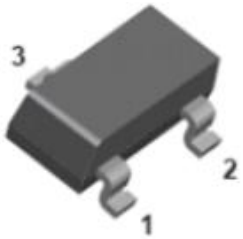
安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO. , LTD.

FSNC23T**2U

SOT-23 ESD 静电保护二极管

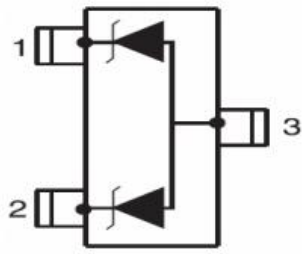


■Features 特点

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
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

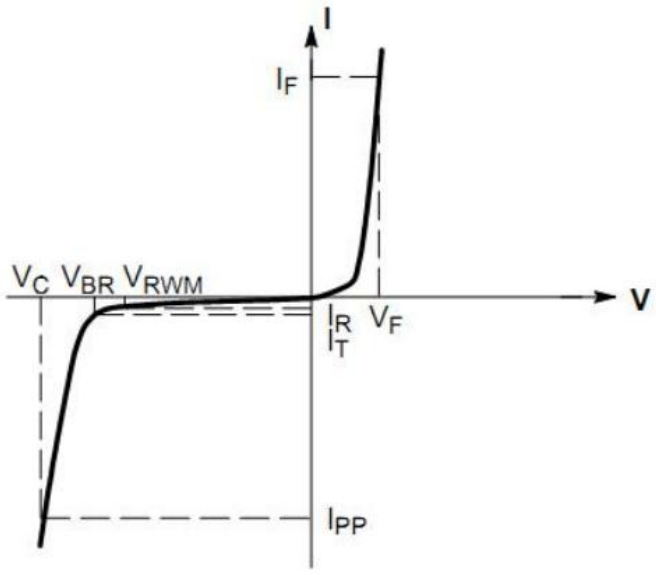
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25℃接触放电	V_{ESD}	±30	KV
ESD (IEC61000-4-2 air discharge) @25℃空气放电	V_{ESD}	±30	KV
Peak Pulse Power @25℃峰值脉冲功率	P_{PK}	450	W
Forward Voltage 正向电压@I_F=10mA	V_F	0.8	V
Lead Temperature 管脚温度	T_L	260	℃
Lead Solder Time 管脚焊接时间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

■Electrical Characteristics 电特性

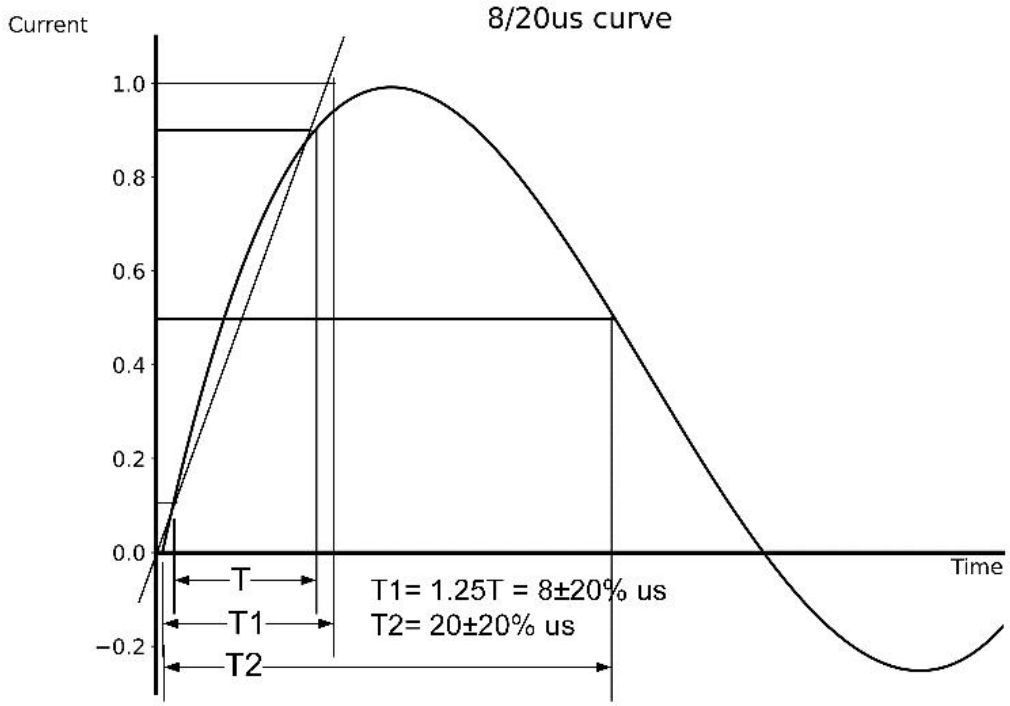
(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃)

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(uA)	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

