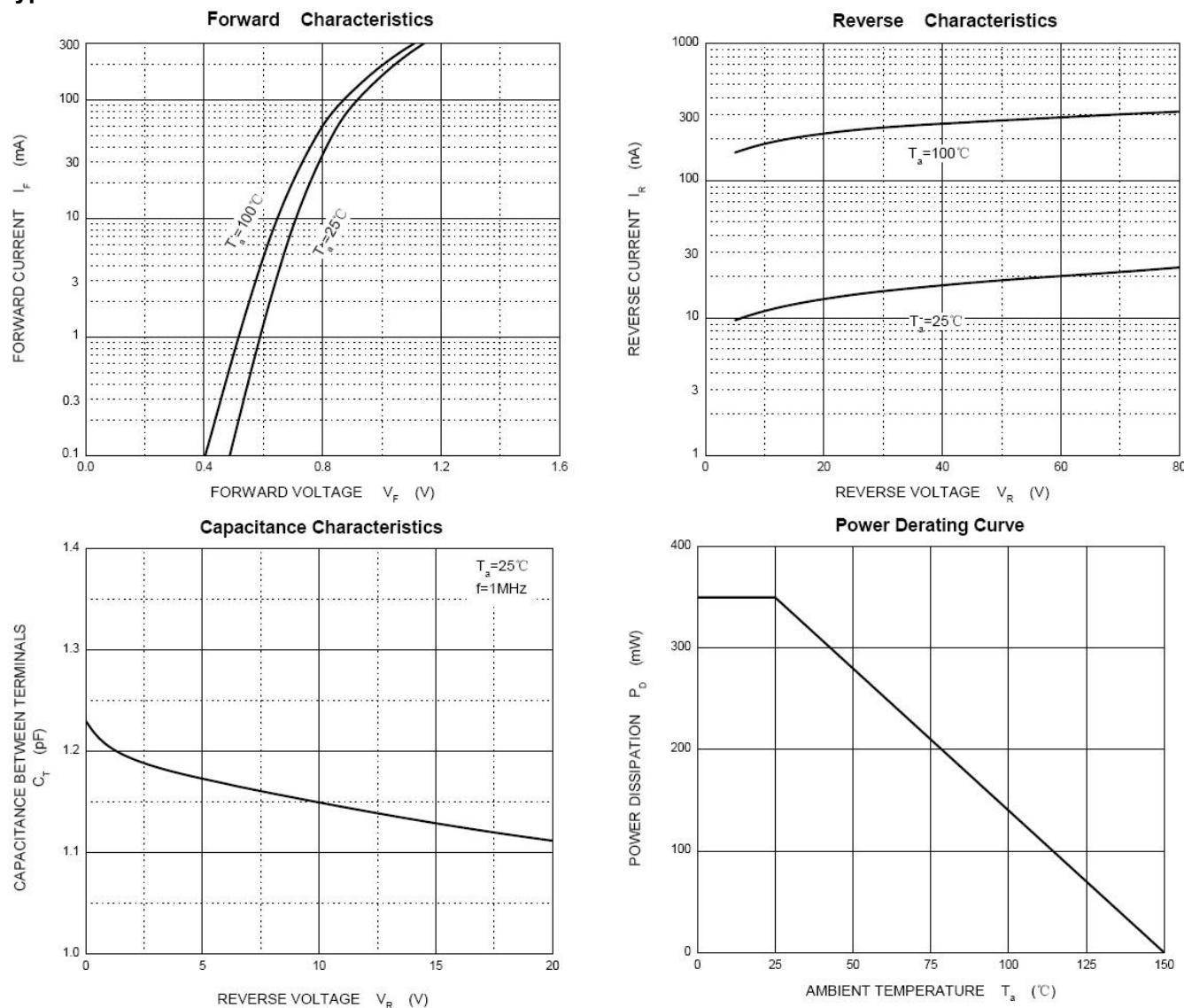
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	V_R	100	V
反向峰值电压 Peak Repetitive Reverse Voltage	V_{RRM}	100	V
功率消耗 Power Dissipation	P_d	350	mW
平均整流电流 Average Rectified Current	I_o	300	mA
正向(不重复)浪涌电流 Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$; $TA=25^\circ\text{C}$	I_{FSM}	2.0	A
工作结温 Operating junction temperature	T_j	150	$^\circ\text{C}$
存储温度 Storage temperature range	T_s	-55~+150	$^\circ\text{C}$
热阻抗 Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C}/\text{W}$

Valid provided that electrodes are kept at ambient temperature.

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

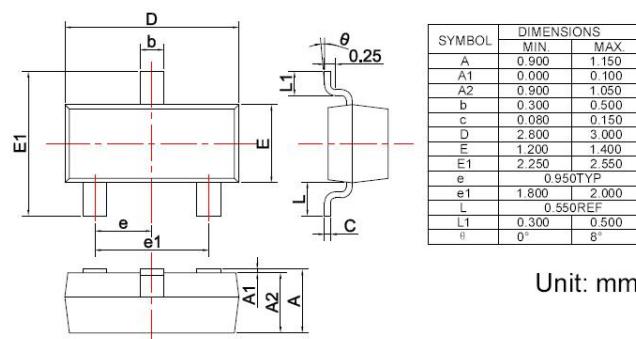
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
$V(BR)$	反向电压 Reverse Voltage	$IR=100\mu\text{A}$	100		V
IR	反向漏电电流 Reverse Leakage Current	$VR=75\text{V}$	---	1.0	μA
		$VR=20\text{V}$	---	25	nA
VF	正向电压 Forward Voltage	$IF=1.0\text{mA}$	---	0.715	V
		$IF=10\text{mA}$	---	0.855	
		$IF=50\text{mA}$	---	1.00	
		$IF=150\text{mA}$	---	1.25	
TRR	反向恢复时间 Reverse Recovery Time	$IF= IR=10\text{mA}$	---	4	nS
		$RL=100\Omega$			
		$IRR=0.1 \times IR$			
CT	结电容 Capacitance	$VR=0\text{V}, f=1\text{MHz}$	---	2	pF

Typical Characteristics

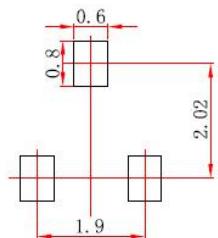


SOT-23 PACKAGE OUTLINE

Plastic surface mounted package



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.