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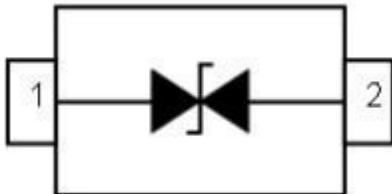
Product data sheet
Product data sheet



SOD-523

Marking: LB

PIN CONFIGURATION



FEATURES

- ◆IEC61000-4-2 (ESD) $\pm 8\text{kV}$ (Contact), $\pm 15\text{kV}$ (Air)
- ◆Peak power dissipation: 35W (8/20 μs)
- ◆Protects one I/O line
- ◆Low clamping voltage
- ◆Working voltage: 5V
- ◆Low leakage current
- ◆Low capacitance

MACHANICAL DATA

- ◆SOD-523 package
- ◆Terminals: Tin plated, solderable per MIL-STD-750, method 2026
- ◆Packaging: Tape and Reel
- ◆Reel size: 7 inch
- ◆Weight: 0.0018 gram (approx.)

APPLICATIONS

- ◆High Speed Line: USB1.0/2.0, VGA, DVI, SDI
- ◆Serial and Parallel Ports
- ◆Notebooks, Desktops, Servers
- ◆Projection TV
- ◆Cellular handsets and accessories
- ◆Portable instrumentation
- ◆Peripherals

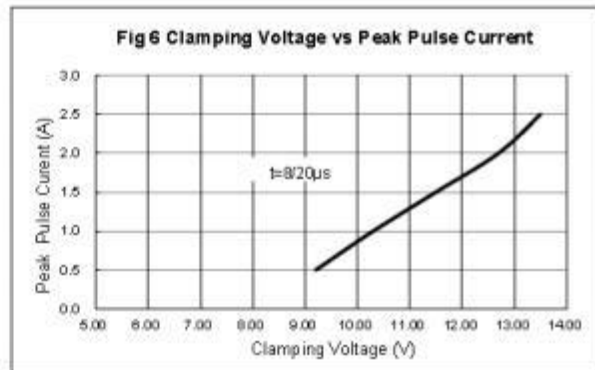
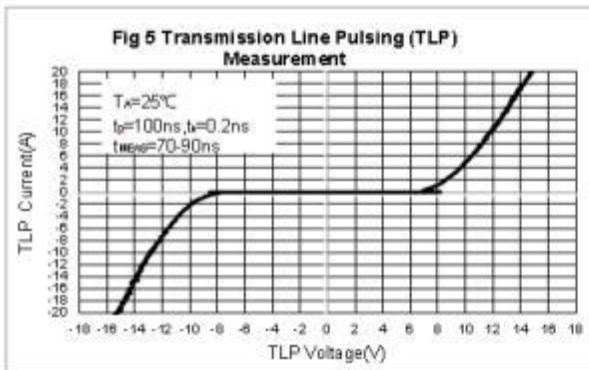
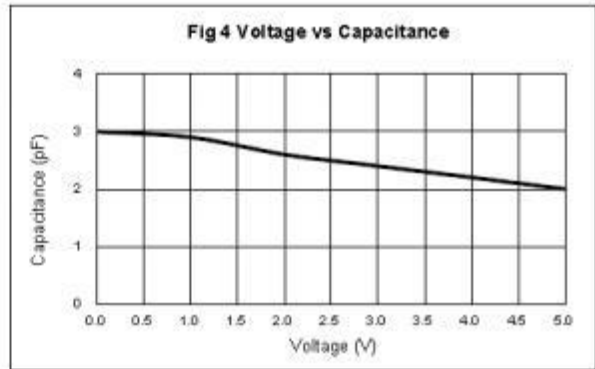
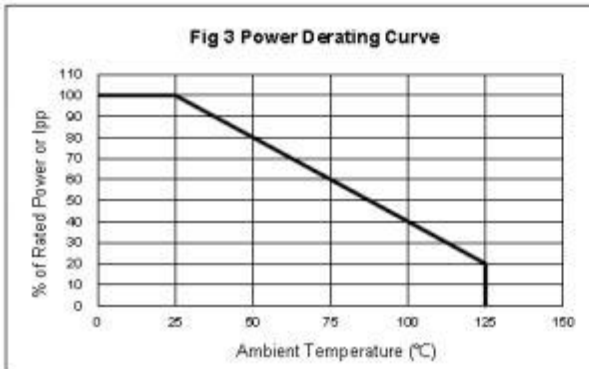
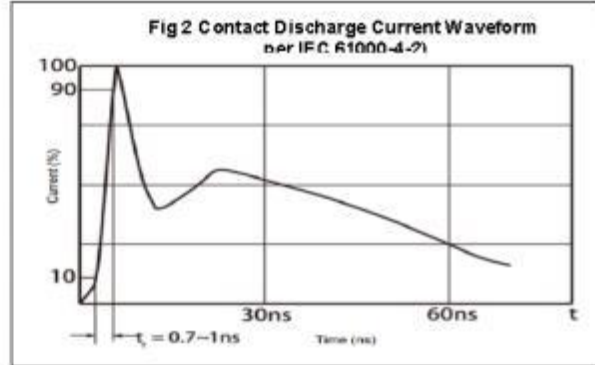
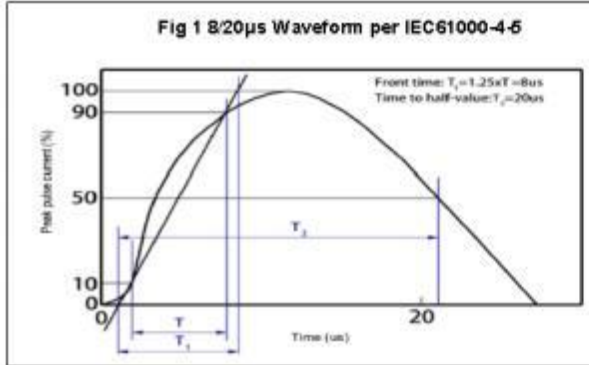
ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Value	Units
V _{ESD}	ESD per IEC 61000-4-2 (Contact) ESD per IEC 61000-4-2 (Air)	±8 ±15	kV
P _{PP}	Peak Pulse Power (8/20μs)	35	W
T _{OPT}	Operating Temperature	-55~150	°C
T _{STG}	Storage Temperature	-55~150	°C

