

## SOT-23 ESD 静电保护二极管

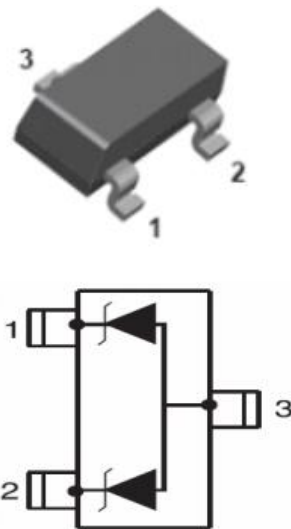
### ■ Features 特点

Two Un-directional Lines 两个单向  
Or Bidirectional 或双向  
ESD Protection 静电保护

### ■ Applications 应用

Computer 计算机  
Set-top box 机顶盒  
Control & Monitoring 控制和监视器  
Communication System 通信系统

### ■ Internal Schematic Diagram 内部结构



### ■ Device Marking 产品打标

$V_{RWM}(V)$	3.3	5	7	12	15	24	36
Marking	M03	M05	M07	M12	M15	M24	M36

### ■ Absolute Maximum Ratings 最大额定值

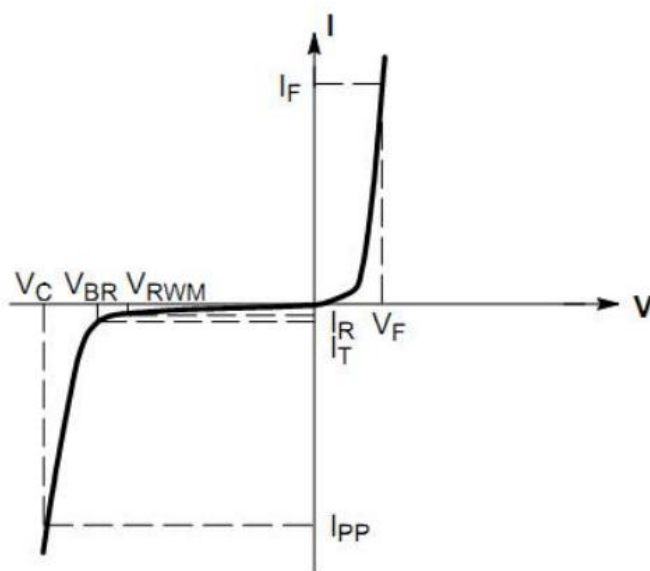
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	$V_{ESD}$	$\pm 30$	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	$V_{ESD}$	$\pm 30$	KV
Peak Pulse Power @25°C峰值脉冲功率	$P_{PK}$	450	W
Forward Voltage 正向电压@ $I_F=10mA$	$V_F$	0.8	V
Lead Temperature 管脚温度	$T_L$	260	°C
Lead Solder Time 管脚焊接时间	$T_L$	10	S
Operating Temperature 工作温度	$T_{op}$	-40~125	°C
Junction Temperature 结温	$T_J$	-55~150	°C
Storage Temperature 储存温度	$T_{stg}$	-55~150	°C

