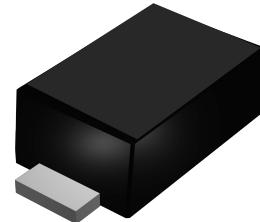


## Features

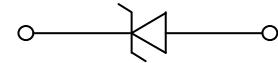
- 100W peak pulse power ( $T_P=8/20\mu S$ )
- SOD-923 package
- Unidirectional configuration
- Protects one I/O port
- Ultra low capacitance
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2  
±15KV contact , ±15KV air
- RoHS compliant



**Package: SOD-923**

## Applications

- Digital Visual Interface (DVI)
- LVDS
- USB
- High Definition Multi-Media Interface (HDMI)



**Schematic Diagram**

## Absolute Maximum Ratings

( $T_A=25^\circ C$  unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $t_P = 8/20\mu S$ )	$P_{PP}$	100	W
Peak Pulse Current ( $t_P = 8/20\mu S$ )	$I_{PP}$	5	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage Temperature	$T_{STG}$	-55 to +150	°C

## Electrical Characteristics

( $T_A=25^\circ C$  unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Stand-off Voltage	$V_{RWM}$		-	-	3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	5.0	-		V
Reverse Leakage Current	$I_R$	$V_R=3.3V$	-	-	1.0	µA
Clamping Voltage	$V_C$	$I_{PP}=1A, T_P=8/20\mu S$	-	8	12	V
Clamping Voltage	$V_C$	$I_{PP}=5A, T_P=8/20\mu S$	-	16	20	V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$	-	0.45	0.65	pF



STEIFPOWER  
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## SPESLC3V3D923-2U Low Capacitance ESD Protection Diode

### Typical Characteristic Curves

Fig.1 ESD Clamping Voltage Screenshot  
Positive 8 kV Contact per IEC61000-4-2

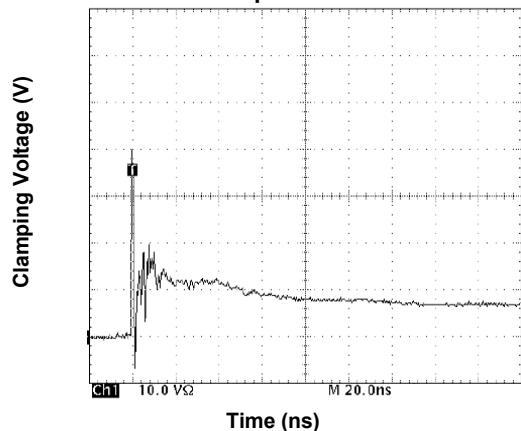


Figure 2. ESD Clamping Voltage Screenshot  
Negative 8 kV Contact per IEC61000-4-2

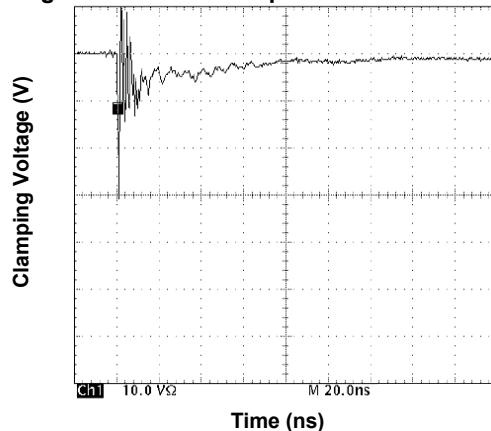


Fig.3 Pulse Waveform-8/20 $\mu$ s

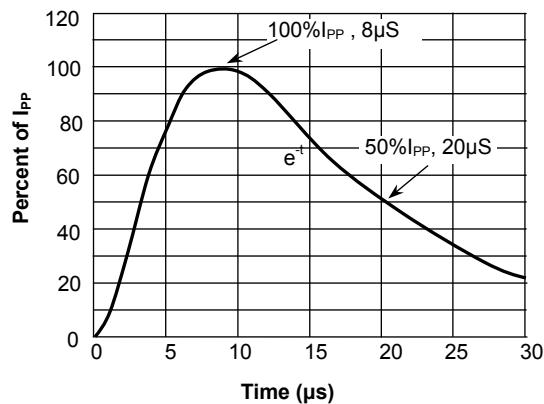
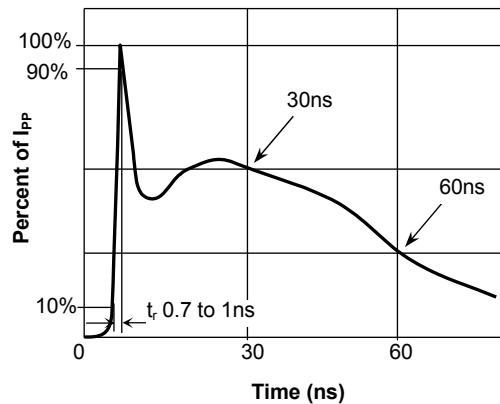
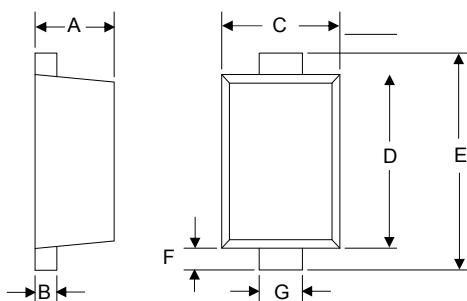


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

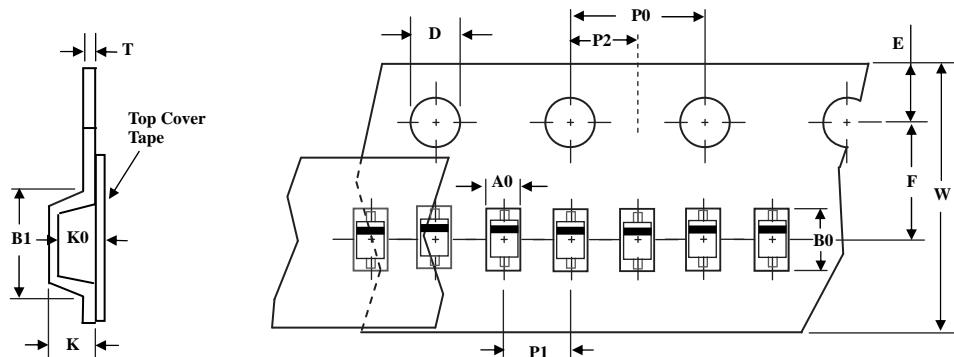


### Product Dimensions



Dim	millimeters	
	min	max
A	0.34	0.43
B	0.07	0.17
C	0.55	0.65
D	0.75	0.85
E	0.95	1.05
F	0.05	0.15
G	0.15	0.25

## Package Information



TapeSize(W)	B1 max	D	E	F	K max	P0	P1	P2	T max	W max
8	4.55	1.55±0.05	1.75±0.1	3.5±0.05	2.4	4.0±0.1	2.0±0.05	2.0±0.05	0.6	8.3

Note: 1. Unit : mm

2. A0, B0, and K0 are determined by component size. The clearance between the components and the cavity must be within 0.05mm min to 0.50 mm max. The component cannot rotate more than 10° within the determined cavity.

## Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
SPESLC3V3D923-2U	SOD-923	P	Tape & Reel	10000pcs / Reel	RoHS compliant