

Features

- Uni-directional ESD protection of one line
- 100Watts peak pulse power (tp = 8/20μs)
- Working voltage: 5V
- Junction Capacitance: 0.5pF(Typ)
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2 ±8kV contact ±15kV air
- IEC 61000-4-5 (Lightning) 4.5A (8/20μs)

Applications

- Digital Visual Interface (DVI)
- LVDS
- USB 2.0
- High Definition Multi-Media Interface (HDMI)


Mechanical Data

- Package:SOD-923
- Molding compound flammability rating: UL 94V-0
- RoHS/WEEE Compliant

Schematic & PIN Configuration



Ordering Information

Part Number	Package	Marking	Packing	Reel Size
ESD9L5.0ST5G	SOD-923		8000 Tape & Reel	7 inches

Absolute Maximum Rating($T_A=25^{\circ}\text{C}$ unless otherwise Specified)

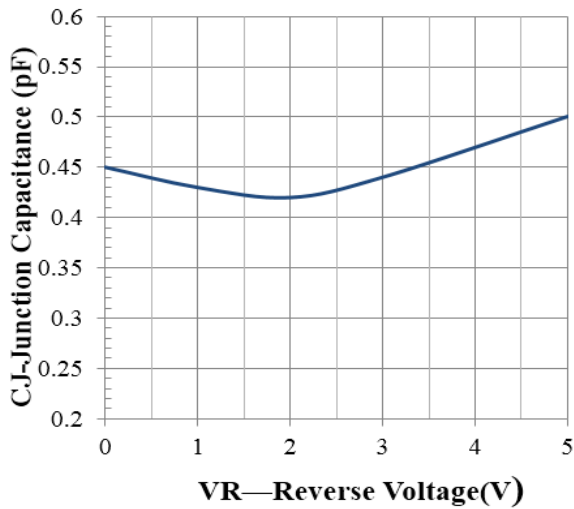
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pk}	100	W
Peak Pulse Current (8/20 μs)	I _{PP}	4.5	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	± 15 ± 8	kV
Operating Temperature Range	T _J	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T _{stg}	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise Specified)

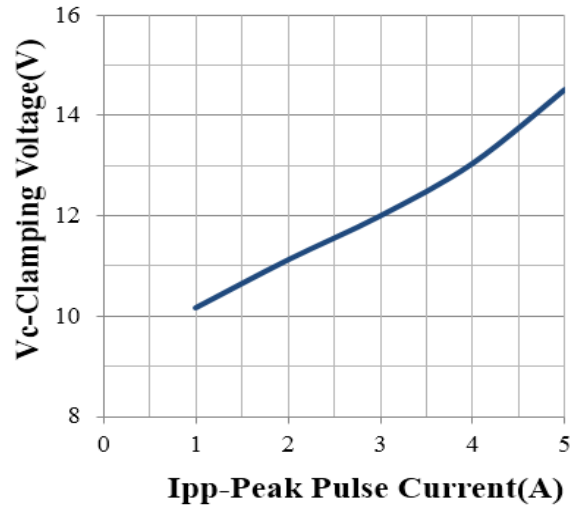
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}				5	V
Breakdown Voltage	V _{BR}	I _T = 1mA	6.0			V
Reverse Leakage Current	I _R	V _{RWM} = 5V			1.0	μA
Holding Voltage	V _C	I _{PP} =1A; t _p =8/20 μs		8	12	V
Clamping Voltage	V _C	I _{PP} =4.5A; t _p =8/20 μs		16	20	V
Junction Capacitance	C _J	V _R =0V; f=1MHz		0.5	0.8	pF



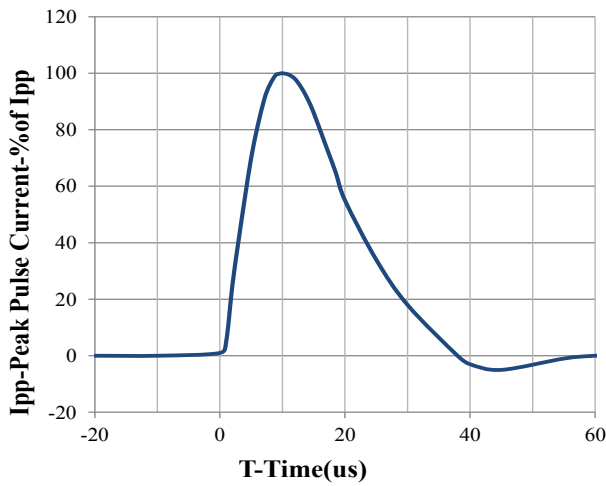
Typical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise Specified)



