

SOP-8 ESD 静电保护二极管

■Features 特点

Four Un-directional ESD Protection 四个单向静电保护

Low capacitance 低电容

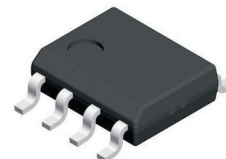
■Applications 应用

Base Station Switch System 基站交换机系统

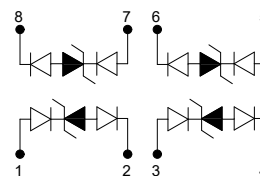
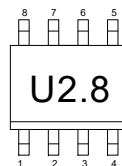
Ethernet WAN/LAN Equipment 以太网局域网设备

Desktops, Servers, and Notebooks 台式、服务器、笔记本电脑

Marking 印字: U2.8



■Internal Schematic Diagram 内部结构



■Absolute Maximum Ratings 最大额定值

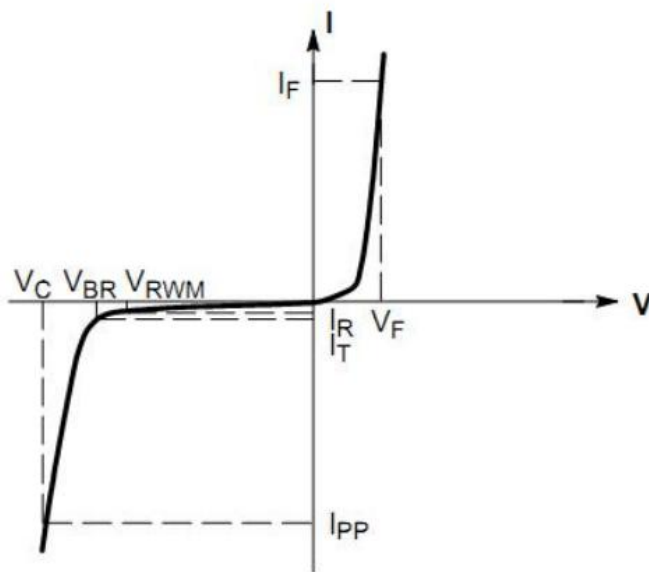
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V_{ESD}	± 30	KV
ESD (IEC61000-4-2 air discharge) @25°C 空气放电	V_{ESD}	± 30	KV
Peak Pulse Current @25°C峰值脉冲电流	I_{PP}	20	A
Peak Pulse Power @25°C峰值脉冲功率	P_{PK}	450	W
Lead Temperature 管脚温度	T_L	260	°C
Lead Solder Time 管脚焊接时间	T_L	10	S
Operating Temperature 工作温度	T_{op}	-40~85	°C
Junction Temperature 结温	T_J	-55~125	°C
Storage Temperature 储存温度	T_{stg}	-55~150	°C

■ Electrical Characteristics 电特性

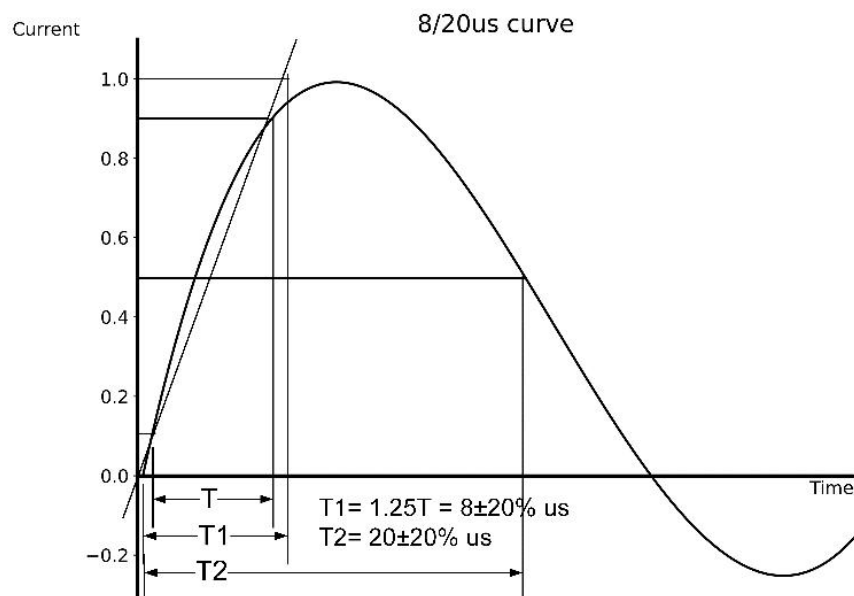
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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}			2.8	V	
Reverse Breakdown Voltage 反向击穿电压	$V_{\text{R(BR)}}$	3			V	$I_{\text{T}}=1\text{mA}$
Reverse Leakage Current 反向漏电流	I_{R}			0.1	μA	$V_{\text{RWM}}=2.8\text{V}$
Clamping Voltage 钳位电压	V_{C}		5		V	$I_{\text{PP}}=1\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Clamping Voltage 钳位电压	V_{C}		25		V	$I_{\text{PP}}=20\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Junction Capacitance 结电容	C_{J}		3		pF	$V_{\text{R}}=0\text{V}, f=1\text{MHz}$

