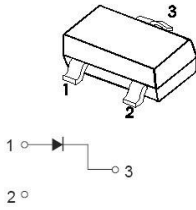


SOT-23



MARKING: 5D



SOT-23 贴片塑封二极管

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

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.)

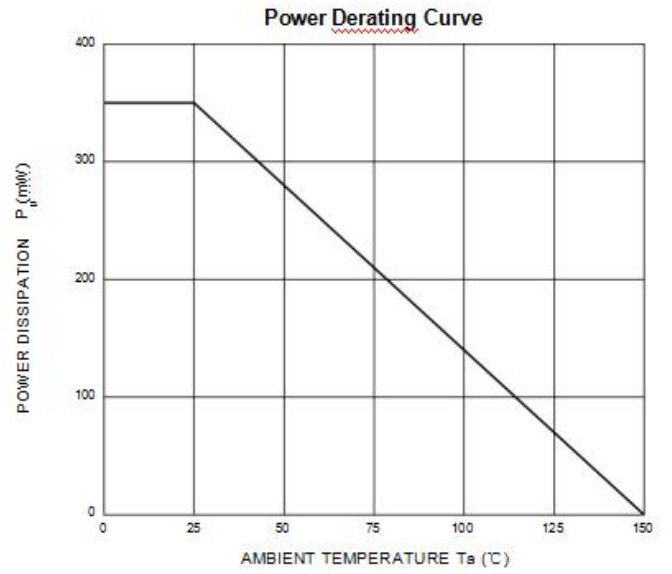
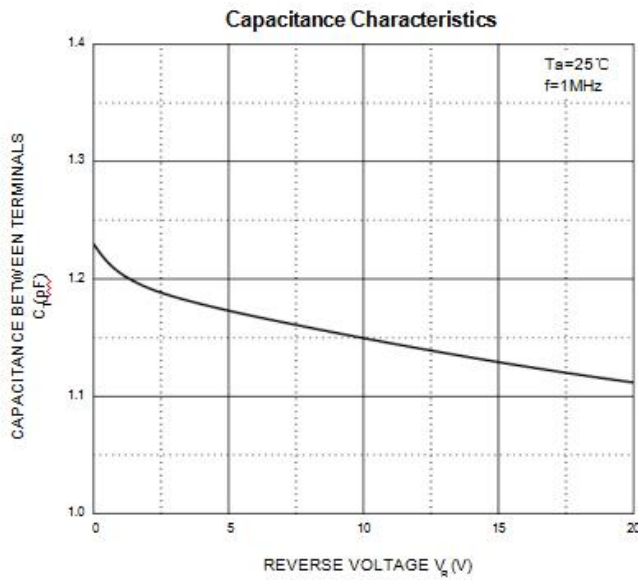
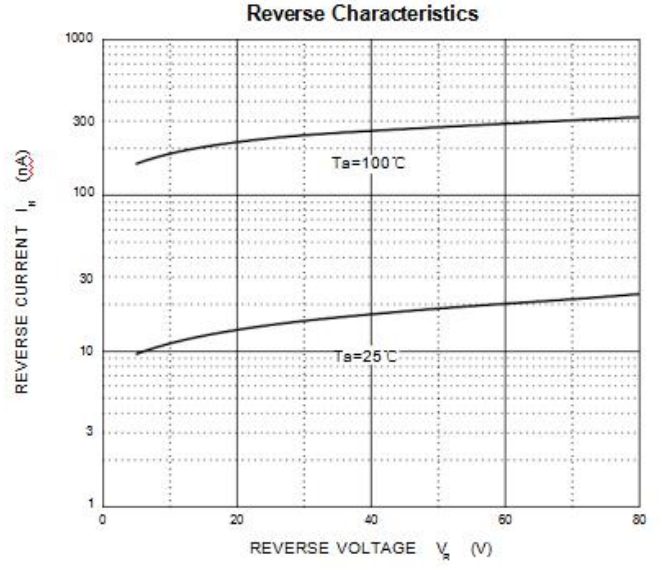
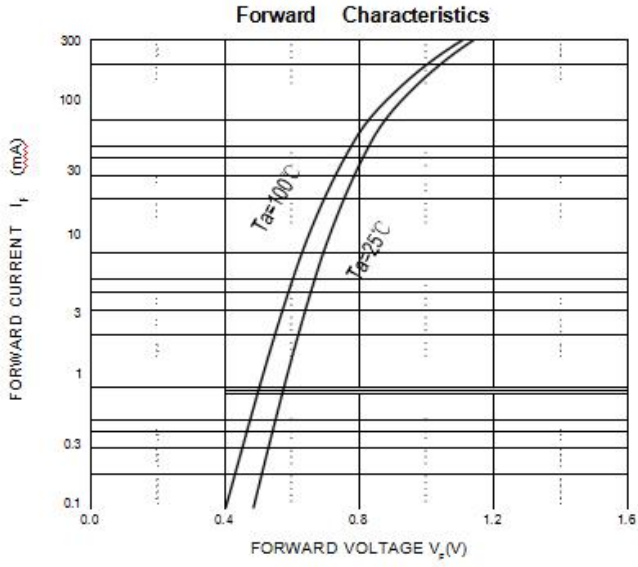
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	V _R	100	V
反向峰值电压 Peak Repetitive Reverse Voltage	V _{RRM}	100	V
功率消耗 Power Dissipation	P _d	350	mW
平均整流电流 Average Rectified Current	I _O	300	mA
正向(不重复)浪涌电流 Non-Repetitive Peak Forward Surge Current @t=8.3ms; TA=25°C	I _{FSM}	2.0	A
工作结温 Operating junction temperature	T _j	150	°C
存储温度 Storage temperature range	T _s	-55-+150	°C
热阻抗 Thermal Resistance from Junction to Ambient	R _{θJA}	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).

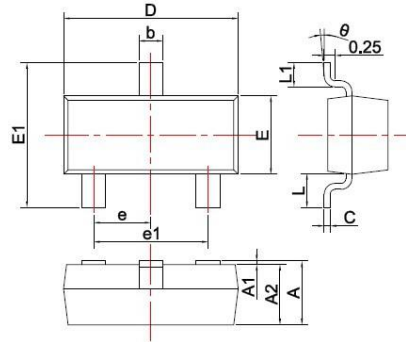
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
V _(BR)	反向电压 Reverse Voltage	I _R =100uA	100		V
I _R	反向漏电流 Reverse Leakage Current	V _R =75V	---	1	uA
		V _R =20V	---	25	nA
V _F	正向电压 Forward Voltage	I _F =1mA	---	0.715	V
		I _F =10mA	---	0.855	
		I _F =50mA	---	1.00	
		I _F =150mA	---	1.25	
TRR	反向恢复时间 Reverse Recovery Time	I _F =I _R =10mA	---	4	nS
		R _L =100Ω			
		I _{RR} =0.1 * I _R			
CT	结电容 Capacitance	V _R =0V, f=1MHZ	---	2	pF

典型特性曲线 Typical Characteristics



SOT-23 PACKAGE OUTLINE

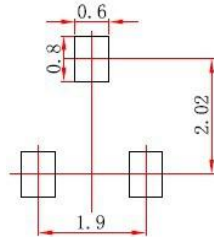
Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN	MAX
A	0.900	1.150
A1	0.900	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
⊘	0°	6°

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: ±0.05mm.
 3. The pad layout is for reference purposes only.