

# MSKSEMI 美森科

SEMICONDUCTOR



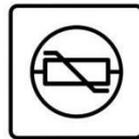
ESD



TVS



TSS



MOV



GDT



PLED

## MSESD5Z5.0C

Product specification

**FEATURES**

- IEC61000-4-2 (ESD) ±30kV (Contact), ±30kV (Air)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- Peak power dissipation: 105W (8/20µs)
- Protects one I/O line
- Low clamping voltage
- Working voltages : 5V
- Low leakage current

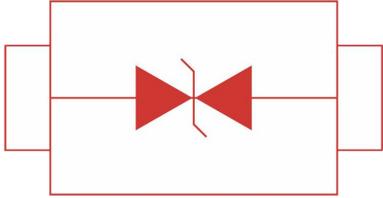
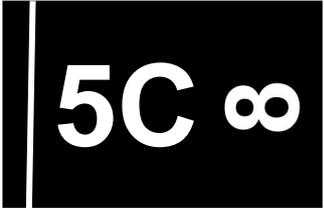
**MACHANICAL DATA**

- SOD-523 package
- Terminals: Tin plated, solderable per
- MIL-STD-750, method 2026
- Packaging: Tape and Reel
- Reel size: 7 inch
- MSL3

**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

**Reference News**

PACKAGE OUTLINE	PIN CONFIGURATION	Marking
		
<p>SOD-523</p>		

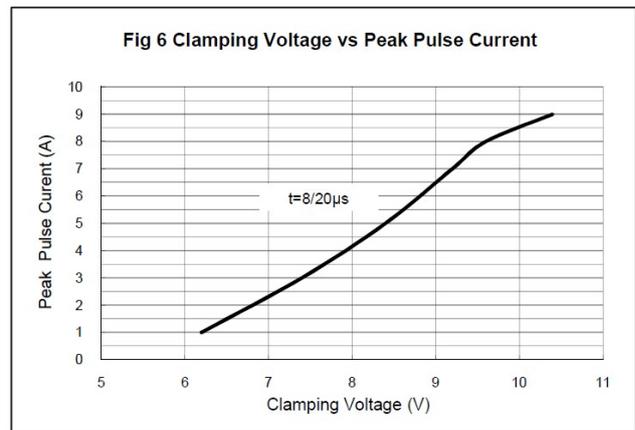
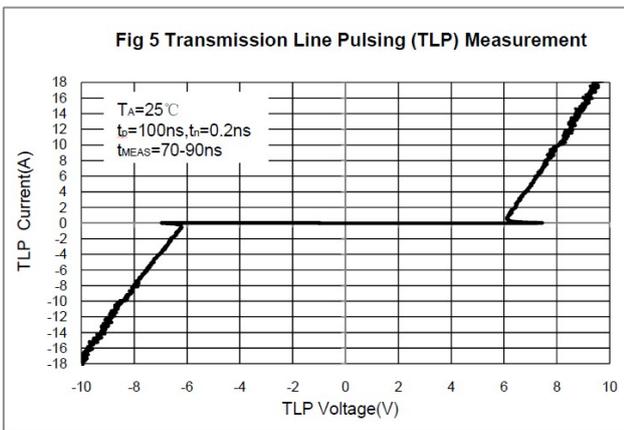
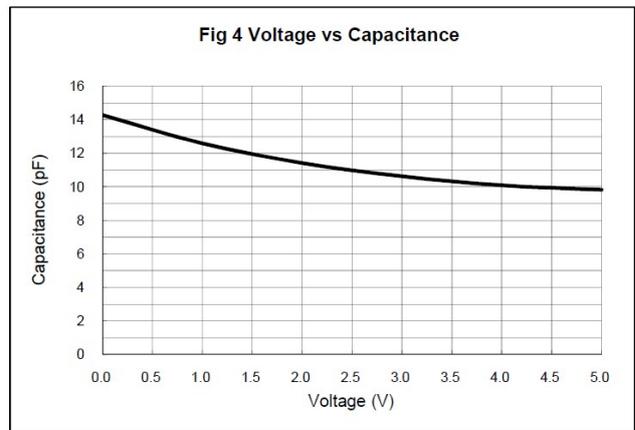
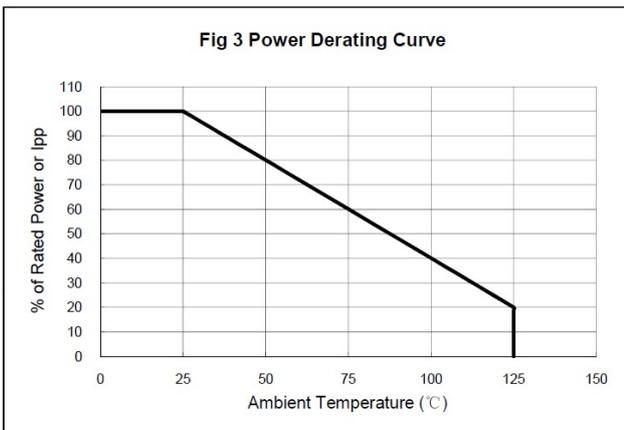
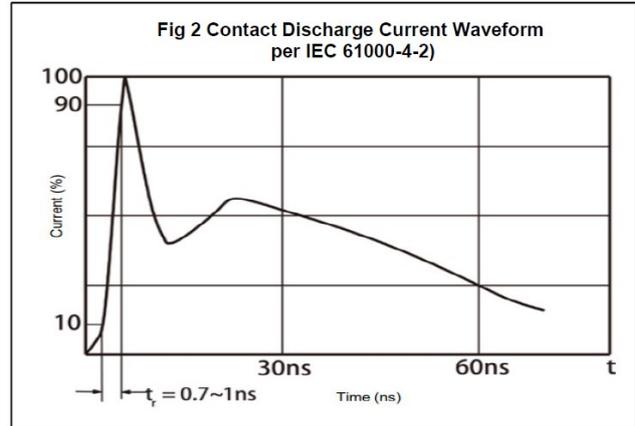
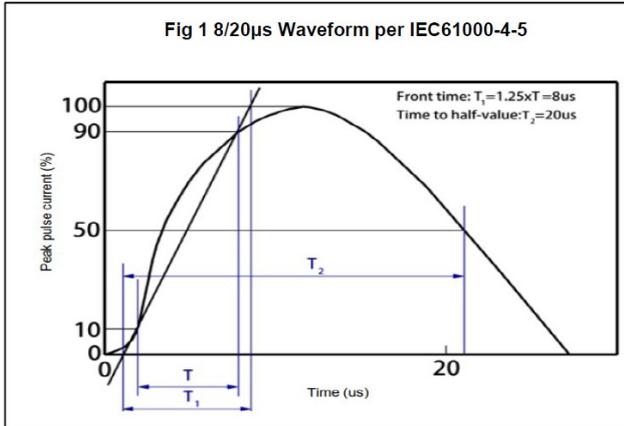
**ABSOLUTE MAXIMUM RATING**