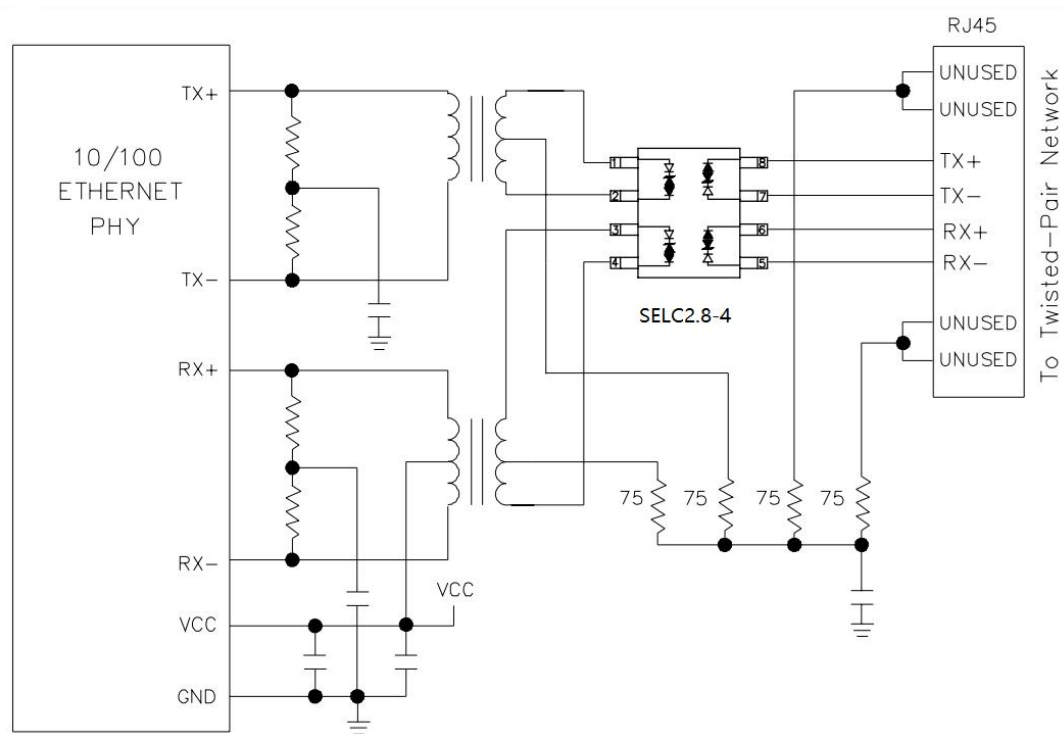
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{\text{R(BR)}}$	Reverse Breakdown Voltage 反向击穿电压@ $I_{\text{T}}=1\text{mA}$
I_{T}	Test Current 测试电流
I_{R}	Reverse Leakage Current 反向漏电流@ V_{RWM}
V_{C}	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_{J}	Junction Capacitance 结电容 $V_{\text{IO}}=0\text{V},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



