SOT-23

开关二极管
Switching Diode

产品特性总结Product Summary	
VR@100uA	＞85V
IR@75V	＜5nA
trr	＜3uS

特征 Features

- 极低的漏电流Very Low Leakage Current
- 低反向恢复时间Low Reverse Recovery Time
- 无卤封装Halogen-free Package
- 表贴型封装Surface Mount Package
- 环氧树脂UL易燃等级Epoxy UL: 94V-0

应用 Applications

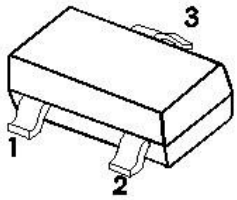
- 低漏电应用Low Leakage Current Applications
- 高速开关应用High Speed Switch Applications

印字Marking：

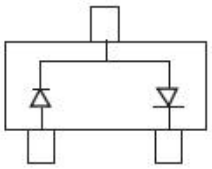
K52 或根据客户要求打印

K52 or According to customer requirement

脚位定义Pin Definition



等效电路Equivalent circuit



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 尖峰反向电压Working Peak Reverse Voltage	VR VRM	85	V
RMS反向电压RMS Reverse Voltage	VR(RMS)	60	V
正向持续电流Forward Continuous Current	IFM	125	mA
正向重复电流Repetitive Peak Forward Current	IFRM	500	mA
正向(不重复)浪涌电流Non-Repetitive Peak Forward Surge Current @ t = 1.0s @ t = 1.0ms @ t = 1.0s	IFSM	4.0 1.0 0.5	A
功率耗散Power Dissipation (Note 1)	Pd	150	mW
结环热阻Thermal Resistance Junction to Ambient Air (Note 1)	RθJA	833	℃/W
工作与储存温度范围Operating and Storage Temperature Range	Tj , TSTG	-65 to+150	℃

电特性 (TA = 25℃ 除非另有规定)

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

参数 Parameters	符号 Symbol	测试条件 Test Condition	最小值 Min	典型值 Typ	最大值 Max	单位Unit
反向电压 Reverse Breakdown Voltage (Note 3)	V(BR)R	I_R = 100uA	85	——	——	V
正向电压Forward Voltage	VF	I_F = 1.0mA	——	——	0.9	V
		I_F = 10mA	——	——	1.0	
		I_F = 50mA	——	——	1.1	
		I_F = 150mA	——	——	1.25	
反向漏电流Leakage Current (Note 3)	IR	V_R = 75V V_R = 75V, T_j = 150℃	——	——	5.0 80	nA
总电容Total Capacitance	CT	V_R = 0, f = 1.0MHz	——	2		pF
反向恢复时间Reverse Recovery Time	trr	I_F = I_R = 10mA, I_{rr} = 0.1xI_R, R_L = 100 Ω	——	——	3.0	uS

***Notes :**

1. Device mounted on FR-4 PC board with recommended pad layout.
2. No purposefully added lead.
3. Short duration test pulse used to minimize self-heating effec..

