



Electro-static Discharge (ESD)

SESD9D Series

Features

- Small Body Outline Dimensions:
0.039"×0.024"(1.0mm×0.60mm)
- Low Body Height:0.60" (0.40mm) Max
- Protects one I/O or power line
- Low clamping voltage
- Low leakage current
- Response Time is Typically<1ns w
- Ultra Low Capacitance:1.5pF



IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)

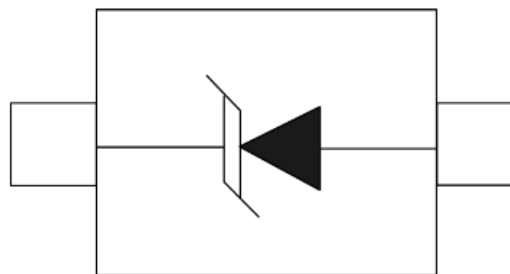
Mechanical Characteristics

- JEDEC SOD-923 package
- Molding compound flammability rating:
UL 94V-0
- Marking : Marking Code
- Packaging : Tape and Reel per EIA 481
- RoHS/WEEE Compliant

Applications

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- MP3 players

Schematic & PIN Configuration



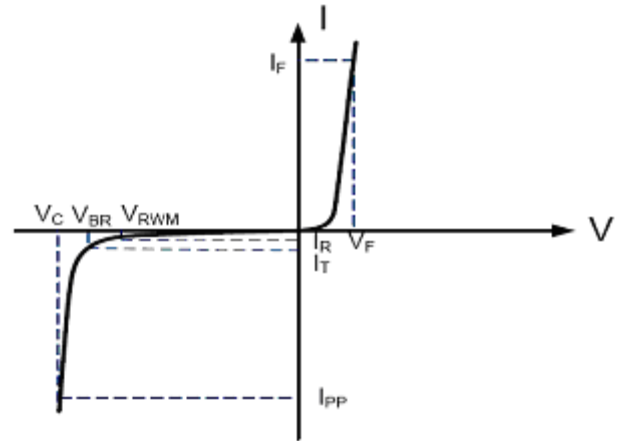
SOD-923 (Top View)

Absolute Maximum Rating

Rating	Symbol	Value	Units
Electrostatic discharge Voltage (See Note1,2)	V _{ESD}	8KV(contact)	volts
		15KV(air)	
Operating Temperature	T _J	-55to+150	°C
Storage Temperature	T _{STG}	-55to+150	°C

Electrical Parameters (T=25°C)

Symbol	Parameter
I _{PP}	Maximum Reverse Peak Pulse Current
V _C	Clamping Voltage @ I _{PP}
V _{RWM}	Working Peak Reverse Voltage
I _R	Maximum Reverse Peak Pulse Current @ V _{RWM}
V _{BR}	Breakdown Voltage @ I _T
I _T	Test Current
I _F	Forward Current
V _F	Forward Voltage @ I _F



Electrical Characteristics

Part No.	V _{RWM} (V)	I _R (μ A)	V _{BR} (V)	C(PF)	P _{PK} (W)	Package
SESD9D3V3	3.3	1.0	5.0-6.2	35	100	SOD923
SESD9D3V3C	3.3	1.0	5.0-7.0	15	100	SOD923
SESD9D5V	5.0	1.0	6.2-7.2	30	100	SOD923
SESD9D5C	5.0	1.0	5.6-7.8	15	100	SOD923
SESD9D7V	7.0	1.0	7.5-8.7	30	100	SOD923
SESD9D12V	12	1.0	13.5-15.5	25	100	SOD923
SESDLC9D5V	5	1.0	5.4-8.5	0.8	100	SOD923

Typical Characteristics

Table 1: IEC 61000-4-2 Spec.

IEC 61000-4-2 Spec.

Level	Test Voltage (kV)	First Peak Current (A)	Current at 30 ns (A)	Current at 60 ns (A)
1	2	7.5	4	2
2	4	15	8	4
3	6	22.5	12	6
4	8	30	16	8

