

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

TVSS5VCES-02GP

Product specification

FEATURES

- IEC61000-4-2 (ESD) $\pm 30\text{kV}$ (Contact), $\pm 30\text{kV}$ (Air)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- Peak power dissipation: 128W (8/20 μs)
- Protects one I/O line
- Low clamping voltage
- Working voltages : 5V
- Low leakage current


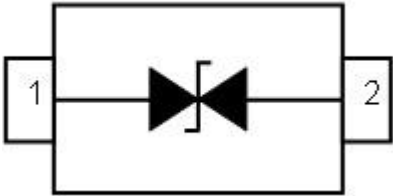

MACHANICAL DATA

- SOD-523 package
- Terminals: Tin plated, solderable per
- MIL-STD-750, method 2026
- Packaging: Tape and Reel
- Reel size: 7 inch
- MSL1

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 data-bbox="240 1666 357 1695">SOD-523</p>		

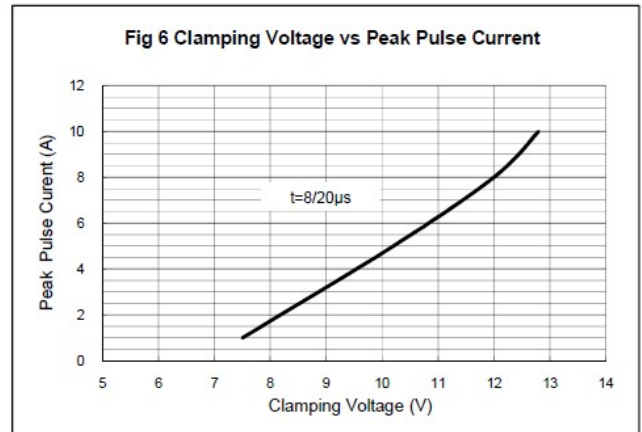
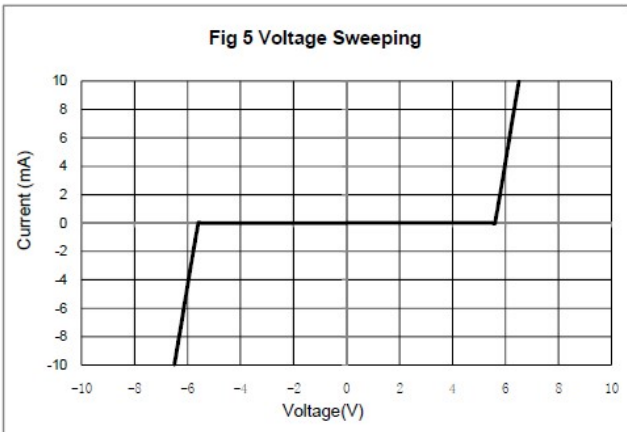
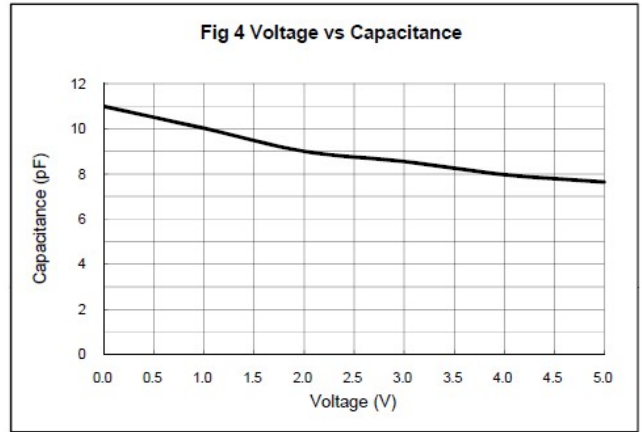
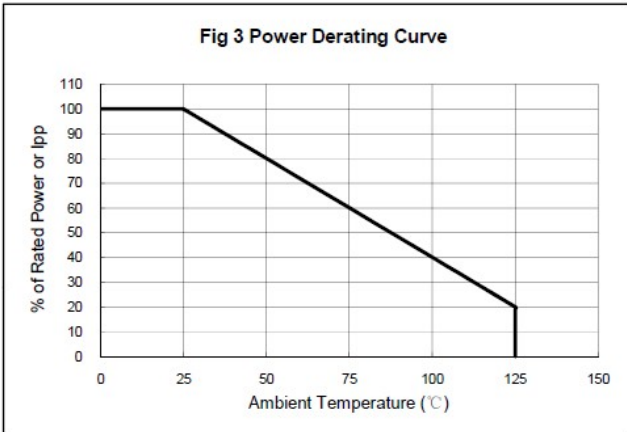
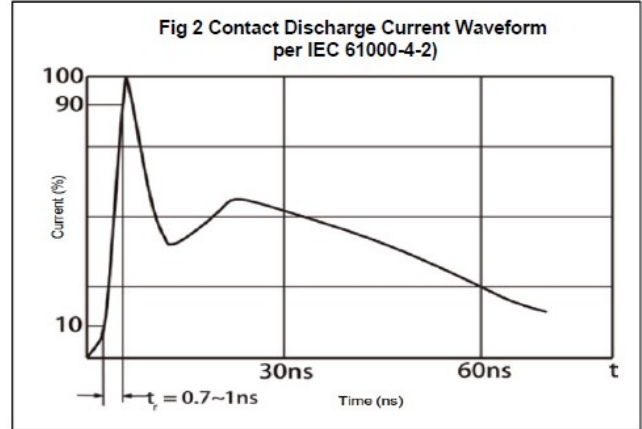
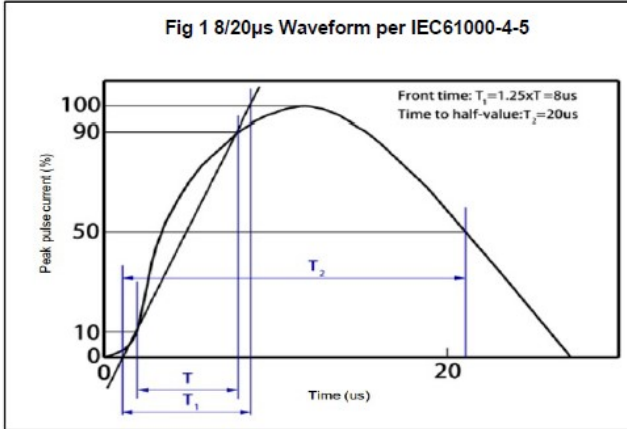
ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Value	Units
V _{ESD}	ESD per IEC 61000-4-2 (Contact)	±30	kV
	ESD per IEC 61000-4-2 (Air)	±30	
P _{PP}	Peak Pulse Power (8/20μs)	128	W
T _{OPT}	Operating Temperature	-40~150	°C
T _{STG}	Storage Temperature	-40~150	°C