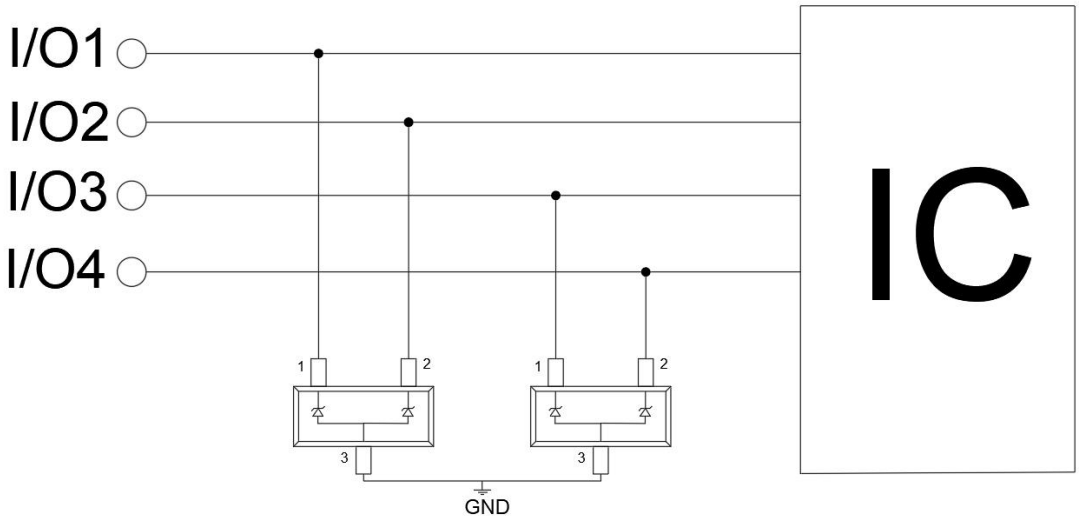
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@I_T=1mA
I_T	Test Current 测试电流
I_R	Reverse Leakage Current 反向漏电流@V_{RWM}
V_C	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_J	Junction Capacitance 结电容 V_{IO}=0V, V_{P-P} = 30mV, f = 1MHz



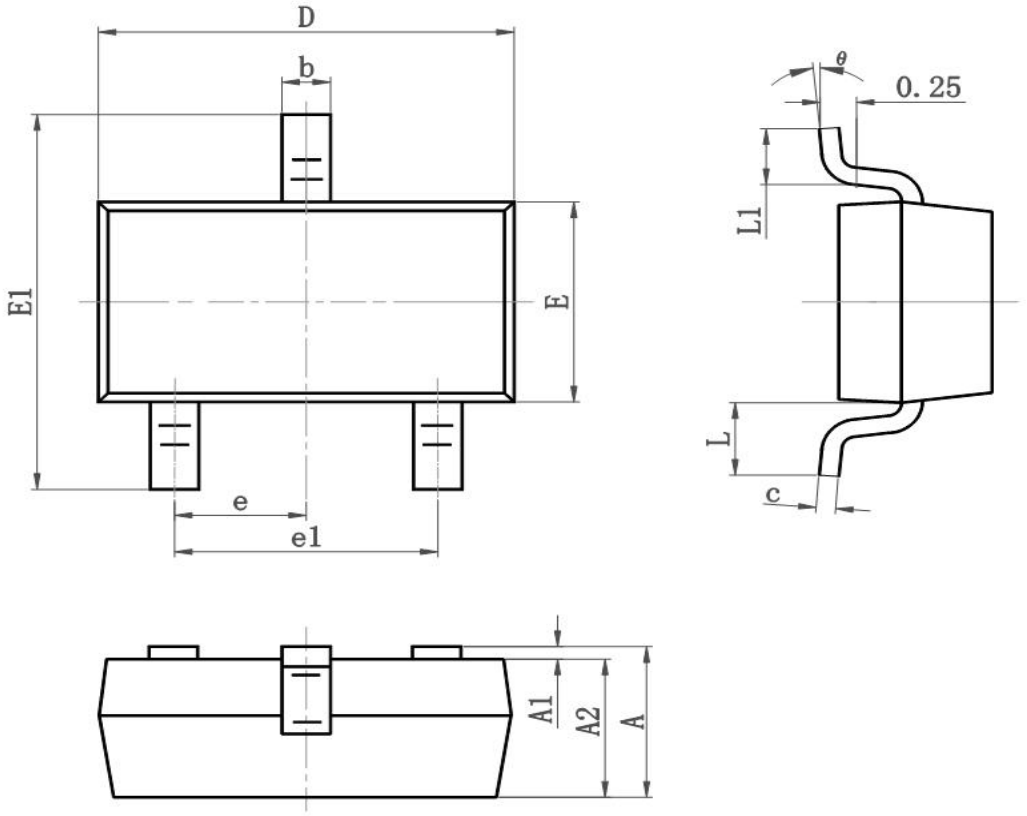
■Typical Characteristic Curve 典型特性曲线



■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	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°