

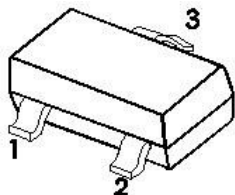


SOT-23 贴片塑封开关二极管

SOT-23 Plastic-Encapsulate Switching Diode

特征 Features

SOT-23



开关速度小于 6nS; Fast Switching Device (TRR <6nS)

最大功率耗散 225mW; Power Dissipation of 225mW

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

BAW56	BAV70	BAV99
MARKING:A1	MARKING:A4	MARKING:A7

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.)

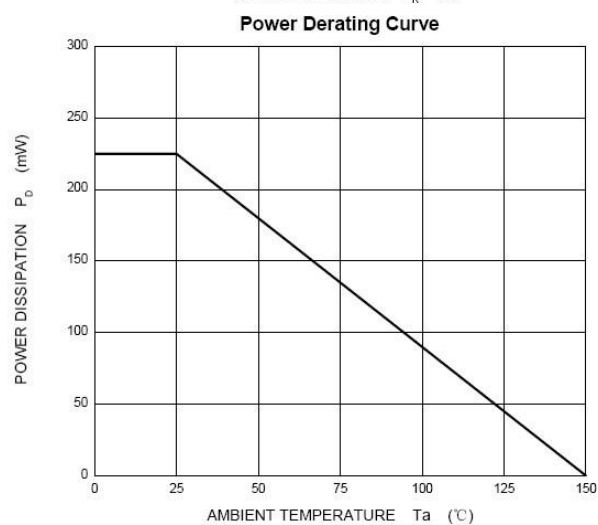
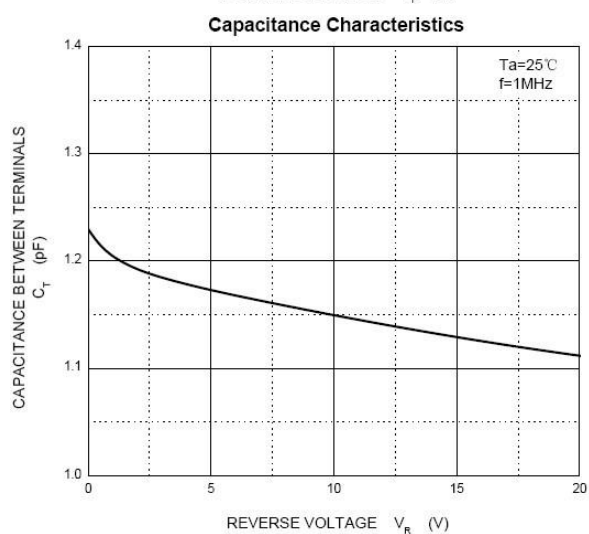
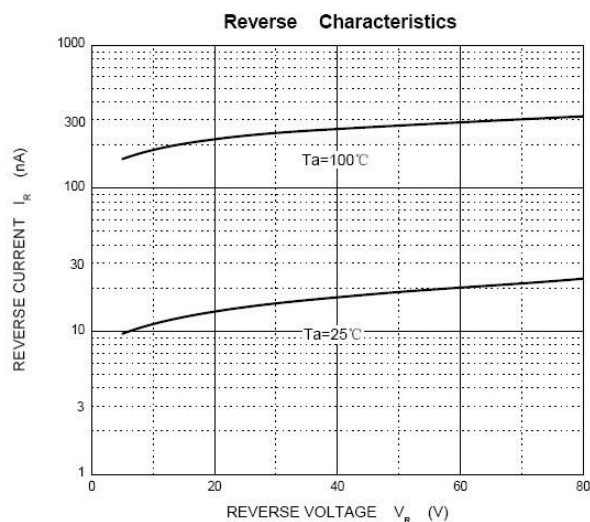
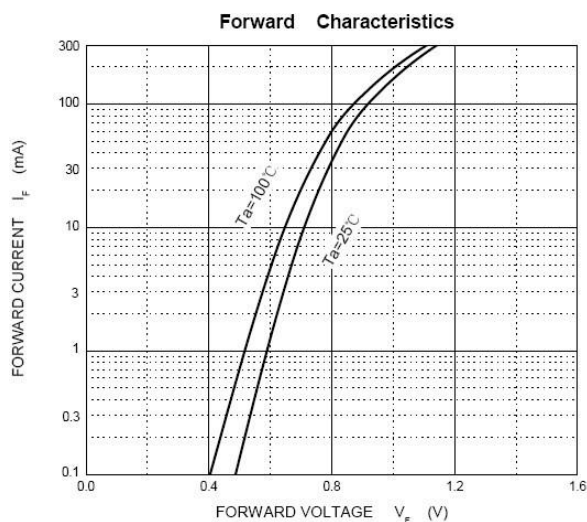
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	VR	70	V
功率消耗 Power Dissipation	Pd	225	mW
工作结温 Operating junction temperature	Tj	150	℃
存储温度 Storage temperature range	Ts	-65-+150	℃
平均整流电流 Average Rectified Current	IO	200	mA
正向(不重复)电流 Non-repetitive Peak Forward Current	IFM	400	mA
正向(不重复)浪涌电流 Peak Forward Surge Current @tp=1us; TA=25℃	IFSM	2.0	A
典型热阻 Typical thermal resistance	RθJA	500	℃/W

Valid provided that electrodes are kept at ambient temperature.

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

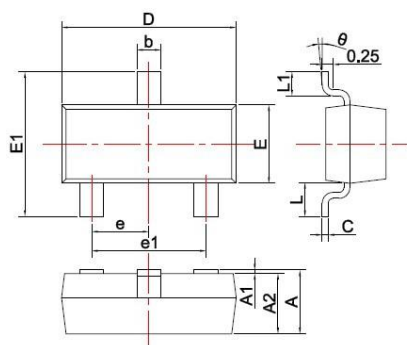
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
VRB	反向击穿电压 Reverse Voltage	IB=100uA	70	---	V
IR	反向漏电流 Reverse Leakage Current	VR=70V	---	2.5	uA
VF	正向电压 Forward Voltage	IF=1mA	---	0.715	V
		IF=10mA	---	0.855	
		IF=50mA	---	1.00	
		IF=150mA	---	1.25	
TRR	反向恢复时间 Reverse Recovery Time	IF= IR=10mA,RL=100Ω IRR=0.1xIR	---	6	nS
CT	结电容 Capacitance	VR=0V, f=1MHZ	---	1.5	pF

Typical Characteristics



SOT-23 PACKAGE OUTLINE

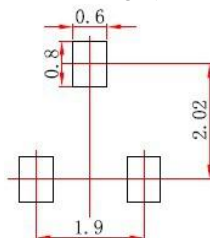
Plastic surface mounted package



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
θ	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.