

MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT

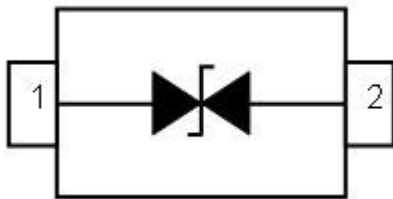


PLED

Product data sheet

FEATURES

- ◇ IEC61000-4-2 (ESD) ±8kV (Contact),
±15kV (Air)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- ◇ Peak power dissipation: 40W (8/20µs)
- ◇ Protects one I/O line
- ◇ Low clamping voltage
- ◇ Working voltages : 5V
- ◇ Low leakage current
- ◇ Low capacitance



SOD-523

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

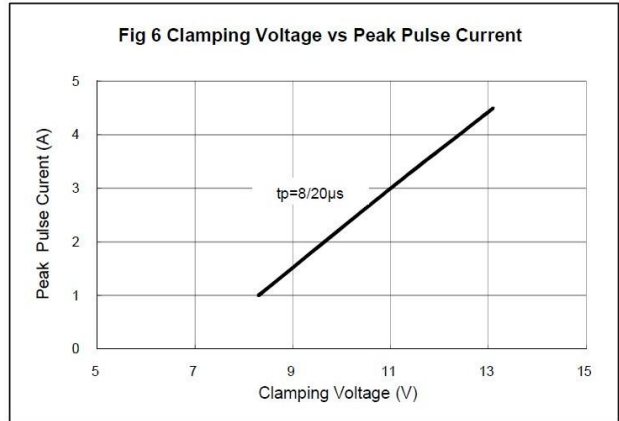
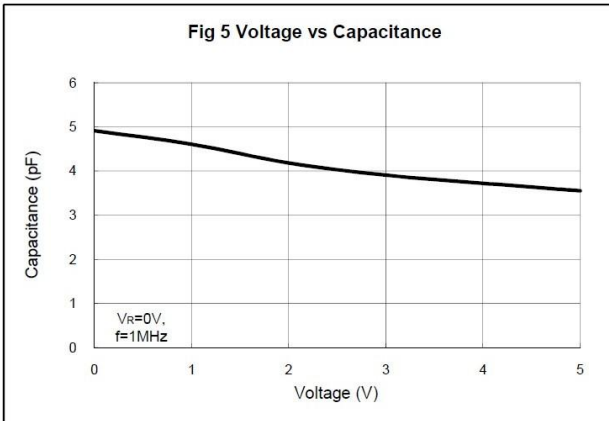
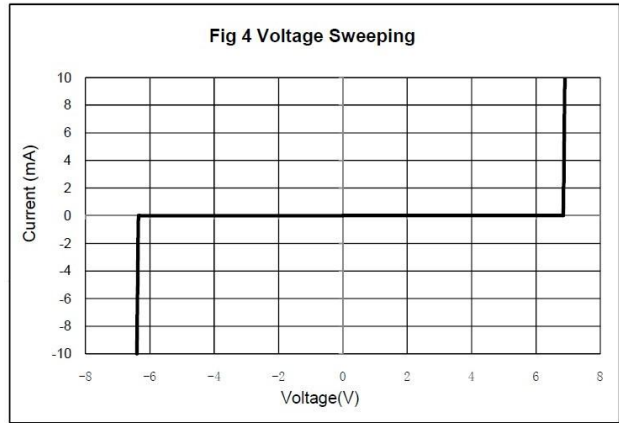
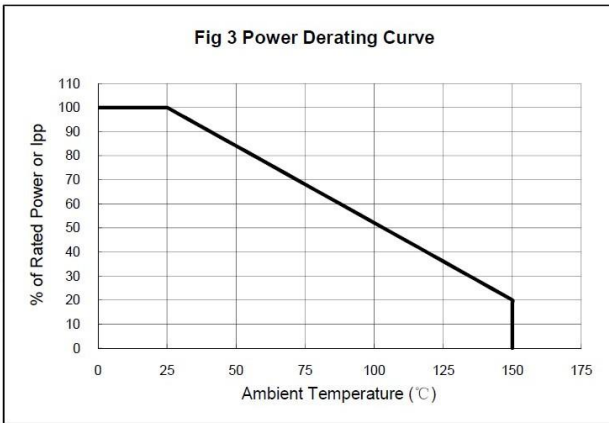
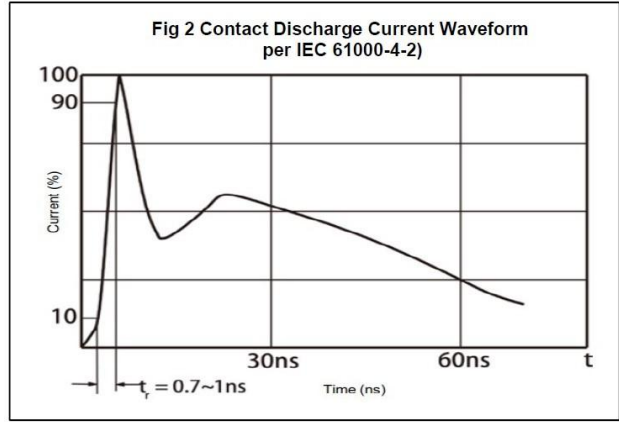
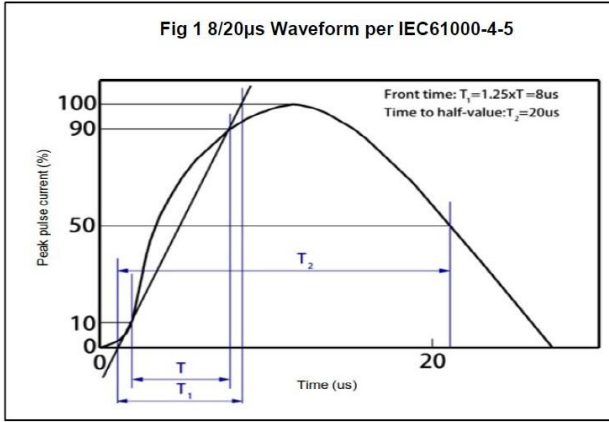
ABSOLUTE MAXIMUM RATING