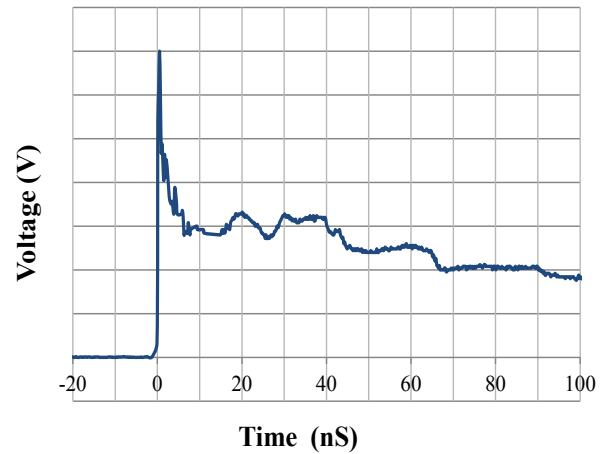
Junction Capacitance vs. Reverse Voltage



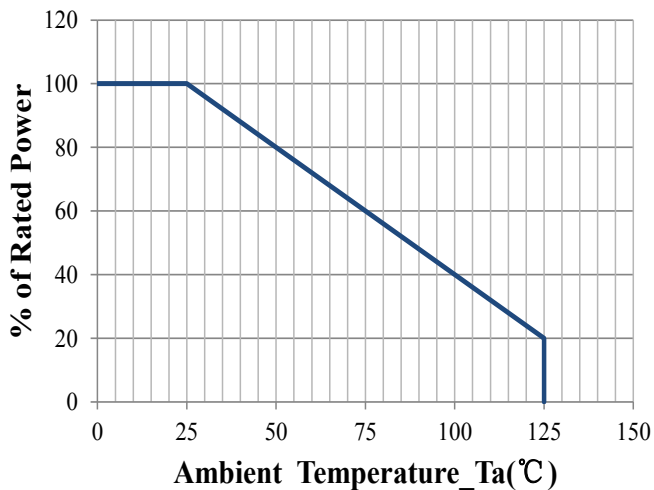
Clamping Voltage vs. Peak Pulse Current



8 X 20us Pulse Waveform



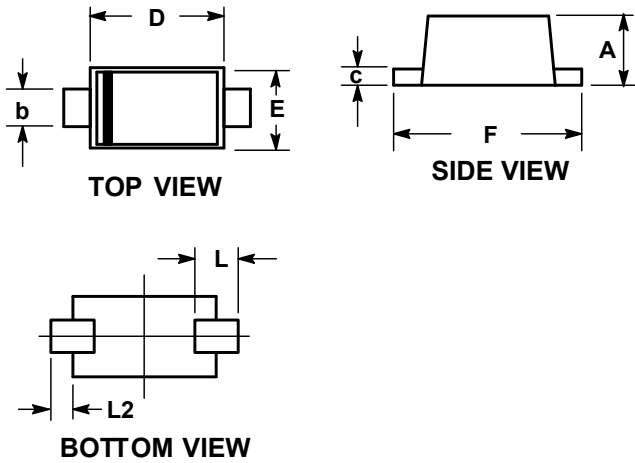
IEC61000-4-2 Pulse Waveform



Power Derating Curve



Outline Drawing – SOD-923



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.39	0.42	0.45	0.016	0.017	0.018
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	0.032	0.034
E	0.55	0.60	0.65	0.022	0.024	0.026
F	0.95	1.00	1.05	0.038	0.040	0.042
L	0.19 REF			0.007 REF		
L2	0.05	0.10	0.15	0.002	0.004	0.006

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