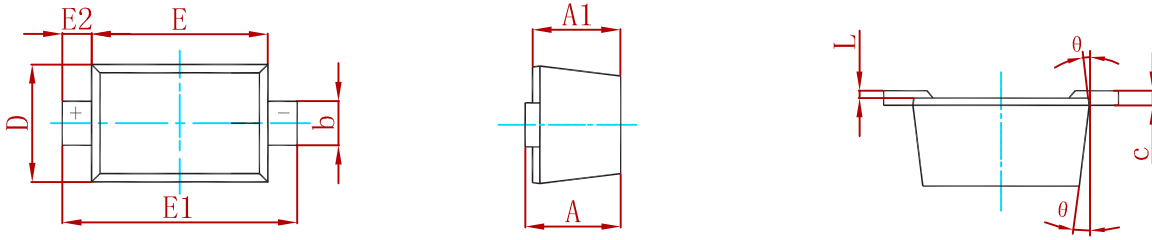
ELECTRICAL CHARACTERISTICS (T_{amb}=25°C)

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		9.0	V
I _R	Reverse Leakage Current	V _{RWM} = 5V			0.1	μA
V _C	Clamping Voltage	I _{PP} = 5A, t _p = 8/20μs			11.6	V
V _C	Clamping Voltage	I _{PPmax} = 8A, t _p = 8/20μs			16.0	V
C _J	Junction Capacitance	V _R = 0V, f = 1MHz		10	15	pF

ELECTRICAL CHARACTERISTICS CURVE

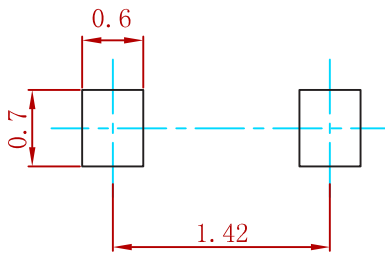


PACKAGE MECHANICAL DATA



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
TVSS5VCEs-02GP	SOD-523	3000

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