



## SOD-323 ESD 静电保护二极管

### ■ Features 特点

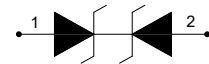
Bidirectional ESD Protection 双向静电保护

### ■ 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	$V_{ESD}$	$\pm 30$	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	$V_{ESD}$	$\pm 30$	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

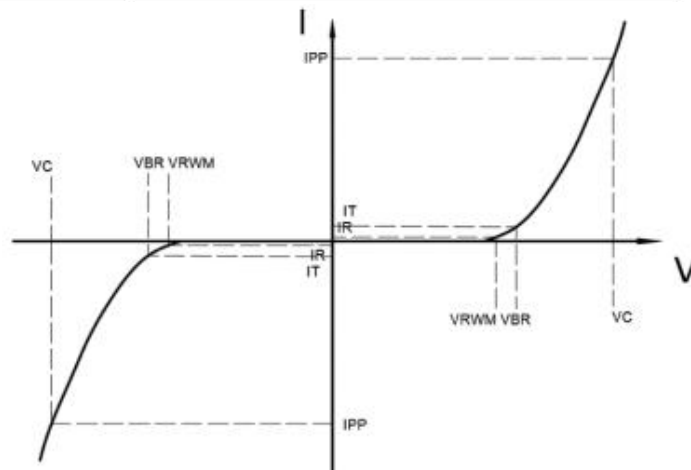


## ■ Electrical Characteristics 电特性

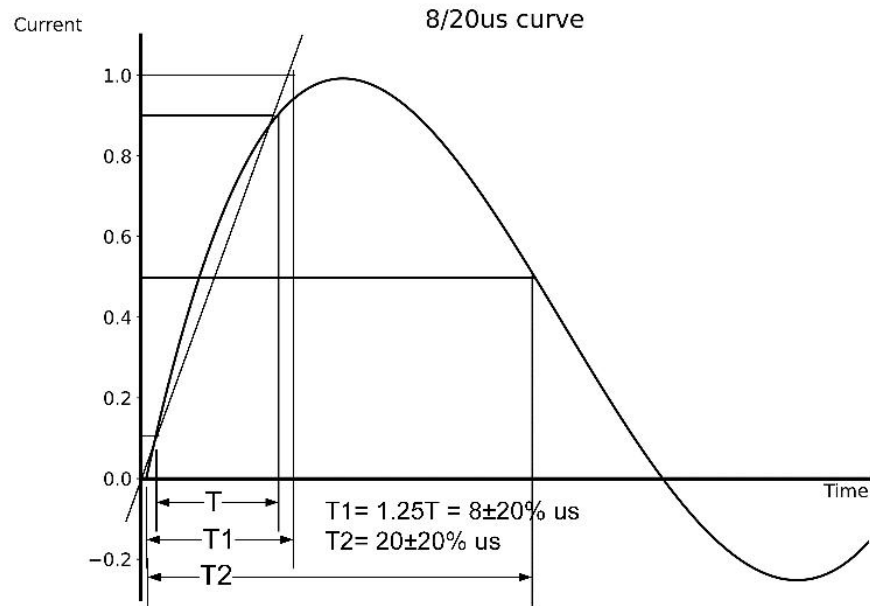
( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

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	$V_{R(BR)}$	16.5/26			V	$I_T=1\text{mA}$
Reverse Leakage Current 反向漏电流	$I_R$			1	$\mu\text{A}$	$V_R=V_{RWM}$
Clamping Voltage 钳位电压	$V_C$		25/40		V	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$
Clamping Voltage 钳位电压	$V_C$		55/63		V	$I_{PP}=9/6\text{A}, t_p=8/20\mu\text{s}$
Junction Capacitance 结电容	$C_J$		30		pF	$V_R=0\text{V}, f=1\text{MHz}$

