

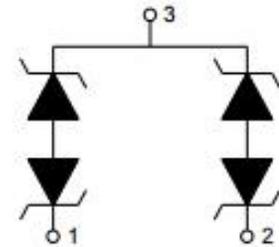
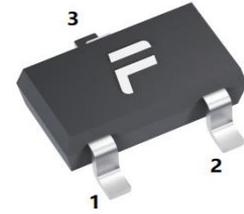
SOT-23 ESD 静电保护二极管

■ Features 特点

Two Bidirectional Lines 两个双向
ESD Protection 静电保护

■ Applications 应用

Portable electronics 便携式电子产品
Control & monitoring systems 控制与监视系统
PowerTrain Control Units 电力机车控制单元
Factory Automation 工业自动化
Lightning Control 照明控制



■ Device Marking 产品打标

tAN/86

■ Absolute Maximum Ratings 最大额定值

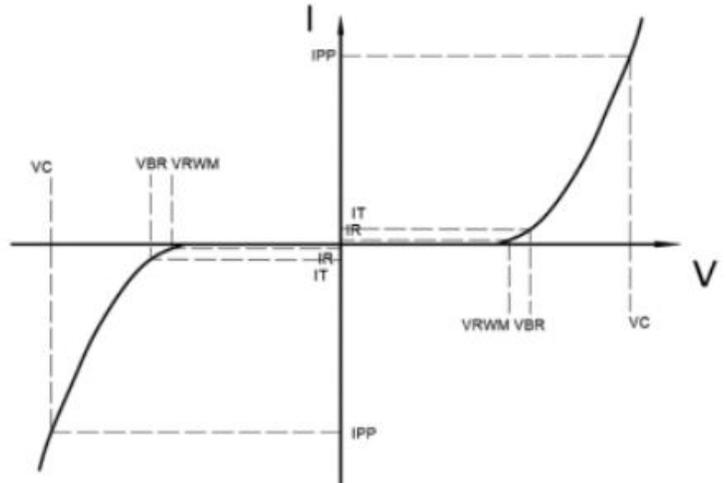
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V_{ESD}	± 15	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	V_{ESD}	± 20	KV
Peak Pulse Power @25°C峰值脉冲功率	P_{PK}	160	W
Peak Pulse Current @25°C峰值脉冲电流	I_{PP}	4	A
Lead Temperature 管脚温度	T_L	260	°C
Lead Solder Time 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**

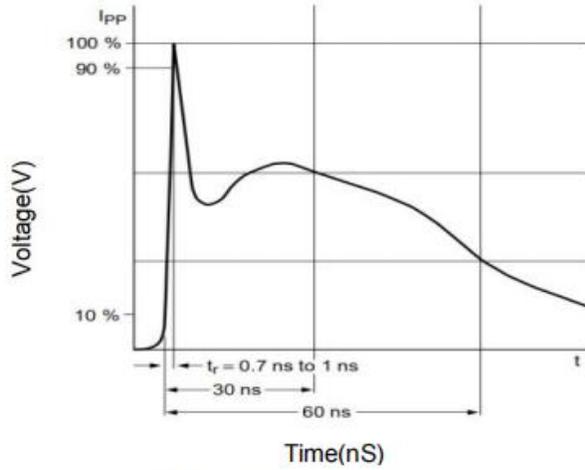
($T_A=25^\circ\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic Parameters 特性参数	Symbol 符号	Min 最小值	Typ 典型值	Max 最大值	Unit 单位	Condition 条件
Reverse Stand-off Voltage 反向工作电压	V_{RWM}			24	V	
Reverse Breakdown Voltage 反向击穿电压	V_{BR}	26.7		32	V	$I_T=1\text{mA}$
Reverse Leakage Current 反向漏电流	I_R			0.1	μA	$V_{RWM}=24\text{V}$
Clamping Voltage 钳位电压	V_C		38		V	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$
Clamping Voltage 钳位电压	V_C		35 38	38 40	V	$I_{PP}=4\text{A}, t_p=8/20\mu\text{s}$ (Pin 1 or 2 to 3) (Pin 3 to 2 or 1)
Capacitance(Pin 1 or 2 to 3) 二极管电容(Pin 3 to 2 or 1)	C_D		10 5	12 6	pF	$V_R=0\text{V}, f=1\text{MHz}$ $V_R=24\text{V}, f=1\text{MHz}$

