

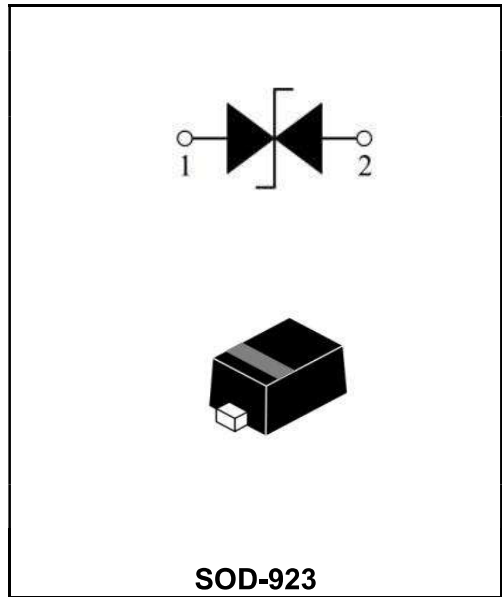
Transient Voltage Suppressor

Features

- ◆80Watts peak pulse power $t_p = 8/20\mu s$
- ◆Bidirectional configurations
- ◆Solid-state silicon-avalanchetechnology
- ◆Low clamping volta
- ◆Low leakage current
- ◆IEC 61000-4-2 $\pm 30KV$ contact $\pm 30KV$ Air
- ◆IEC 61000-4-4 (EFT) 40A (5/50 μs)
- ◆IEC 61000-4-5 (Lightning 8/20 μs): 8A

Application

- ◆Microprocessor based equipm
- ◆Personal Digital Assistants (PDA'S)
- ◆Notebooks, Desktops, and Servers
- ◆Portable Instrumentat
- ◆Pagers Peripher



Order Information

Part Number	Package	Marking	Size (mm)	Delivery Form	Delivery Quantity
ESD5VFBD923	SOD-923	C	0.79x0.59x0.4	7" T&R	8000PCS/Tape

Limiting Values(TA = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	value	Unit
V _{ESD}	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	±30	kV
		IEC 61000-4-2; Air Discharge	±30	kV
P _{PP}	Peak Pulse Power	t _P = 8/20 μs	80	W
I _{PPM}	Rated Peak Pulse Current	t _P = 8/20 μs	8	A
T _L	Lead Soldering Temperature	-	260(10seconds)	°C
T _J	Junction Temperature	-	-55 to+150	°C
T _{stg}	Storage Temperature Range	-	-55 to+150	°C

Electrical Characteristics(TA = 25 °C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
V _{RWM}	Reverse Working Voltage	TA = 25 °C	-	-	5.0	V
V _{BR}	Breakdown Voltage	I _T = 1mA	5.6	-	-	V
I _R	Reverse Leakage Current	VRWM = 5 V; TA = 25 °C	-	-	100	nA
V _C	Clamping Voltage	I _{PP} =8A, t _P =8/20 μs	-	-	10	V
C _J	Junction Capacitance	VR = 0V, f = 1 MHz	-	15	-	pF

Typical Characteristics

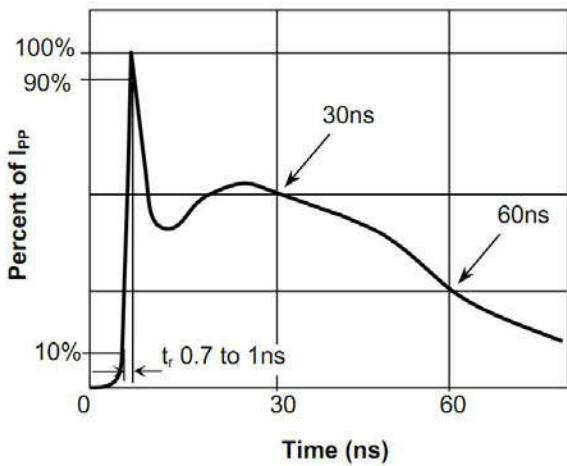


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

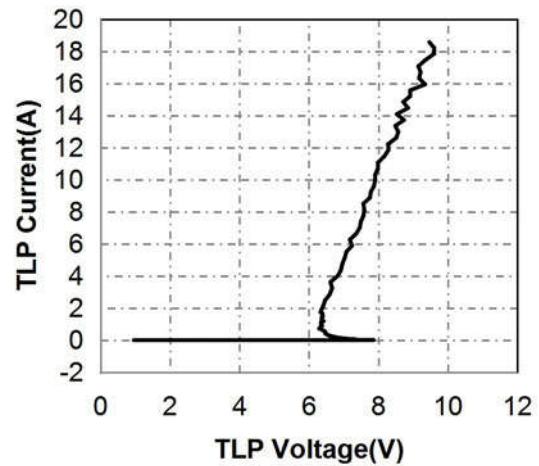


Fig.2 Transmission Line Pulse (TLP)

