

SOD-323 ESD 静电保护二极管

■ Features 特点

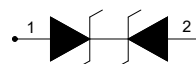
Bidirectional ESD Protection 双向静电保护

■ Applications 应用

LIN-bus protection 串行通信总线保护

Automotive applications 自动系统应用

■ Device Marking 产品打标



■ Absolute Maximum Ratings 最大额定值

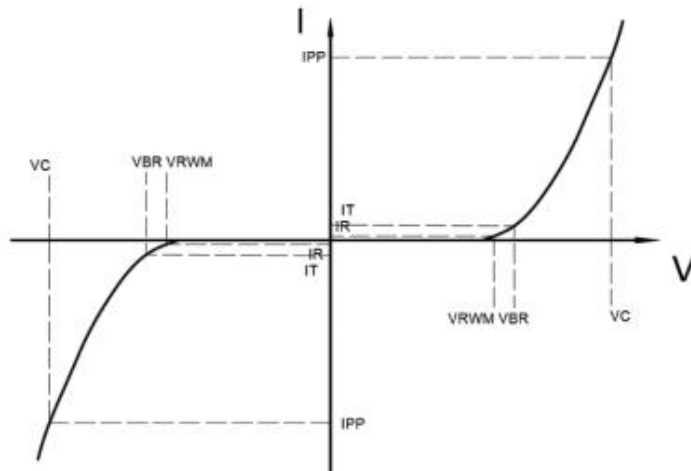
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge)@25°C接触放电	V_{ESD}	± 30	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	V_{ESD}	± 30	KV
Peak Pulse Current @25°C峰值脉冲电流 pin 1 to 2	I_{PP}	9	A
Peak Pulse Current @25°C峰值脉冲电流 pin 2 to 1	I_{PP}	6	A
Peak Pulse Power @25°C峰值脉冲功率	P_{PK}	350	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

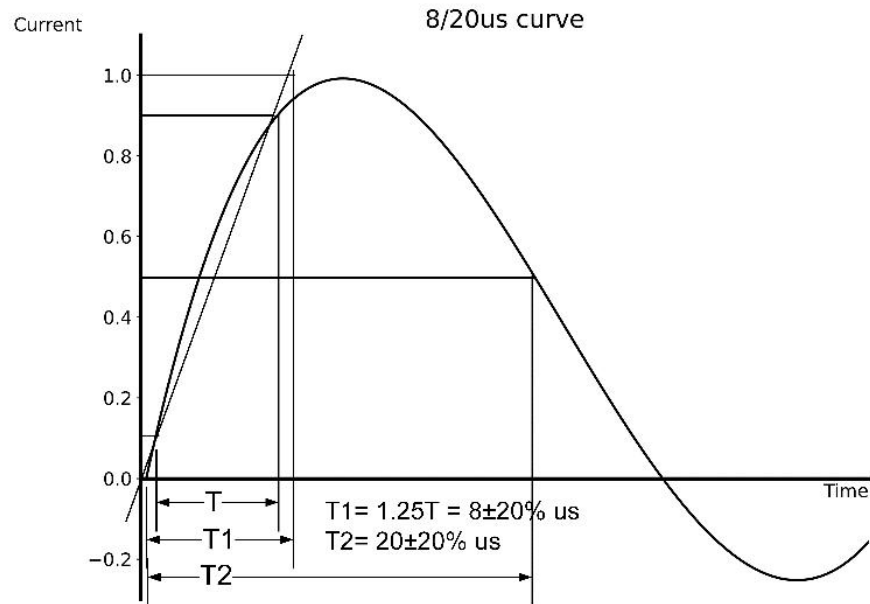
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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}			15/24	V	
Reverse Breakdown Voltage 反向击穿电压	$V_{\text{R(BR)}}$	16.5/26			V	$I_{\text{T}}=1\text{mA}$
Reverse Leakage Current 反向漏电流	I_{R}			1	μA	$V_{\text{R}}=V_{\text{RWM}}$
Clamping Voltage 钳位电压	V_{C}		25/40		V	$I_{\text{PP}}=1\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Clamping Voltage 钳位电压	V_{C}		55/63		V	$I_{\text{PP}}=9/6\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Junction Capacitance 结电容	C_{J}		30		pF	$V_{\text{R}}=0\text{V}, f=1\text{MHz}$

