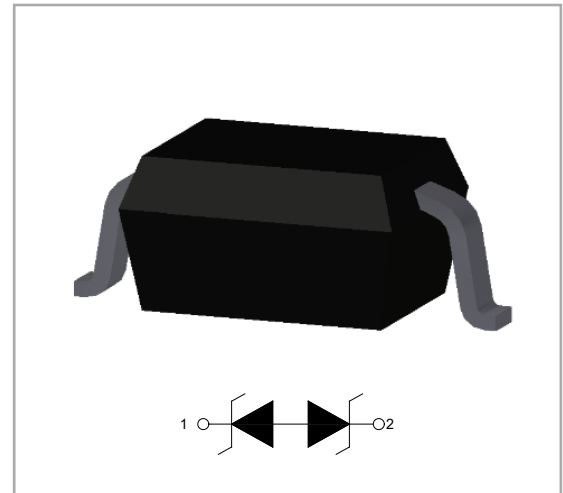


## ■ Features

- 350W Peak pulse Power (8/20us)
- Low clamping voltage
- Working voltage: 15/24V
- Low leakage current
- RoHS compliant
- Protecting one bi-directional lines
- Junction capacitance: 30pF Typ
- IEC 61000-4-2 Level 4 ESD Protection  
±30kV Contact Discharge  
±30kV Air Discharge



**SOD-323**

## ■ Applications

- LIN-bus protection
- Automotive applications

## ■ Absolute Maximum Rating(TA = 25°C unless otherwise noted)

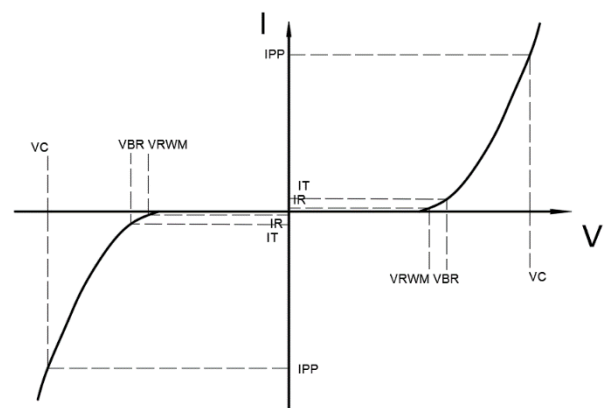
Parameters	Symbol	Min.	Max.	Unit
Peak pulse power (tp=8/20us)@25°C	P <sub>pk</sub>	-	350	W
Peak pulse current (tp=8/20us, pin1 to 2)@25°C	I <sub>pp</sub>	-	9	A
Peak pulse current (tp=8/20us, pin2 to 1)@25°C	I <sub>pp</sub>	-	6	A
ESD (IEC61000-4-2 air discharge) @25°C	V <sub>ESD</sub>	-	±30	kV
ESD (IEC61000-4-2 contact discharge) @25°C	V <sub>ESD</sub>	-	±30	kV
Junction temperature	T <sub>J</sub>	-	125	°C
Operating temperature	T <sub>OP</sub>	-40	85	°C
Storage temperature	T <sub>STG</sub>	-55	150	°C
Lead temperature	T <sub>L</sub>	-	260	°C

**■ Electrical Characteristics (TA = 25°C unless otherwise noted)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	$V_{RWM}$	Pin1 to Pin2			15	V
		Pin2 to Pin1			24	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$ , Pin1 to Pin2	16.5			V
		$I_T=1mA$ , Pin2 to Pin1	26			V
Reverse Leakage Current	$I_R$	$V_{RWM}=15V$			1	$\mu A$
		$V_{RWM}=24V$			1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP}=1A$ ; Pin1 to 2; $t_p=8/20\mu s$		25		V
		$I_{PP}=9A$ ; Pin1 to 2; $t_p=8/20\mu s$		55		V
		$I_{PP}=1A$ ; Pin2 to 1; $t_p=8/20\mu s$		40		V
		$I_{PP}=6A$ ; Pin2 to 1; $t_p=8/20\mu s$		63		V
Junction Capacitance	$C_J$	I/O to GND; $V_R=0V$ ; $f=1MHz$		30		pF

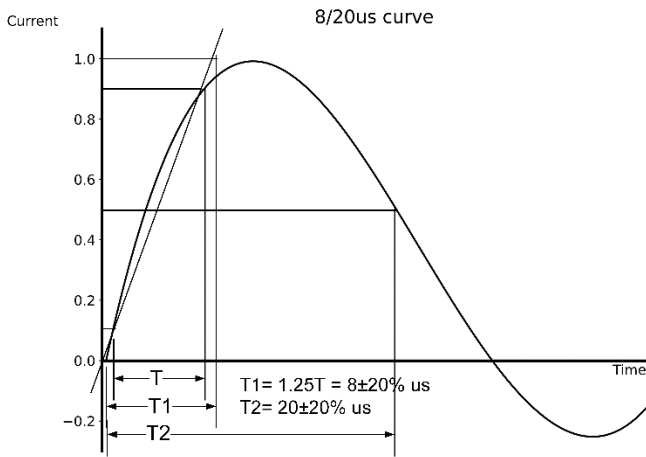
**■ Electrical Parameters (TA = 25°C unless otherwise noted)**

