

WE05D9UC-B

Transient Voltage Suppressor

Features

- Small Body Outline Dimensions:
0.039" x 0.024" (1.0 mm x 0.60 mm)
- Low Body Height: 0.06" (0.40 mm) Max
- Protects one I/O or power line
- Working Voltage: 5 V
- Low Leakage Current
- Response Time is Typically < 1 ns
- Ultra Low Capacitance: 0.7pF



IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)

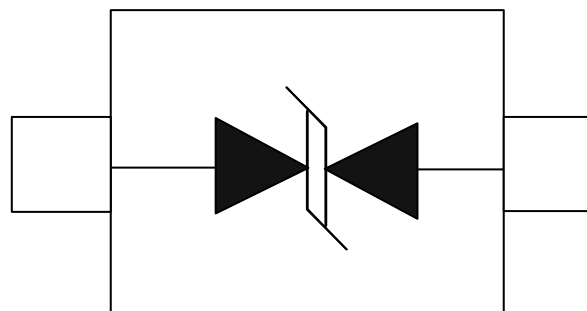
Mechanical Characteristics

- 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

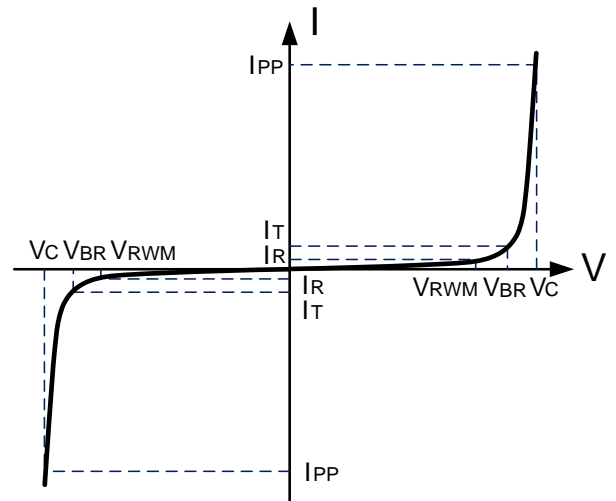


SOD-923 (Top View)

Absolute Maximum Rating			
Rating	Symbol	Value	Units
Electrostatic discharge Voltage (See Note1 ,2)	V_{ESD}	8KV (contact)	volts
		15KV (air)	
Operating Temperature	T_J	-55 to + 150	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Electrical Parameters (T=25°C)

Symbol	Parameter
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage 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

WE05D9UC-B						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0			V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25°C$			1	µA
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		0.7	1	pF

Note1: ESD Pulse Waveform according to IEC 61000-4-2 , see Table1 and Figure1

Note2: ESD tests Setup see Figure2.

Note3: The clamping Voltage data is taken with a 100x attenuator.

