

Features

- ◇ 100 W (8/20 μ s) Peak Pulse Power
- ◇ Low Capacitance ESD Protection
- ◇ SOD-923 Package
- ◇ RoHS Compliant
- ◇ Matte Tin Lead finish (Pb-Free)
- ◇ Protect One High Speed Data Line ◇ Meet IEC61000-4-2 Level 4:

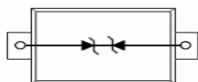
Contact Discharge > 30kV

Air Discharge > 30kV

Applications

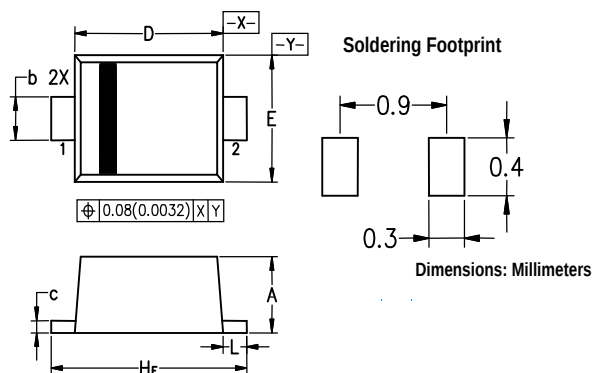
- ◇ Communication System
- ◇ Portable Instrumentation
- ◇ Audio and Video Equipment
- ◇ Computers and Peripherals
- ◇ USB 1.1, USB 1.0 Ports

Circuit Diagram



SOD-923

SOD-923



Dim	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A	0.36	0.40	0.43	0.014	0.016	0.017
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
He	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

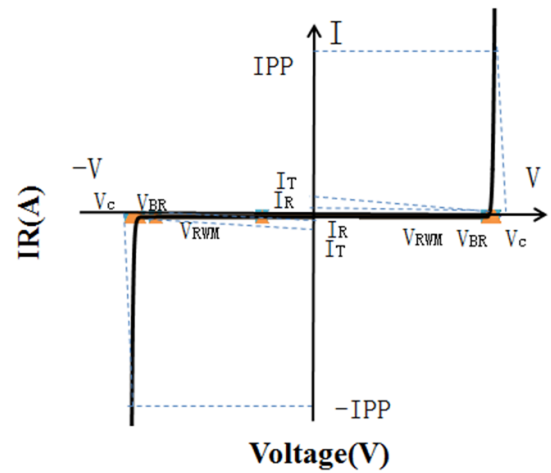
Maximum Ratings (Ta = 25°C)

Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power	100	W
IPP	Peak Pulse Current	8	A
VESD (Contact)	Contact ESD Voltage per IEC61000-4-2	30	kV
VESD (Air)	Air ESD Voltage per IEC61000-4-2	30	kV
TJ	Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

ESD9B3.3ST5G

Portion Electronics Parameter

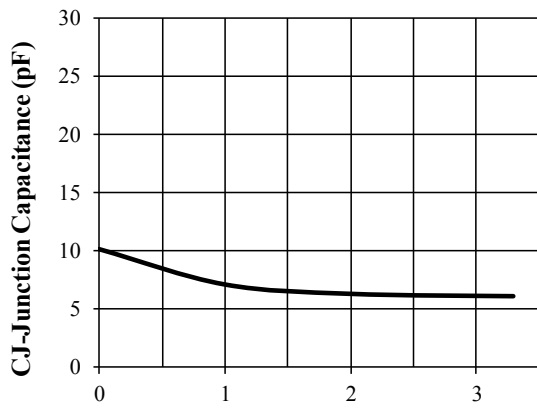
Symbol	Parameter
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_C



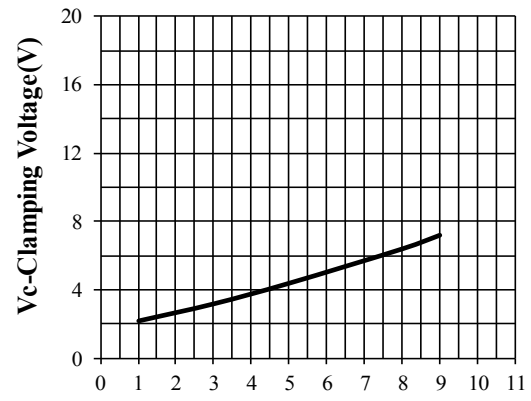
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_{RWM}	Reverse Working Peak Voltage				3.3	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	3.7	4.3	6.2	V
I_R	Reverse Leakage Current	$V_{RWM} = 3.3\text{V}$			0.5	μA
V_C	Clamping Voltage	$I_{PP} = 1\text{A}$ (8/20 μs)		4.5	6.5	V
V_C	Clamping Voltage	$I_{PP} = 8\text{A}$ (8/20 μs)		7	12.5	V
C_J	Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$		10	25	pF

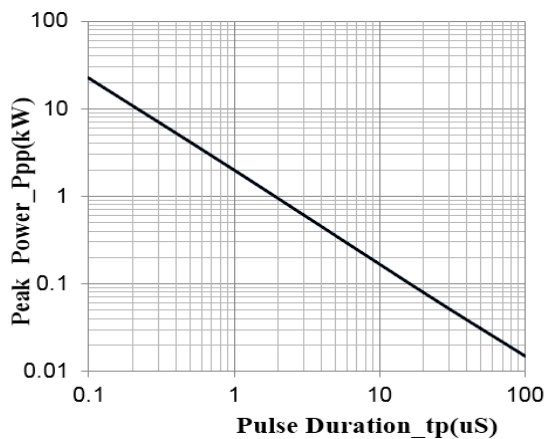
RATING AND VCHARACTERISTIC CURVES(ESD9B3.3ST5G)



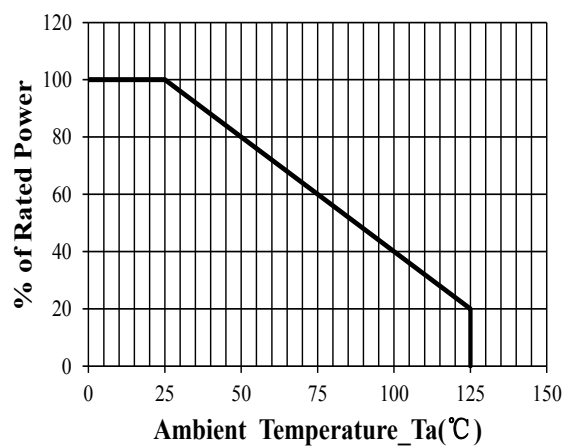
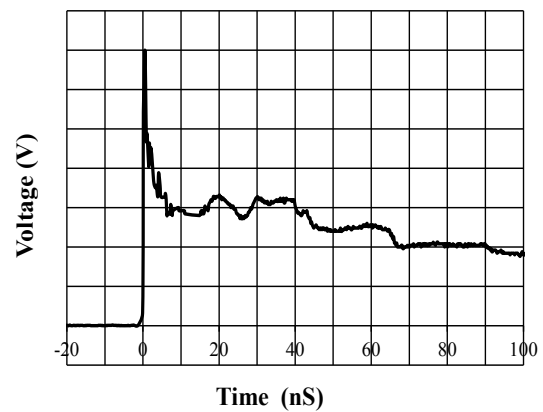
Junction Capacitance vs. Reverse Voltage



Clamping Voltage vs. Peak Pulse Current



Peak Pulse Power vs. Pulse Time



Power Derating Curve

