

Features

- 100W (8/20 μ s) Peak Pulse Power
- Low Capacitance ESD Protection
- SOD-723 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

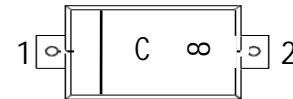
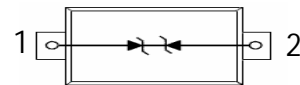
Applications

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

Circuit Diagram



SOD-723



Marking

C = Device Code
8 = Date Code*

Ordering information

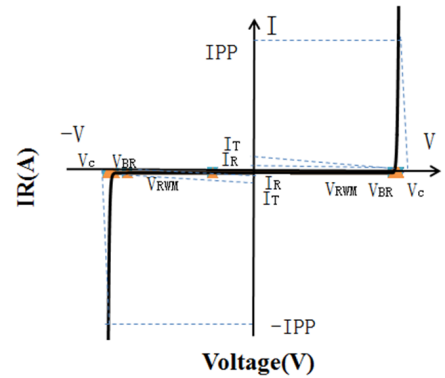
Device	Package	Reel Size	Qty / Reel
LXE723F5V0B	SOD-723	7 inch	10000

Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Value	Unit
Peak Pulse Power	P _{PK}	100	W
Peak Pulse Current	I _{PP}	7	A
Contact ESD Voltage per IEC61000-4-2	V _{ESD(Contact)}	30	kV
Air ESD Voltage per IEC61000-4-2	V _{ESD(Air)}	30	kV
Junction Temperature	T _J	-55 to +150	°C
Storage Temperature	T _{STG}	-55 to +150	°C

Portion Electronics Parameter

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

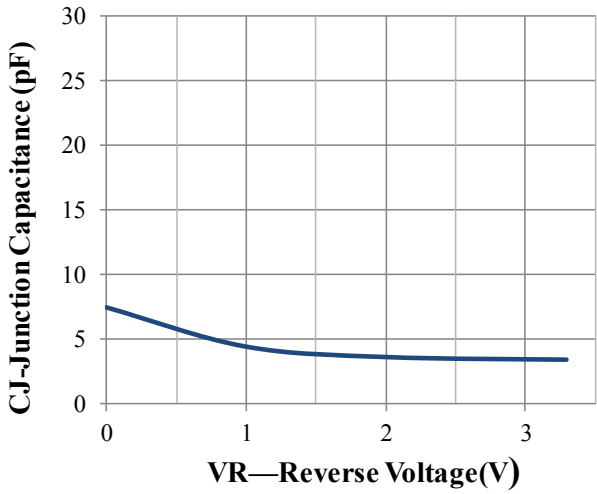


Electrical Characteristics (Ta = 25°C)

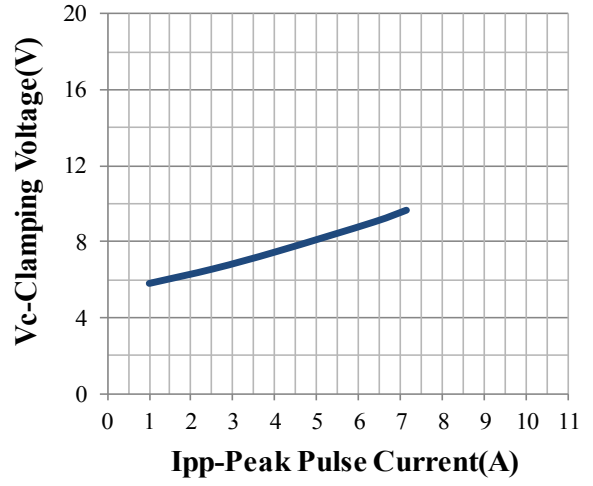
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_{RWM}	Reverse Working Peak Voltage				5	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	6		9	V
I_R	Reverse Leakage Current	$V_{RWM} = 5\text{V}$			0.1	μA
V_C	Clamping Voltage	$I_{PP} = 1\text{A}$ (8/20 μs)			10	V
V_C	Clamping Voltage	$I_{PP} = 7\text{A}$ (8/20 μs)		9	15	V
C_J	Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$		8	15	pF



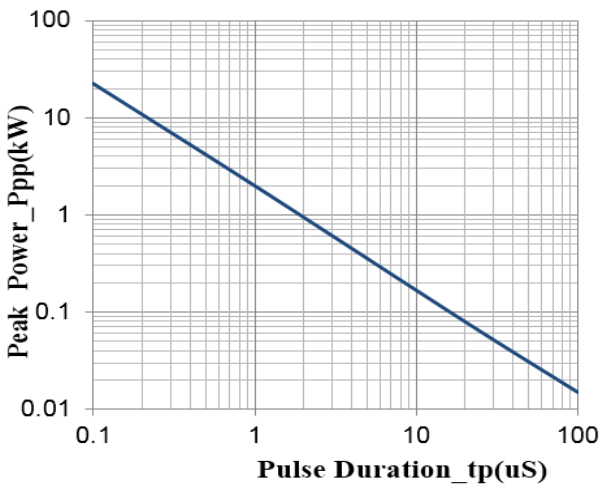
Typical Performance Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise Specified)