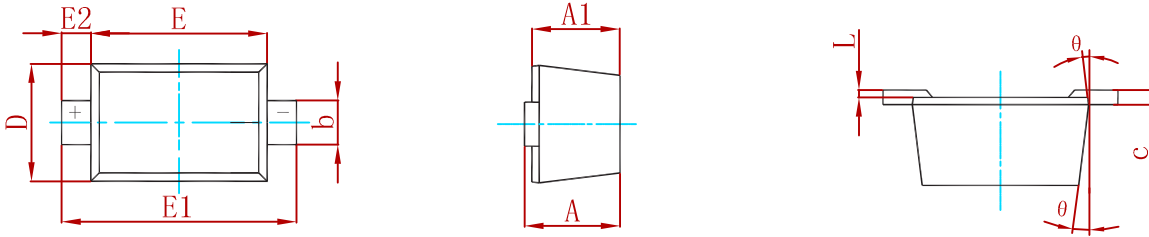
ELECTRICAL CHARACTERISTICS (T_{amb}=25°C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _{RWM}	Reverse Working Voltage				5.0	V
V _{BR}	Reverse Breakdown Voltage	I _T = 1mA	5.6		9.4	V
I _R	Reverse Leakage Current	V _{RWM} = 5V			2.0	μA
V _C	Clamping Voltage	I _{PP} = 1A, t _p = 8/20μs			10.5	V
		I _{PP} = 2A, t _p = 8/20μs			14.0	V
V _{CTLP}	TLP Clamping Voltage	I _{PP} = 16A IEC61000-4-2 Level 4 equivalent (±8kV Contact, ±15kV Air)		14.5		V
R _{DYN}	Dynamic Resistance	t _p = 100ns		0.3		Ω
C _J	Junction Capacitance	V _R = 0V, f = 1MHz		3.0	3.5	pF

ELECTRICAL CHARACTERISTICS CURVE

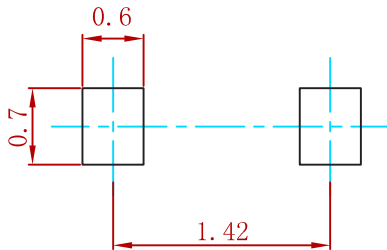


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

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.

REEL SPECIFICATION

P/N	PKG	QTY
ESD5B5CU	SOD-523	3000

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