典型特性曲线 Typical characteristics

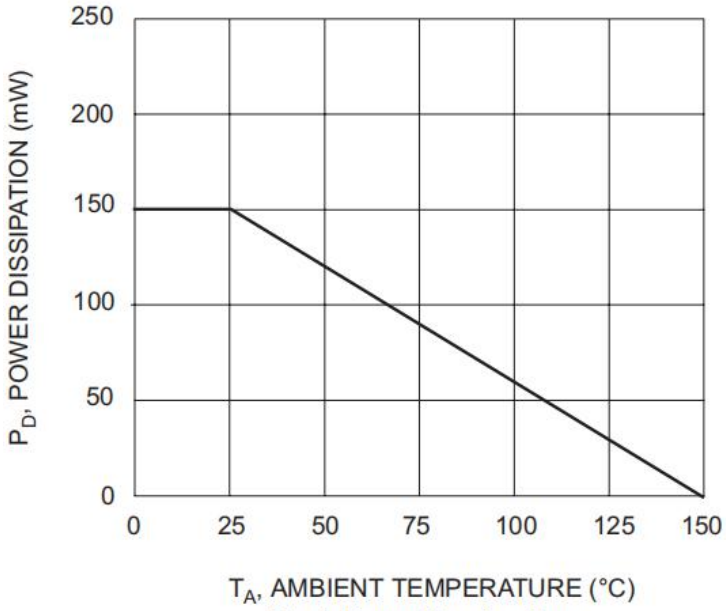


Fig. 1 Power Derating Curve

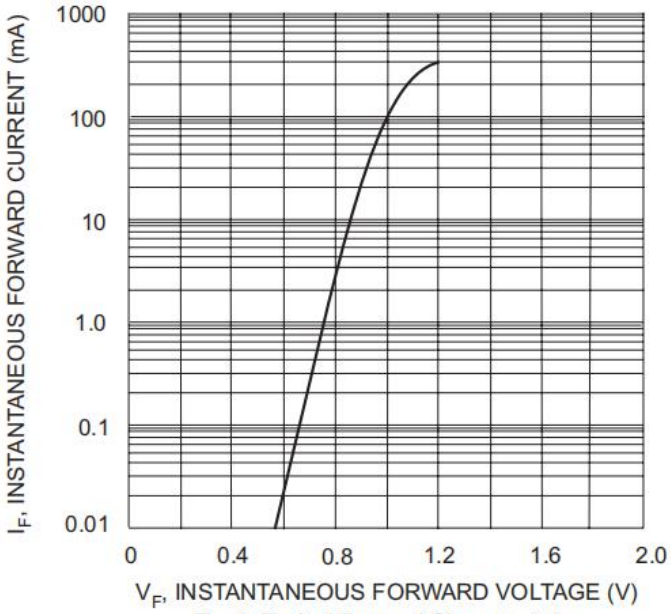


Fig. 2 Typical Forward Characteristics

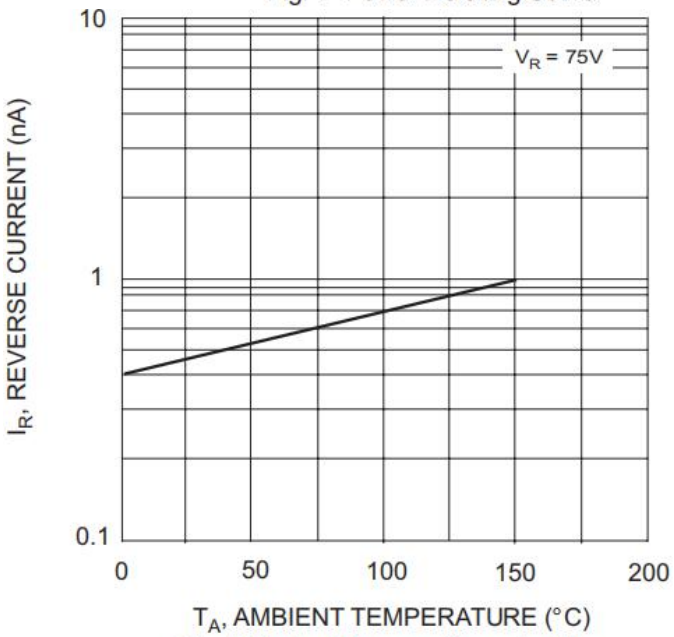


Fig. 3 Typical Reverse Characteristics

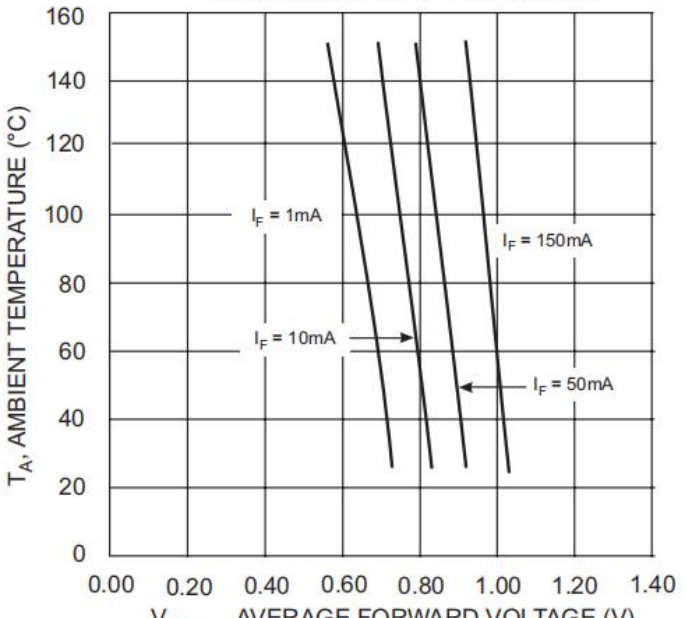
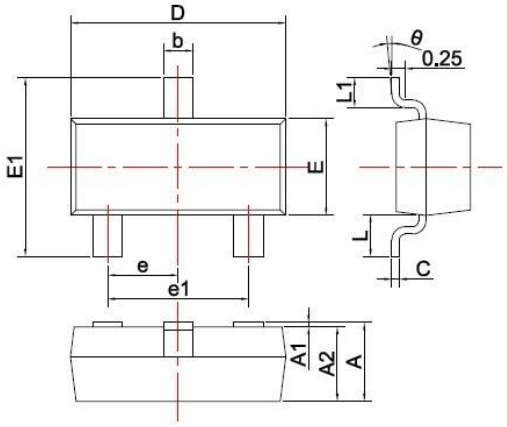


Fig. 4 Typical Forward Voltage vs Ambient Temperature

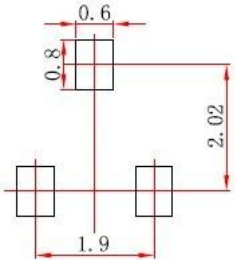
封装外形图 SOT-23 Package Outline Dimensions



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



Note:
1.Controlling dimension:In millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.