Features

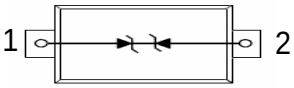
- 68W (8/20μs) Peak Pulse Power
- Low Capacitance ESD Protection
- SOD - 923 Package
- RoHS Compliant
- Matte Tin Lead finish (Pb-Free)
- Protect One High Speed Data Line
- Meet IEC61000-4-2 Level 4:
  - Contact Discharge > 20kV Air
  - Discharge > 20kV

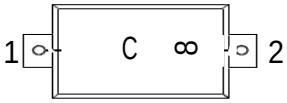
Applications

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

Circuit Diagram

SOD-923





Marking
C= Device Code
8 = Date Code*

Ordering information

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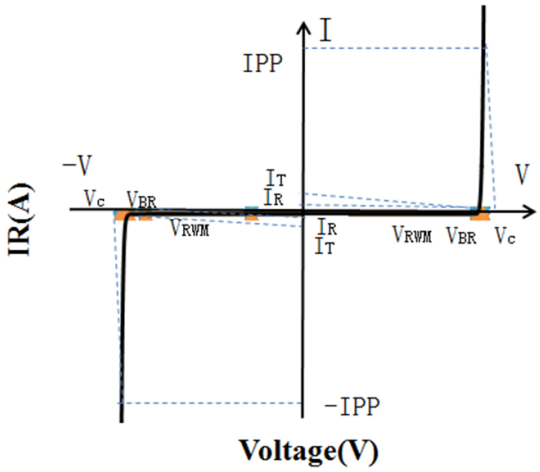
Type No.	Marking	Package Code
LXE5V015PB9	**C8**	**SOD-923**

Maximum Ratings (Ta = 25℃)

Symbol	Parameter	Value	Unit
P_{PK}	Peak Pulse Power	68	W
I_{PP}	Peak Pulse Current	5.5	A
$V_{ESD\ (Contact)}$	Contact ESD Voltage per IEC61000-4-2	20	kV
$V_{ESD\ (Air)}$	Air ESD Voltage per IEC61000-4-2	20	kV
T_J	Junction Temperature	-55 to +150	℃
T_{STG}	Storage Temperature	-55 to +150	℃

Portion Electronics Parameter

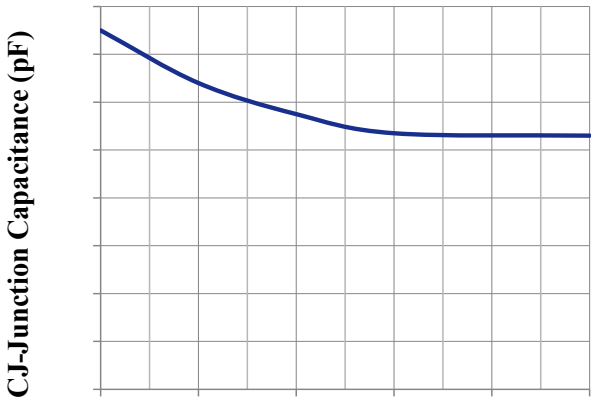
Symbol	Parameter
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @Ic



Electrical Characteristics (Ta = 25℃)

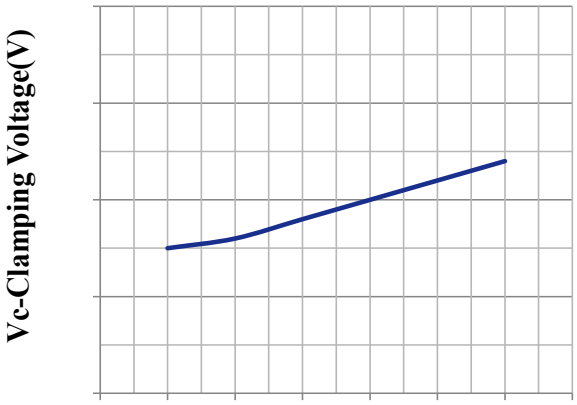
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_{RWM}	Reverse Working Peak Voltage				5	V
V_{BR}	Reverse Breakdown Voltage	I_T = 1mA	5.7		9	V
I_R	Reverse Leakage Current	V_{RWM} = 5V			0.1	μA
V_C	Clamping Voltage	I_{PP} = 1A (8/20μs)			12	V
V_C	Clamping Voltage	I_{PP} = 5.5A (8/20 μs)			17	V
C_J	Capacitance	V_R = 0V, f = 1MHz	8	8.9	15	pF

Typical Performance Characteristics (TA=25°C unless otherwise Specified)



