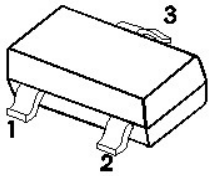
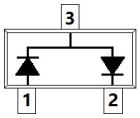
SOT-23

SOT-23 贴片塑封开关二极管
SOT-23 Plastic-Encapsulate Switching Diode





MARKING: K52

特征 Features

- 开关速度小于 3uS; Fast Switching Device (TRR <3uS)
- 最大功率耗散 250mW; Power Dissipation of 250mW
- 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℃ 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	85	V
功率消耗 Power Dissipation		Pd	250	mW
工作结温 Operating junction temperature		Tj	150	℃
存储温度 Storage temperature range		Ts	-65-+150	℃
正向电流 Forward continuous Current	Single diode Double diode	IFM	160 140	mA
正向浪涌电流 Repetitive Peak Forward Current		IFRM	500	mA
正向(不重复)浪涌电流 Peak Forward Surge Current; TA=25℃	@tp=1.0us @tp=1.0ms @tp=1.0s	IFSM	4.0 1.0 0.5	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	Typ	Max	
VRB	反向击穿电压 Reverse Voltage	IB=100uA	85			V
IR	反向漏电电流 Reverse Leakage Current	VR=75V			5	nA
VF	正向电压 Forward Voltage	IF=1mA			0.90	V
		IF=10mA			1.00	
		IF=50mA			1.10	
		IF=150mA			1.25	
TRR	反向恢复时间 Reverse Recovery Time	IF= IR=10mA,RL=100Ω IRR=0.1xIR			3	uS
CT	结电容 Capacitance	VR=0V, f=1MHZ		2.0		pF

Typical Characteristics

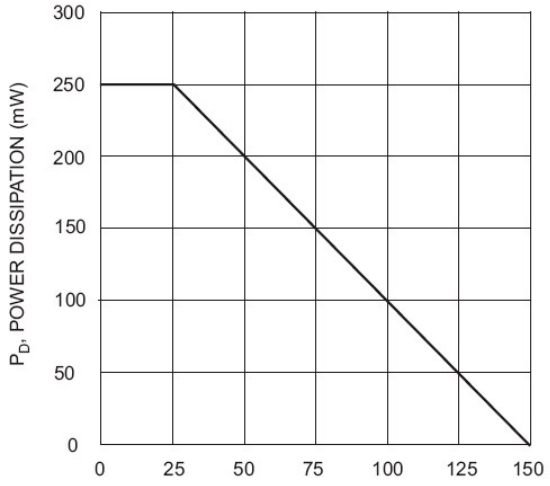


Fig. 1 Power Derating Curve

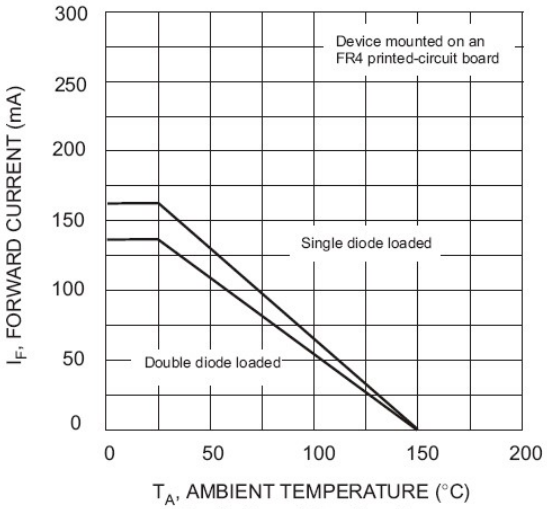


Fig. 2 Current Derating Curve

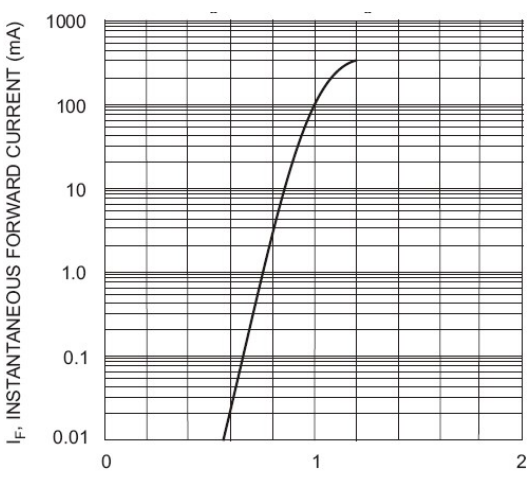


Fig. 3 Typical Forward Characteristics

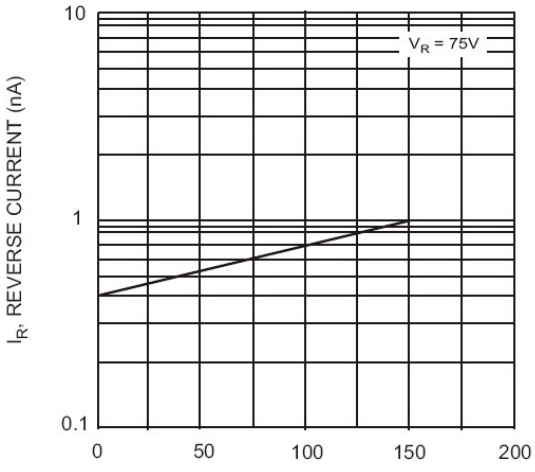
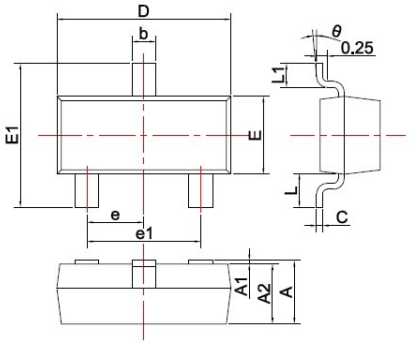


Fig. 4 Typical Reverse Characteristics

SOT-23 PACKAGE OUTLINE

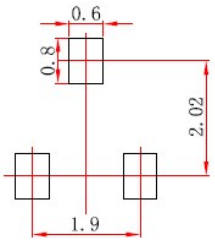
Plastic surface mounted package



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