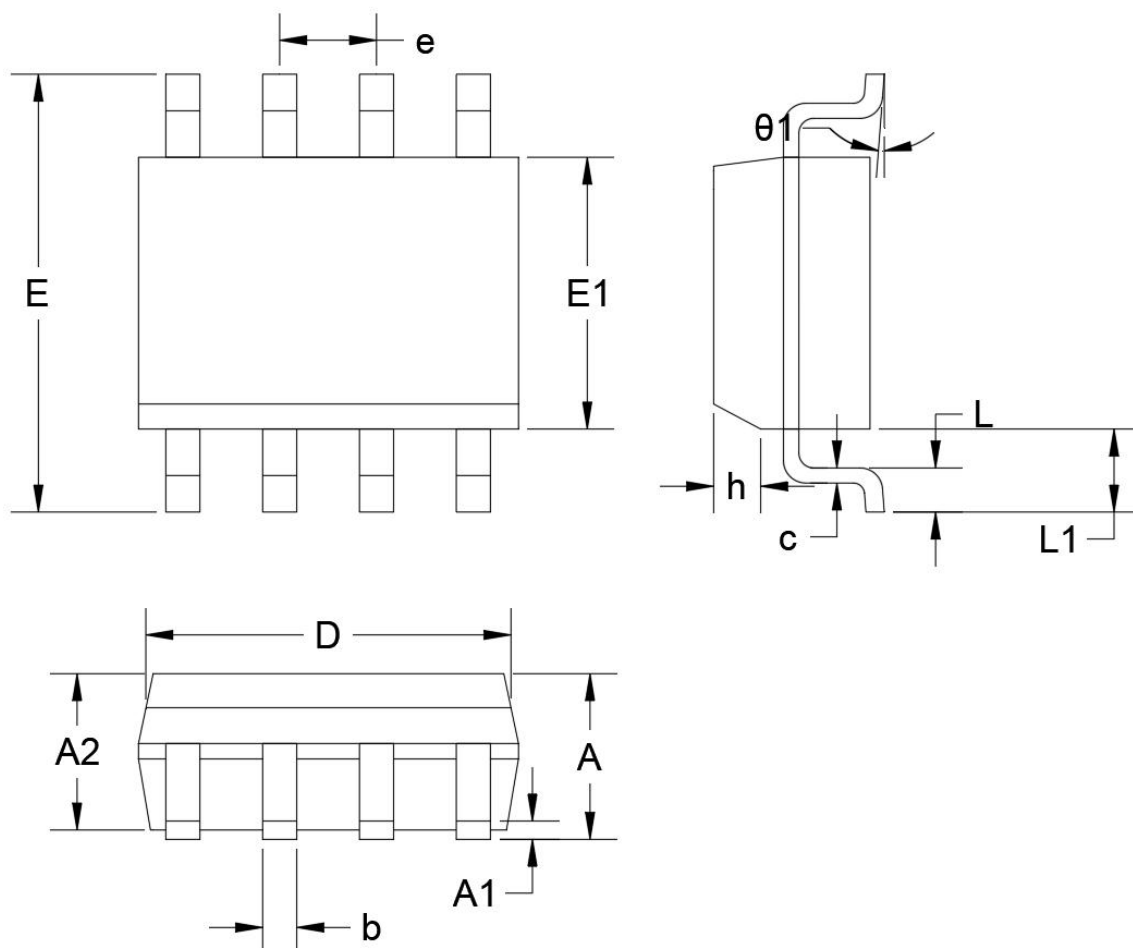
■ Typical Characteristic Curve 典型特性曲线



■ Typical Application 典型应用



■ Dimension 外形封装尺寸



Dimensions in Millimeters					
Symbol	Min.	Max.	Symbol	Min.	Max.
A	1.35	1.75	e	1.27 BSC	
A1	0.10	0.25	h	0.25	0.50
A2	1.25	1.65	L	0.40	1.04
b	0.31	0.51	L1	1.04	
c	0.17	0.25	$\theta 1$	0°	8°
D	4.80	5.00			
E1	3.80	4.00			
E	6.00 BSC				