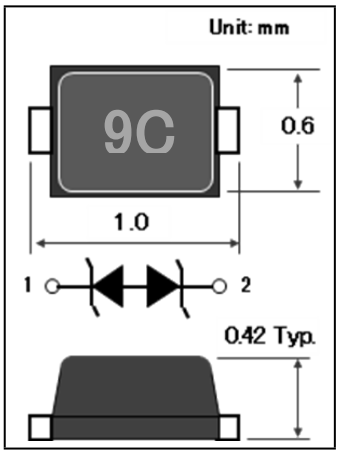
Transient Voltage Suppressors for ESD Protection

- ◇ 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



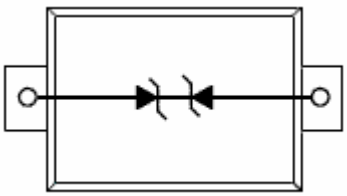


Fig -1 Package **SOD923**

Absolute Maximum Ratings (Ta = 25 ℃)

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	℃
T_{STG}	Storage Temperature	-55 to +150	℃
P_D	Power Dissipation	150	mW

*1 t_P =8/20 μ s

Electrical Characteristics (Ta = 25 ℃)

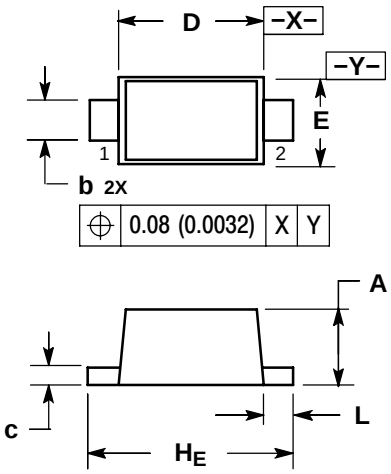
Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{RWM}	Reverse Working Peak Voltage	I_R = ±1 μ A			5.0	V
V_{BR}	Reverse Breakdown Voltage Pin 1 to 2	I_T =±1mA	6.0			V
I_R	Reverse Current	V_{RWM} =±5V			1.0	μ A
V_C	Clamping Voltage	I_{PP} =±7A, t_P =8/20 μ s			9.0	V
C_D	Diode Capacitance	V_R = 0V, f = 1MHz		13.5		pF

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
ESD9D5.0C	SOD923	Tape & Reel 8000pcs /7" Reel	8 mm	2 mm	Conductive	

Package Dimensions

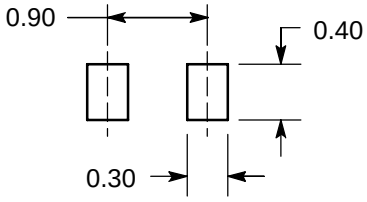
SOD−923



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.

	MILLIMETERS			INCHES		
DIM	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