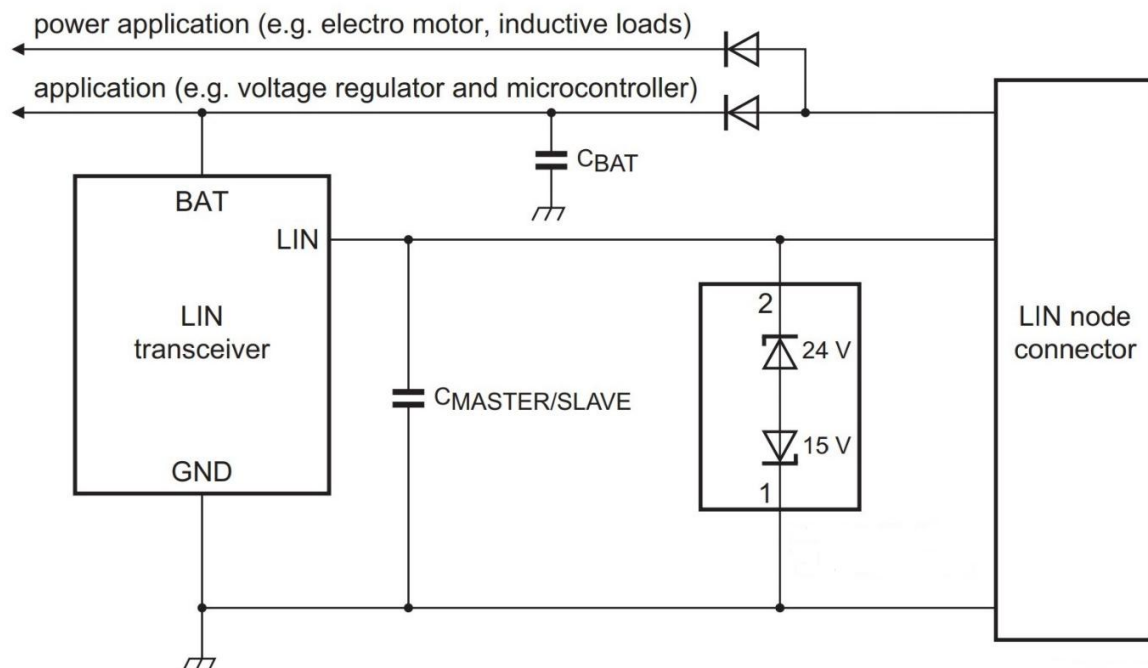
Symbol	Parameters
$V_{RWM}$	Peak Reverse Working Voltage
$I_R$	Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$I_F$	Forward Current
$V_F$	Forward Voltage @ $I_F$



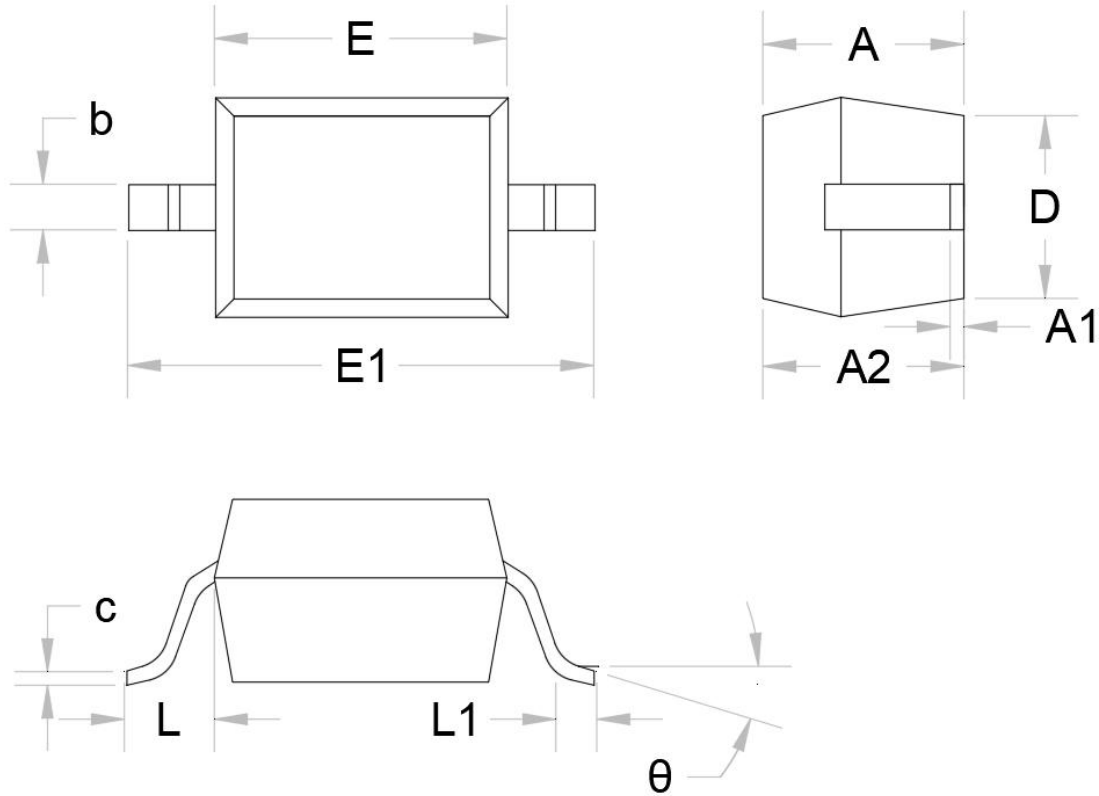
## ■ Typical Characteristic Curve 典型特性曲线



## ■ 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°