Figure 1: IEC61000-4-2 Waveform

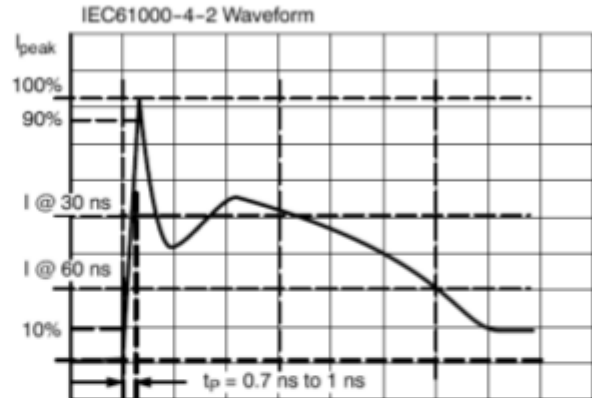


Figure 2: ESD Test Setup

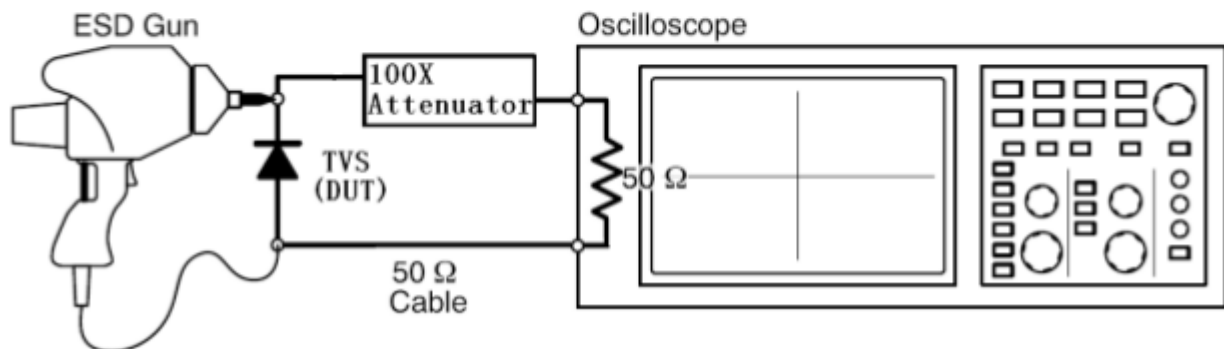
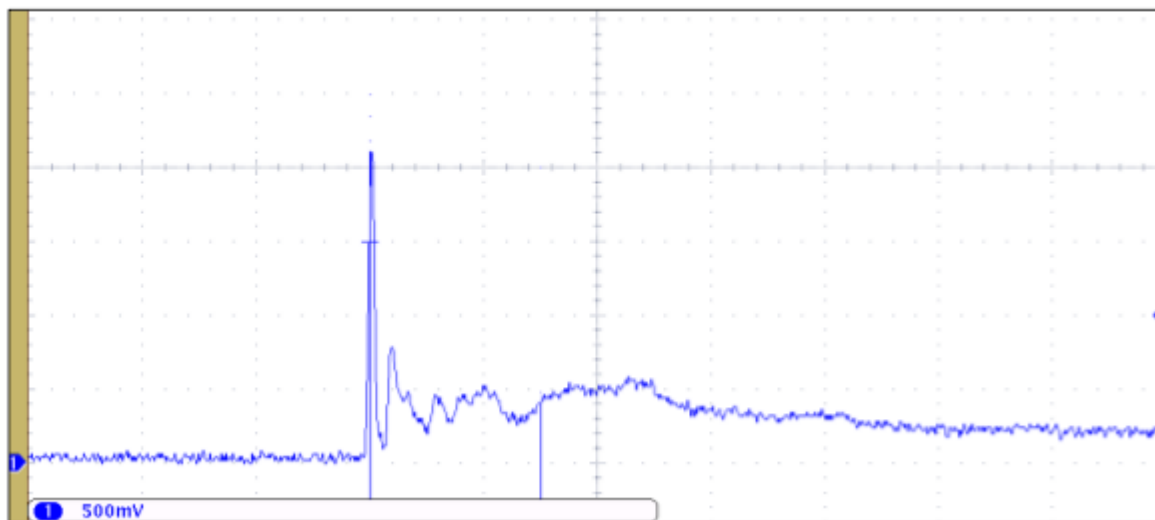
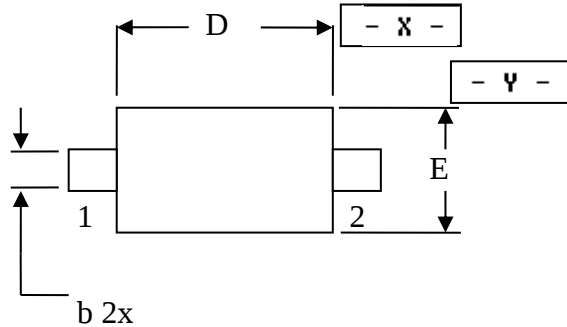


Figure 3: ESD Clamping(8kV Contact per IEC 61000-4-2)

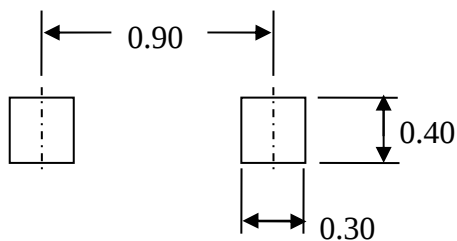
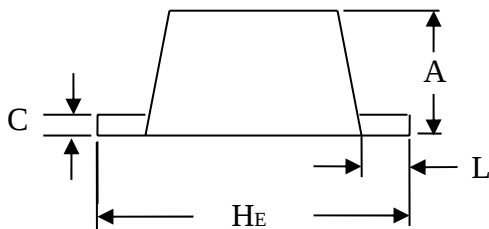


Outline Drawing – SOD-923

PACKAGE OUTLINE



$\oplus$	0.08(0.0032)	X	Y
----------	--------------	---	---



DIMENSIONS:MILLIMETERS



SOD-923

DIMENSIONS

SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.36	0.43	0.014	0.017
b	0.15	0.25	0.006	0.010
C	0.07	0.17	0.003	0.007
D	0.75	0.85	0.030	0.033
E	0.55	0.65	0.026	0.028
H _E	0.95	1.05	0.037	0.041
L	0.05	0.15	0.002	0.006

Notes:

- 1、Dimensioning and tolerancing per ansi y14.5m, 1982
- 2、Controlling dimension : millimeters.
- 3、Maximum lead thickness includes lead finish thickness. Minimum lead thickness is the minimum thickness of base material.

CONTACT INFORMATION

Add: Room 729, Saiger Science Park Building 2 east, Futian District, Shenzhen, Guangdong.

Tel: 0755-82045978-810

Fax: 0755-82044903-803