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

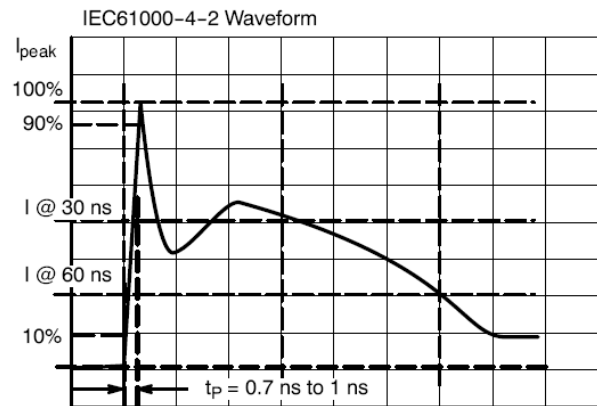
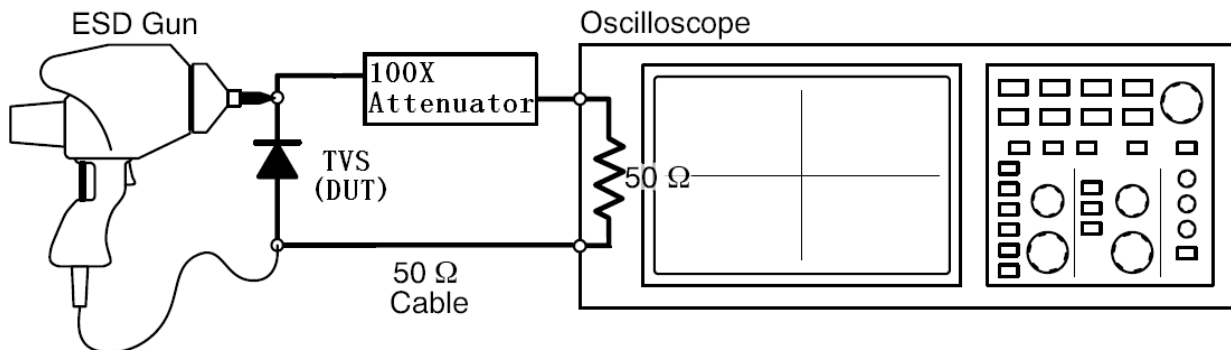
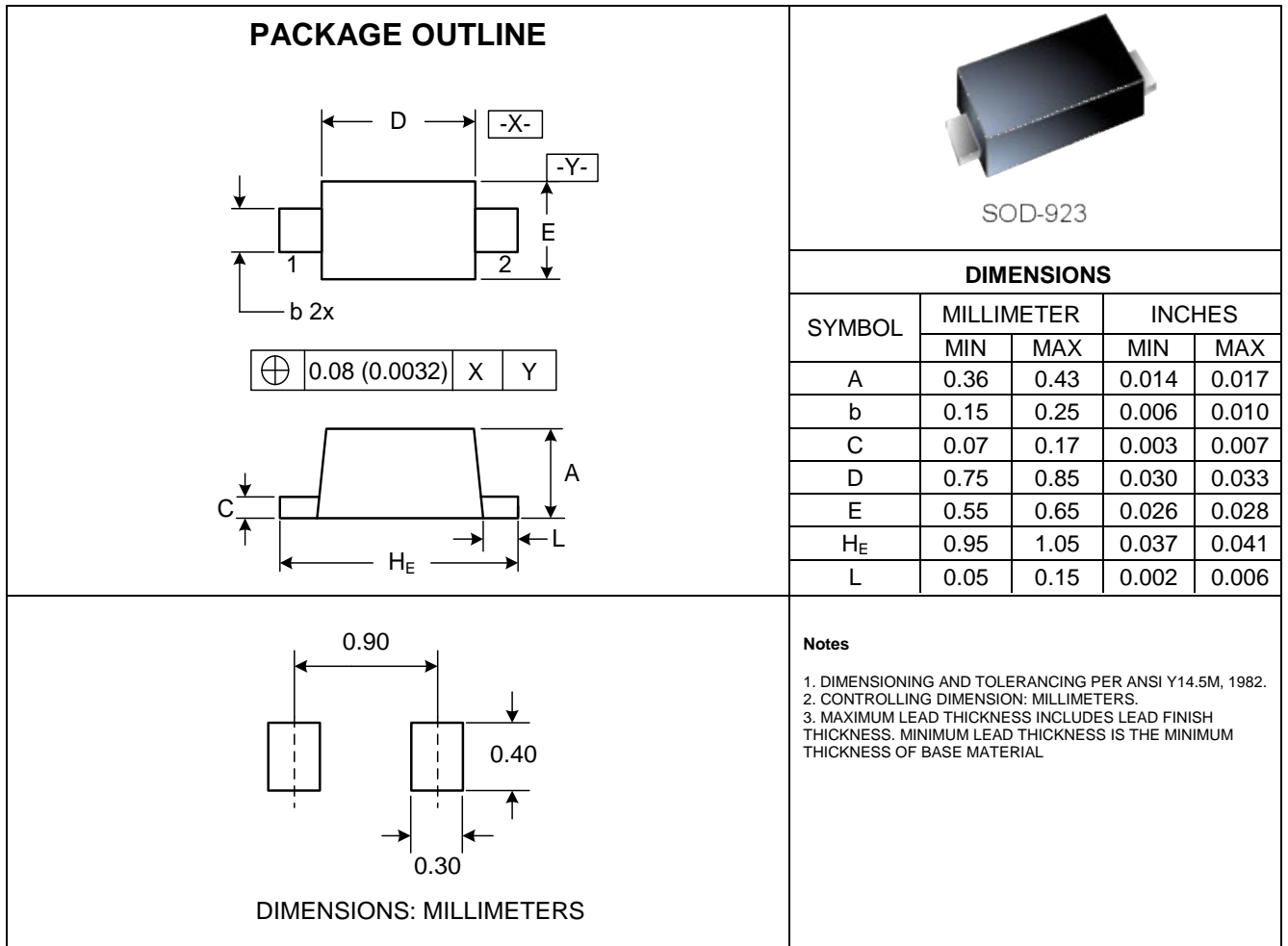


Figure 2: ESD Test Setup



Outline Drawing – SOD-923



Marking Codes



Pin Style: 1. Cathode 2. Anode