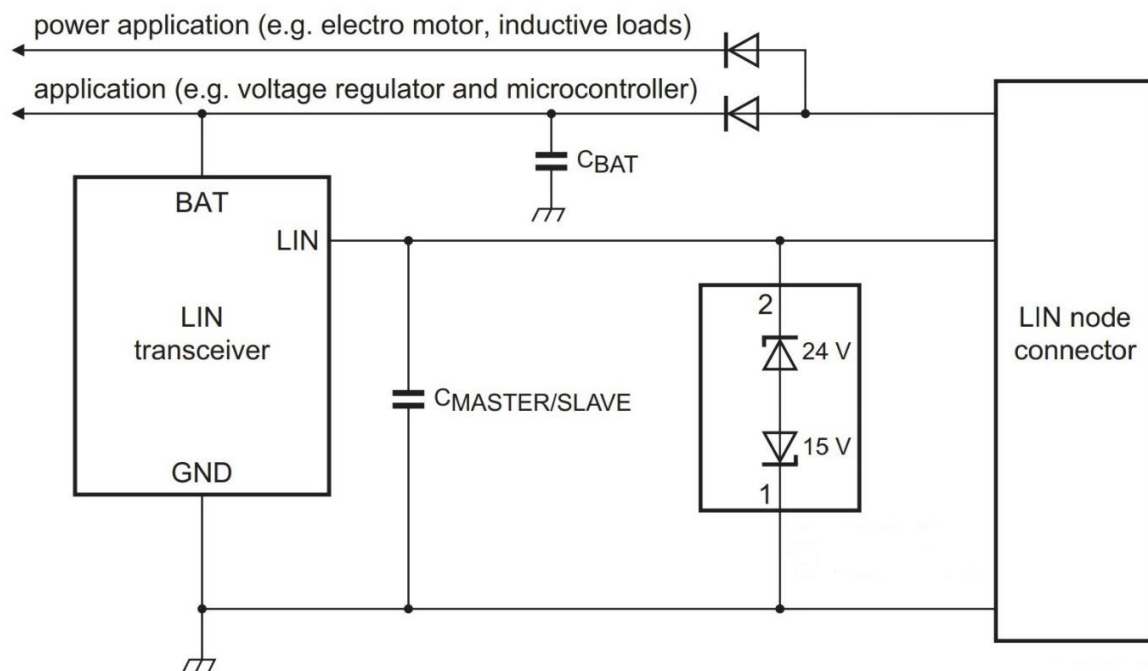
Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_{R}	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_{T}
I_{T}	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_{C}	Clamping Voltage @ I_{PP}
I_{F}	Forward Current
V_{F}	Forward Voltage @ I_{F}



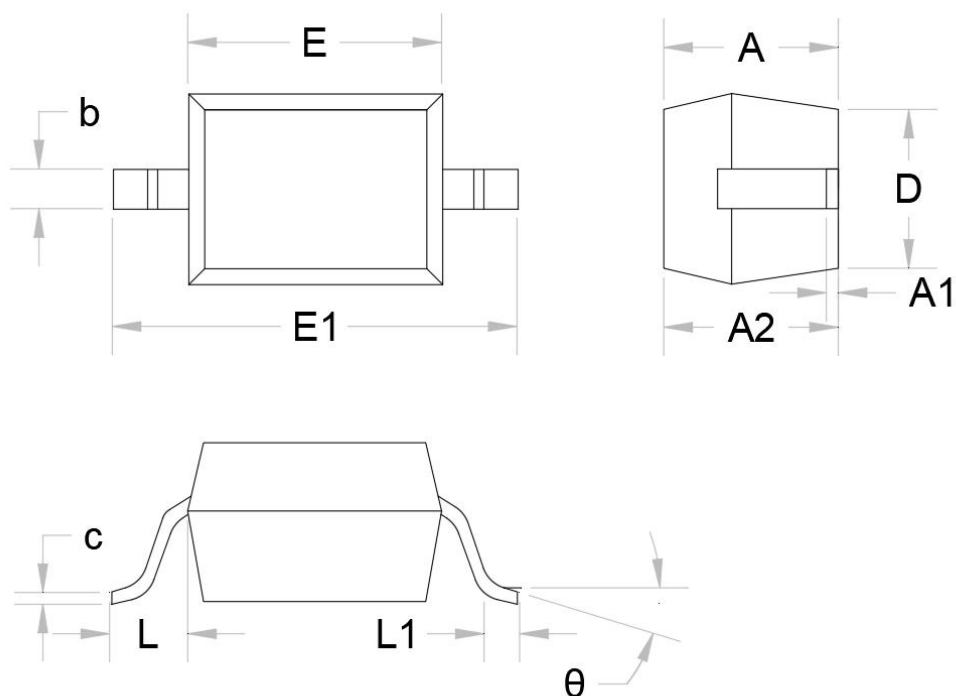
■ Typical Characteristic Curve 典型特性曲线



■ 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		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
C	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475REF		0.019REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°