■ **Electrical Characteristics 电特性**

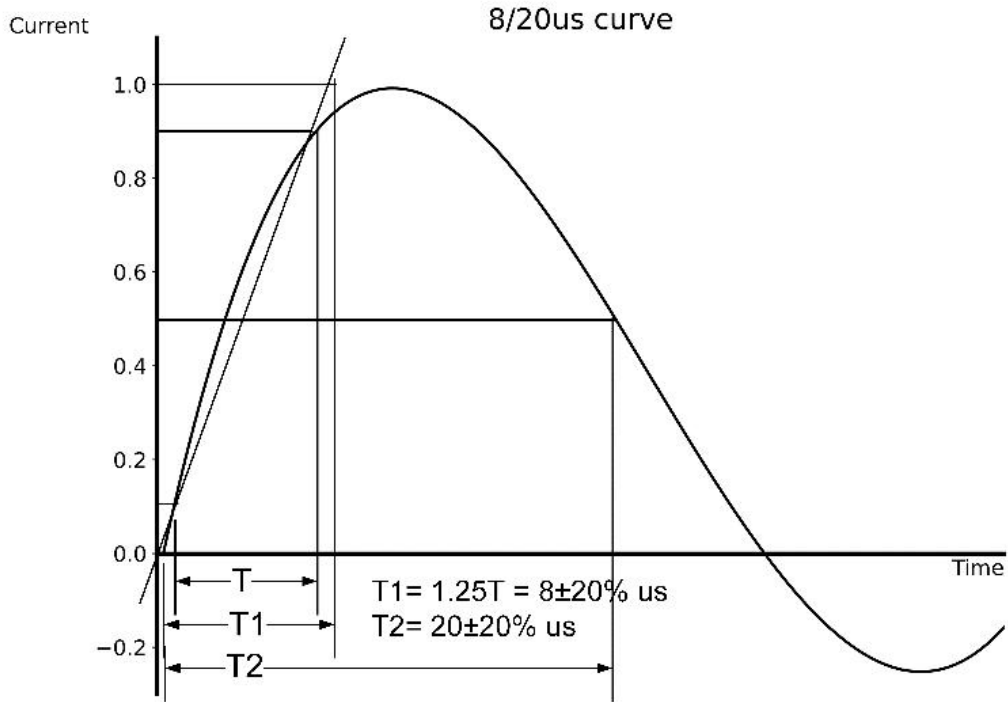
( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

Part No.型号	$V_{RWM}(V)$	$V_{R(BR)}(V)$	$V_C(V)@I_T=1A$	$I_{PP}(A)$	$V_C(V)@I_T=I_{PP}$	$I_R(\mu A)$	$C_J(pF)$
FSNC23T3V2U	3.3	4.5	9	32	18	1.0	300
FSNC23T5V2U	5	6	9	30	18	1.0	220
FSNC23T5V2UC	5	6	9	16	20	1.0	220
FSNC23T7V2U	7	7.5	9	25	20	1.0	180
FSNC23T12V2U	12	13.5	18	15	28	1.0	100
FSNC23T15V2U	15	16.5	22	11	33	1.0	80
FSNC23T24V2U	24	26.5	33	6	48	1.0	60
FSNC23T36V2U	36	40	55	3	65	1.0	50

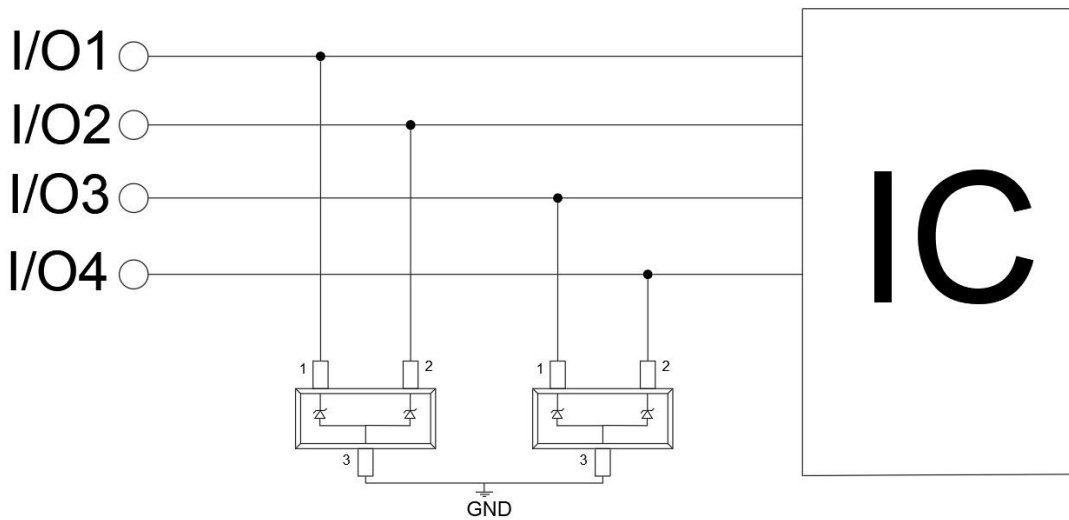
$V_{RWM}$	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@ $I_T=1mA$
$I_T$	Test Current 测试电流
$I_R$	Reverse Leakage Current 反向漏电流@ $V_{RWM}$
$V_C$	Clamping Voltage 钳位电压
$I_{PP}$	Reverse Peak Pulse Current 浪涌电流
$C_J$	Junction Capacitance 结电容 $V_{IO}=0V, V_{P-P} = 30mV, f = 1MHz$