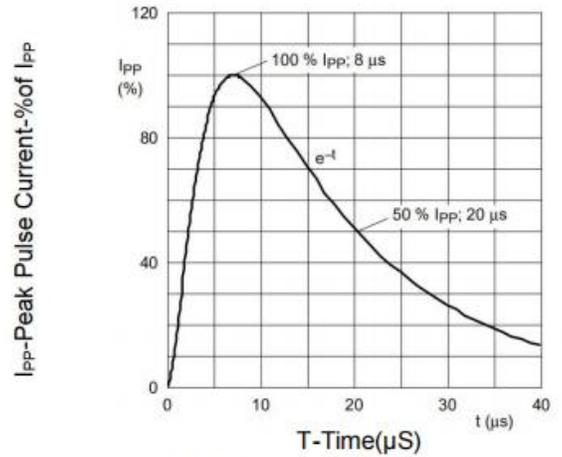
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@ $I_T=1\text{mA}$
I_T	Test Current 测试电流
I_R	Reverse Leakage Current 反向漏电流@ V_{RWM}
V_C	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_D	Diode Capacitance 二极管电容



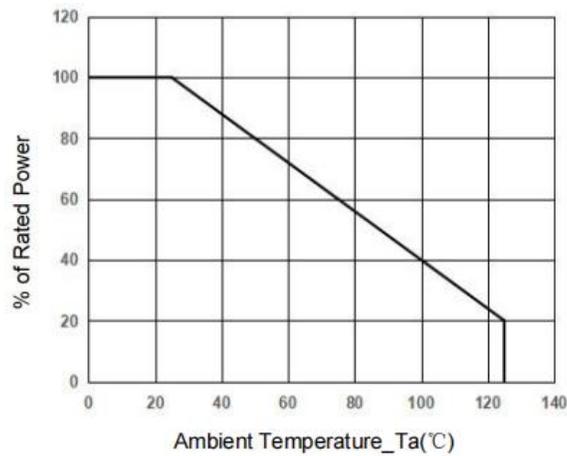
■ Typical Characteristic Curve 典型特性曲线



IEC61000-4-2 Pulse Waveform

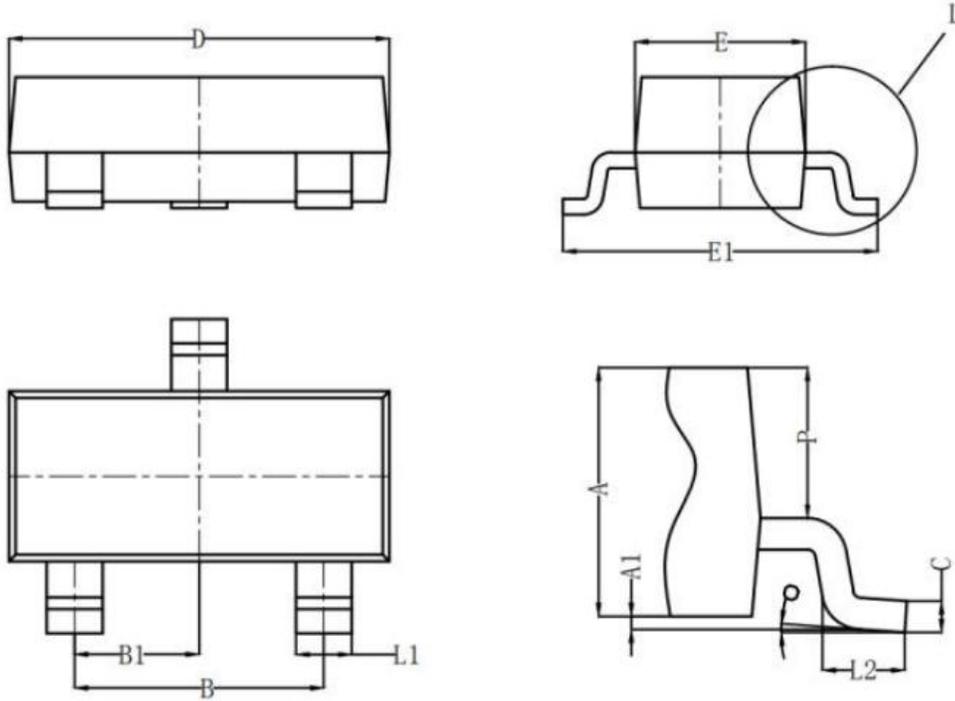


IEC61000-4-5 8X20μS Pulse Waveform



Power Derating Curve

■ Dimension 外形封装尺寸



Symbol	Dimensions (mm)		
	Min	Typ	Max
A	0.900	1.000	1.1100
A1	0.000	0.050	0.100
L1	0.350	0.400	0.500
C	0.100	0.110	0.120
D	2.800	2.900	3.000
E	1.250	1.300	1.350
E1	2.250	2.400	2.550
B	1.800	1.900	2.000
B1	0.950 Typ		
L2	0.200	0.350	0.450
P	0.550	0.575	0.600