

Transient Voltage Suppressors for ESD Protection

- ◇ Bi-Directional Transient Voltage Suppressor
- ◇ Low capacitance and Low Leakage
- ◇ ESD Protection, IEC61000-4-2 Level 4
- ◇ **SOD923** Micro SMD package (Fig-1)
Dimensions: 1.0 mm x 0.6 mm (0.039" x 0.024")
- ◇ RoHS compliant
- ◇ UL-94 V-0 / Green EMC
- ◇ Matte Tin Lead finish (Pb-Free)
- ◇ Moisture Level Sensitivity 1

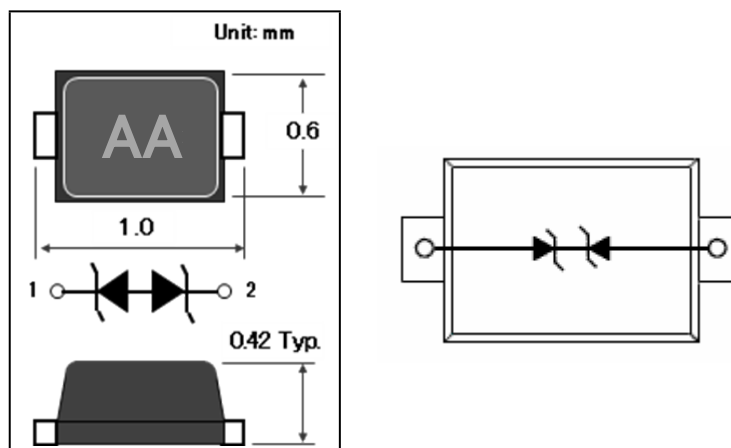


Fig -1 Package **SOD923**

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Symbol	Parameter	Value	Units
I_{PP}^{*1}	Maximum Reverse Peak Pulse Current	7.0	A
$V_{ESD-Air}$	ESD Voltage IEC61000-4-2 Air	± 15	KV
$V_{ESD-contact}$	ESD Voltage IEC61000-4-2 Contact	± 8	KV
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 to +150	$^\circ\text{C}$
P_D	Power Dissipation	150	mW

*1 $t_P = 8/20 \mu s$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

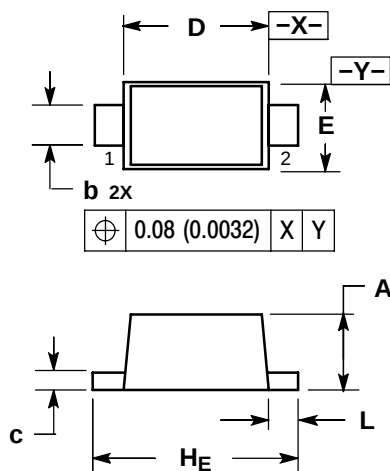
Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{RWM}	Reverse Working Peak Voltage	$I_R = \pm 1 \mu A$			5.0	V
V_{BR}	Reverse Breakdown Voltage Pin 1 to 2	$I_T = \pm 1 mA$	6.0			V
I_R	Reverse Current	$V_{RWM} = \pm 5V$			1.0	μA
V_C	Clamping Voltage	$I_{PP} = \pm 7A$, $t_P = 8/20 \mu s$			9.0	V
C_D	Diode Capacitance	$V_R = 0V$, $f = 1MHz$		10		pF

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
ESD7951ST5G	SOD923	Tape & Reel 8000pcs /7" Reel	8 mm	2 mm	Conductive	

Package Dimensions

SOD-923

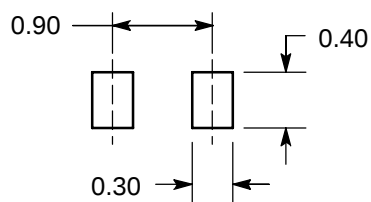


NOTES:

- DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
- CONTROLLING DIMENSION: MILLIMETERS.
- MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.34	0.37	0.40	0.013	0.015	0.016
b	0.15	0.20	0.25	0.006	0.008	0.010
c	0.07	0.12	0.17	0.003	0.005	0.007
D	0.75	0.80	0.85	0.030	0.031	0.033
E	0.55	0.60	0.65	0.022	0.024	0.026
H _E	0.95	1.00	1.05	0.037	0.039	0.041
L	0.05	0.10	0.15	0.002	0.004	0.006

SOLDERING FOOTPRINT*



DIMENSIONS: MILLIMETERS

Electrical Characteristic Curve