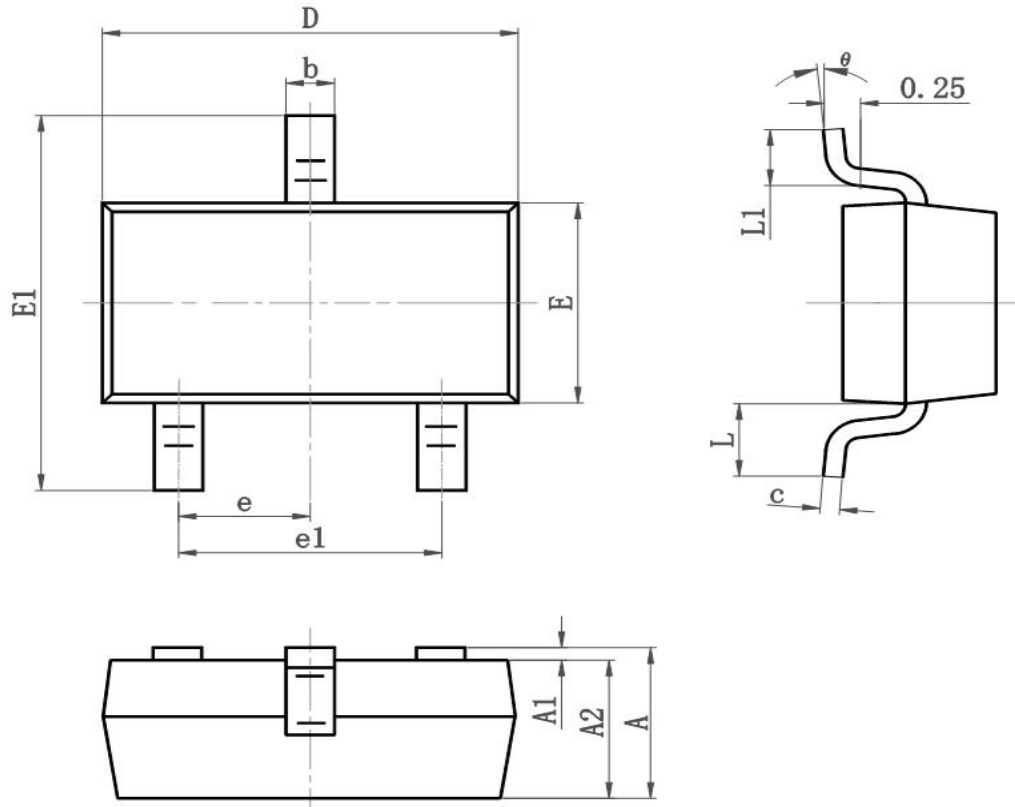
■ Typical Characteristic Curve 典型特性曲线



■ Typical Application 典型应用



■ Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.050	0.055
E1	2.250	2.550	0.089	0.100
e	0.900	1.00	0.035	0.039
e1	1.800	2.000	0.071	0.079
L	0.500	0.600	0.020	0.024
L1	0.300	0.500	0.012	0.020
$\theta$	0°	8°	0°	8°