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 (8/20 μ s)	40	W
T_{OPT}	Operating Temperature	-55~150	$^{\circ}$ C
T_{STG}	Storage Temperature	-55~150	$^{\circ}$ C

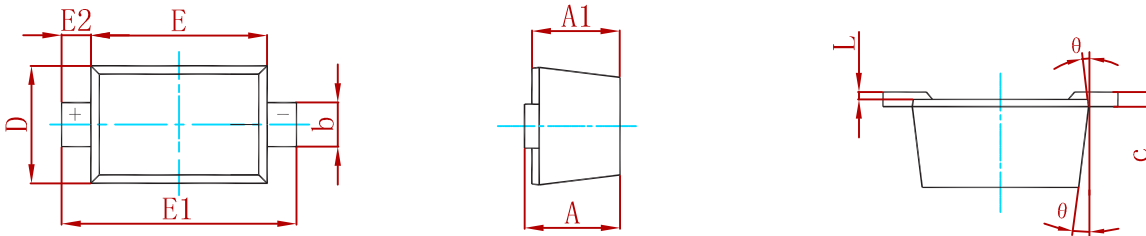
ELECTRICAL CHARACTERISTICS (Tamb=25 $^{\circ}$ C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				5.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	5.2		8.0	V
I_R	Reverse Leakage Current	$V_{RWM} = 5\text{V}$			2.0	μ A
V_C	Clamping Voltage	$I_{PP} = 1\text{A}$, $t_p = 8/20\mu\text{s}$			9	V
C_J	Junction Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$		4.5	6	pF

ELECTRICAL CHARACTERISTICS CURVE

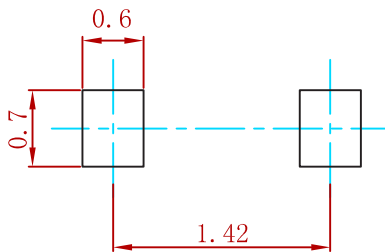


PACKAGE MECHANICAL DATA



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
ESD5B5CL-MS	SOD-523	3000

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