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 @ $I_F$

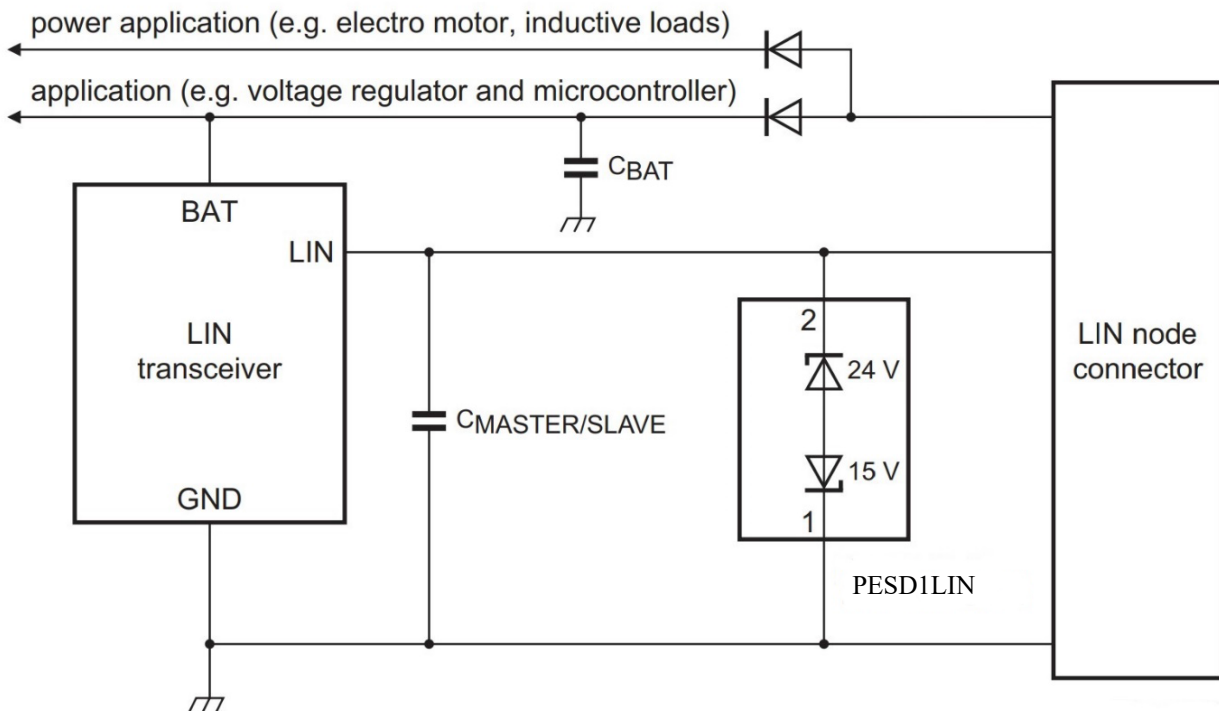




### ■ Typical Characteristics

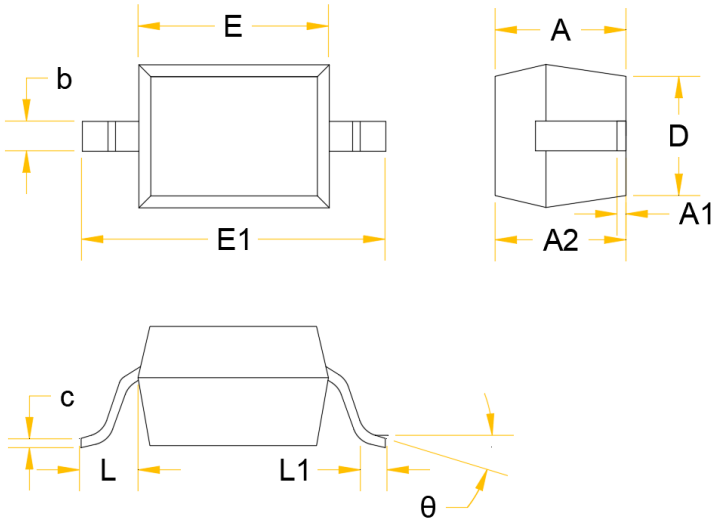


### ■ Typical Application





■ Outline Drawing – SOD-323



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°

■ ORDERING INFORMATION

Part Number	Package	Marking	Packing	Quantity per reel	Reel Size
PESD1LIN	SOD-323	AM	Tape & Reel	3,000 PCS	7 inches