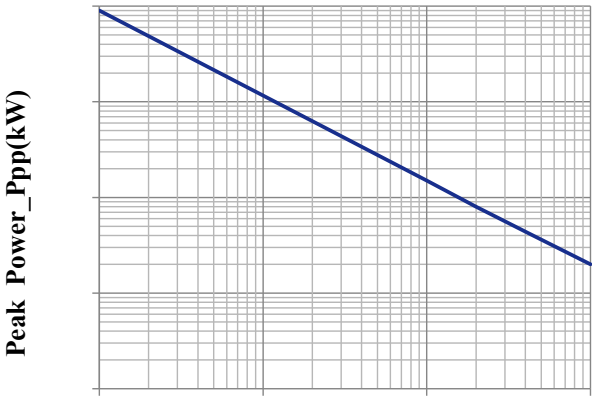
VR—Reverse Voltage(V)

Junction Capacitance vs. Reverse Voltage



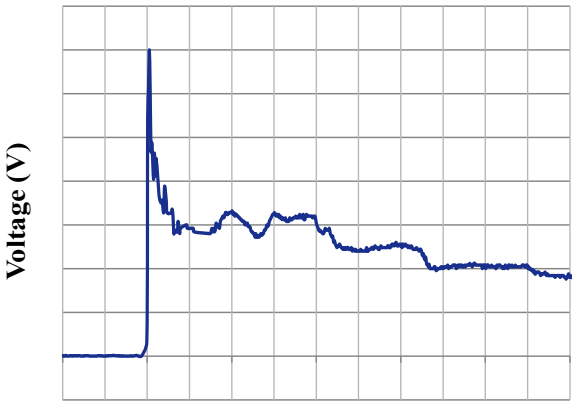
Ipp-Peak Pulse Current(A)

Clamping Voltage vs. Peak Pulse Current



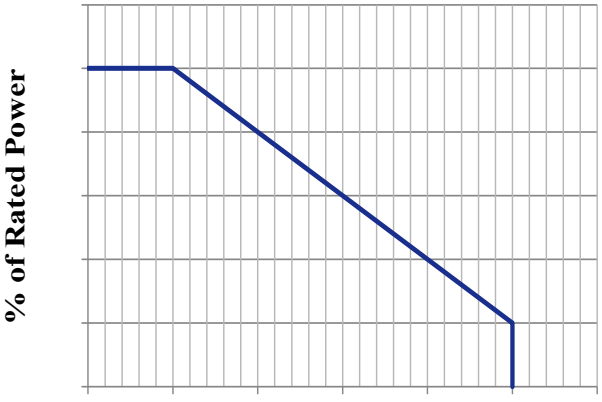
Pulse Duration_tp(uS)

Peak Pulse Power vs. Pulse Time



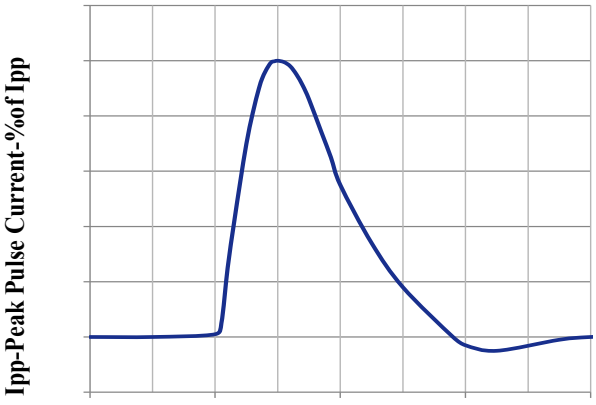
Time (nS)

IEC61000 Pulse Waveform



Ambient Temperature_Ta(℃)

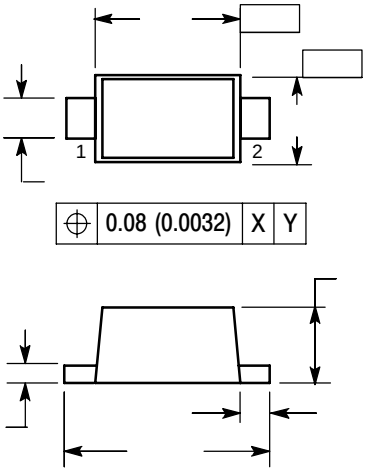
Power Derating Curve



T-Time(us)

8 X 20us Pulse Waveform

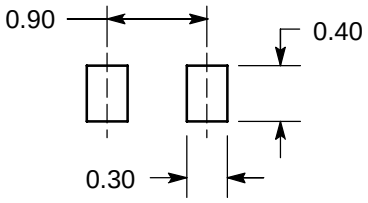
SOD−923



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
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

SOLDERING FOOTPRINT*



DIMENSIONS: MILLIMETERS