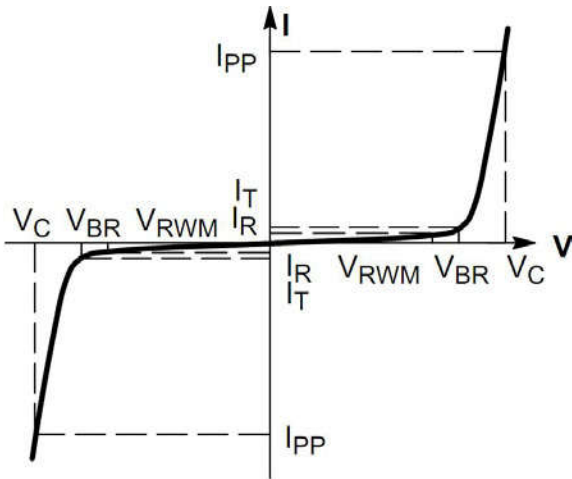


Fig.3 V-I Capacitance For Bidirectional Diode

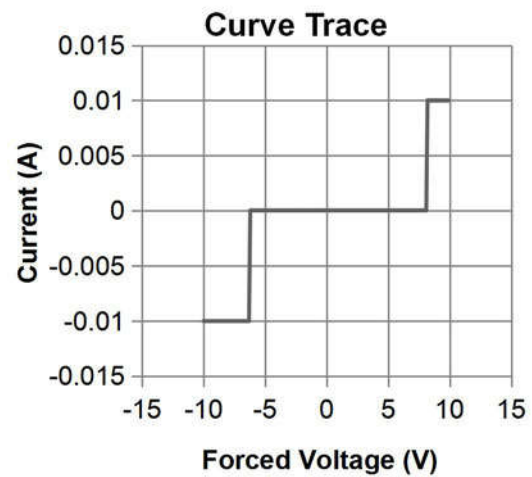


Fig. 4 IV Curve

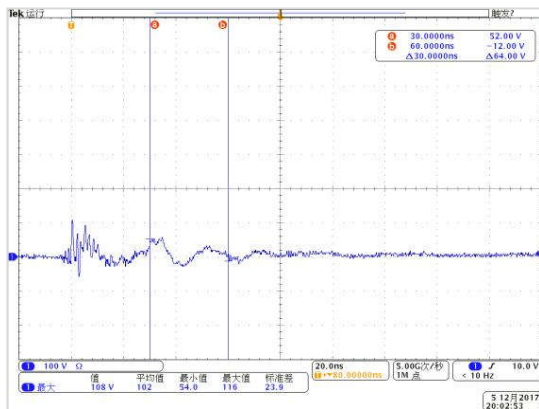


Fig.5 Clamping Voltage at IEC61000-4-2 +8kV Pulse Waveform

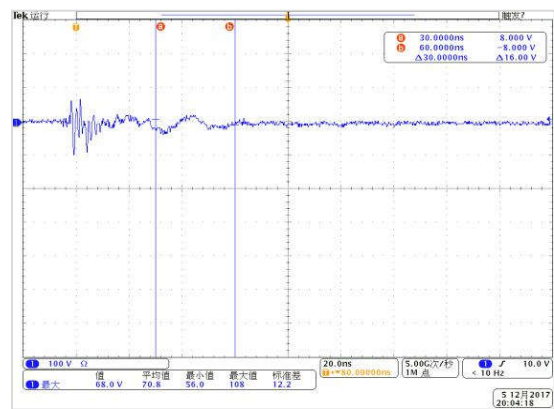
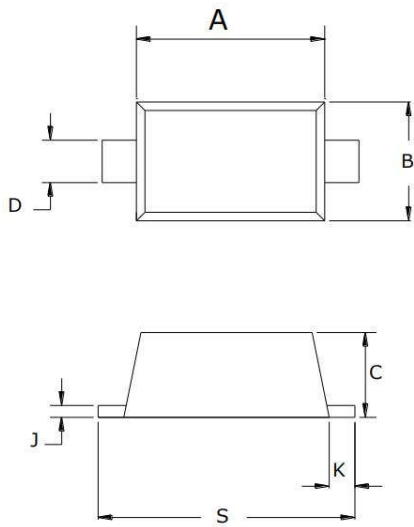


Fig.6 Clamping Voltage at IEC61000-4-2 -8kV Pulse Waveform

Package Dimension



SYMBOL	MILLIMETERS	
	MIN	MAX
A	0.74	0.86
B	0.54	0.66
C	0.35	0.45
D	0.14	0.26
K	0.04	0.16
S	0.95	1.10

Soldering Footprint (mm)