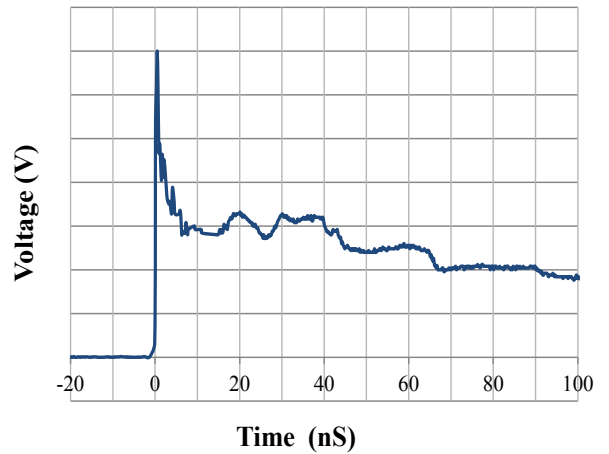
Junction Capacitance vs. Reverse Voltage



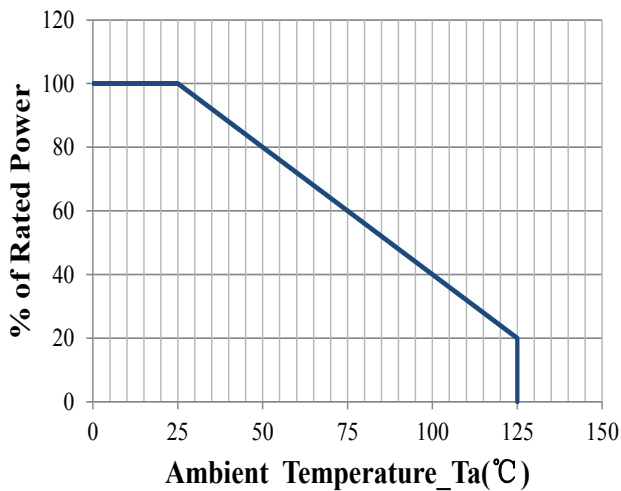
Clamping Voltage vs. Peak Pulse Current



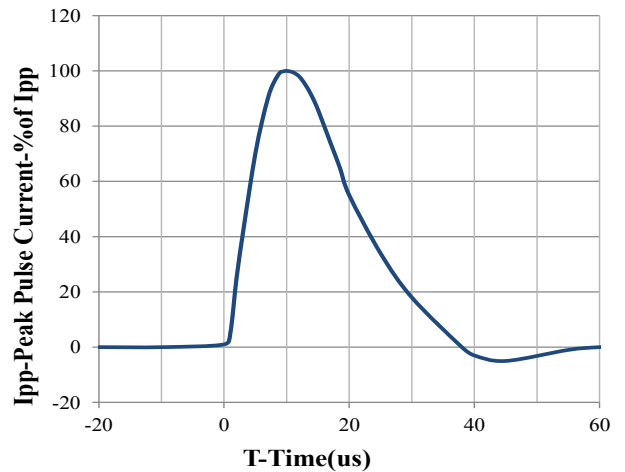
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform

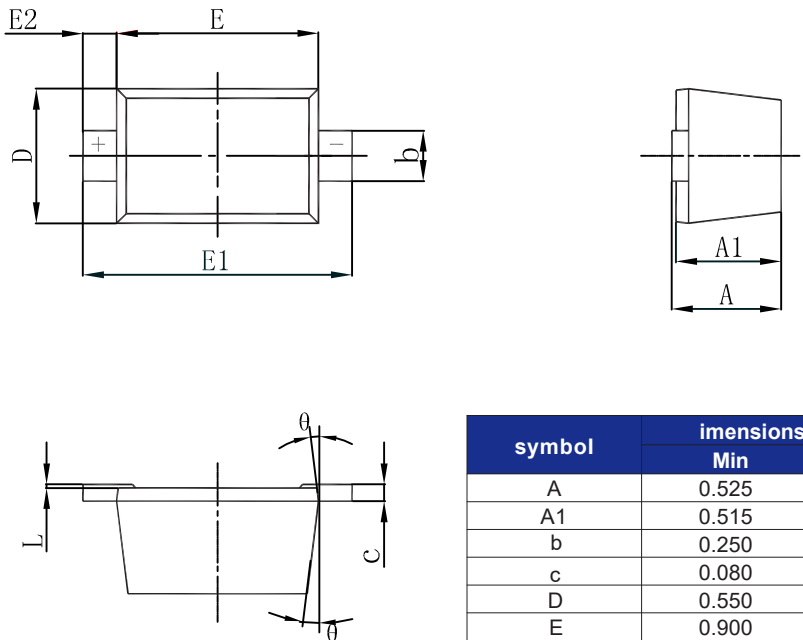


Power Derating Curve



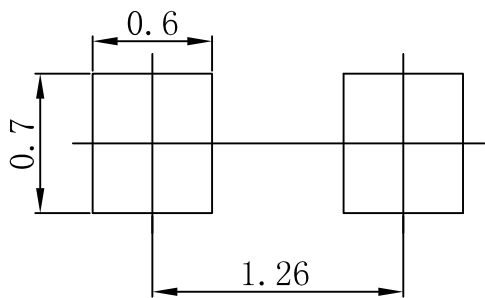
8 X 20us Pulse Waveform

SOD-723 Package Outline Dimensions



symbol	imensions In Millimeters		imensions In Inches	
	Min	Max	Min	Max
A	0.525	0.650	0.021	0.026
A1	0.515	0.580	0.020	0.023
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.550	0.650	0.022	0.026
E	0.900	1.100	0.035	0.043
E1	1.300	1.500	0.051	0.059
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
theta	7° REF		7° REF	

SOD-723 Suggested Pad Layout



- Note:**
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.