Symbol	Parameter	Value	Units
$V_{ESD}$	ESD per IEC 61000-4-2 (Contact)	$\pm 30$	kV
	ESD per IEC 61000-4-2 (Air)	$\pm 30$	
$P_{PP}$	Peak Pulse Power (8/20 $\mu$ s)	105	W
$T_{OPT}$	Operating Temperature	-40~150	$^{\circ}$ C
$T_{STG}$	Storage Temperature	-40~150	$^{\circ}$ C

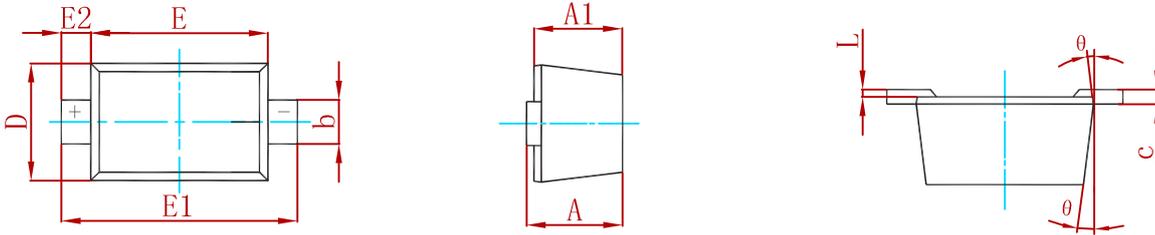
**ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}$ C)**

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
$V_{RWM}$	Reverse Working Voltage				5.0	V
$V_{BR}$	Reverse Breakdown Voltage	$I_r = 1mA$	5.6		9.0	V
$I_R$	Reverse Leakage Current	$V_{RWM} = 5V$			1.0	$\mu$ A
$V_C$	Clamping Voltage	$I_{PP} = 1A, t_p = 8/20\mu s$			9.5	V
$V_C$	Clamping Voltage	$I_{PPmax} = 7A, t_p = 8/20\mu s$			15.0	V
$C_J$	Junction Capacitance	$V_R = 0V, f = 1MHz$			15	pF

**ELECTRICAL CHARACTERISTICS CURVE**

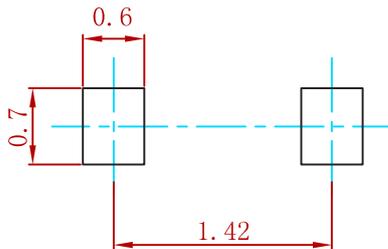


**PACKAGE MECHANICAL DATA**



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
MSESD5Z5.0C	SOD-523	3000

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