

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet

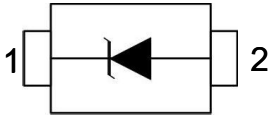
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**PACKAGE OUTLINE**



SOD-523

**PIN CONFIGURATION**



**FEATURES**

- ✧ IEC61000-4-2 Level 4 ESD Protection
- ✧ Protects one directional I/O line
- ✧ Low clamping voltage
- ✧ Working voltages : 15V
- ✧ Low leakage current

**MACHANICAL DATA**

- ✧ SOD-523 package
- ✧ Flammability Rating: UL 94V-0
- ✧ Packaging: Tape and Reel
- ✧ High temperature soldering guaranteed:260°C/10s
- ✧ Reel size: 7 inch

**APPLICATIONS**

- ✧ Cell Phone Handsets and Accessories
- ✧ Microprocessor based equipment
- ✧ Personal Digital Assistants (PDA's)
- ✧ Notebooks, Desktops, and Servers
- ✧ Portable Instrumentation
- ✧ Peripherals
- ✧ Pagers

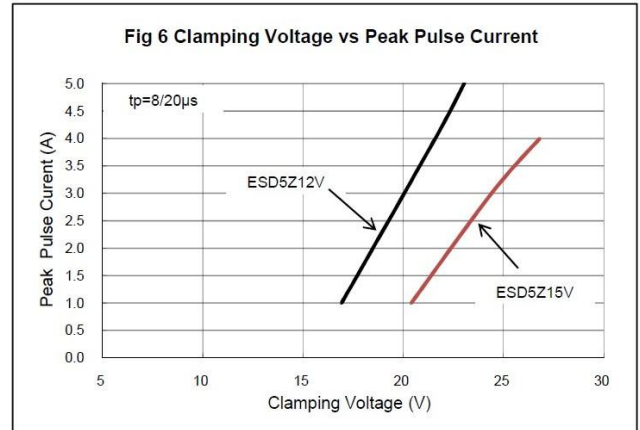
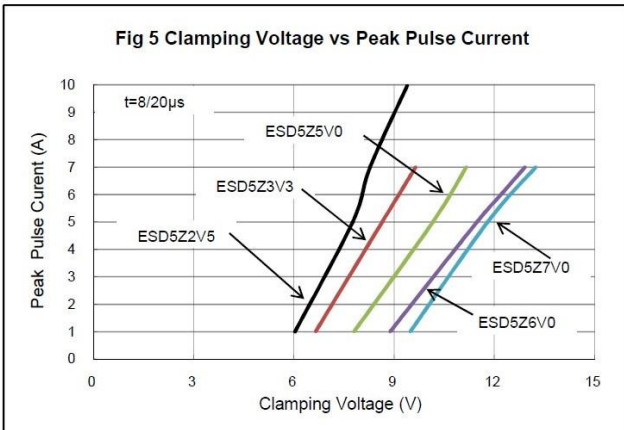
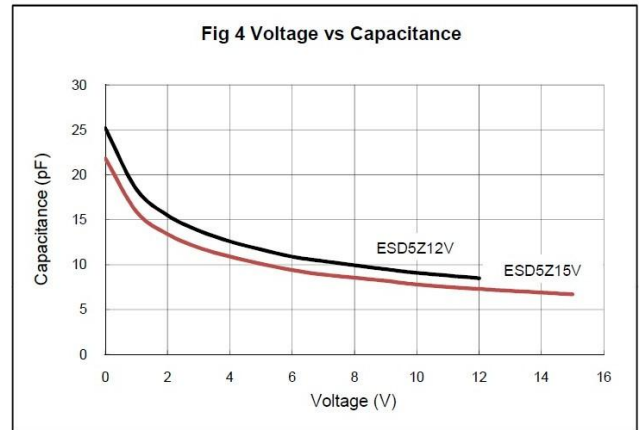
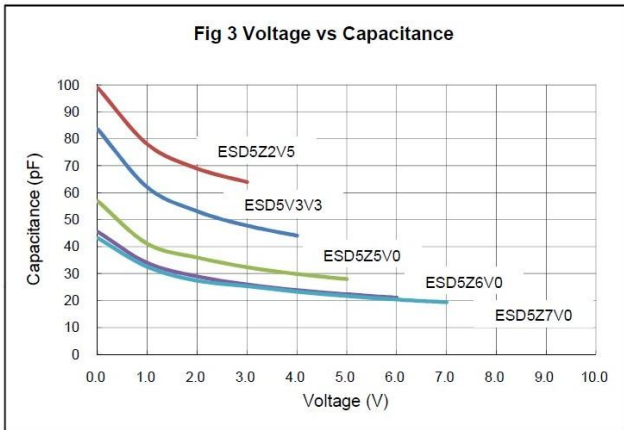
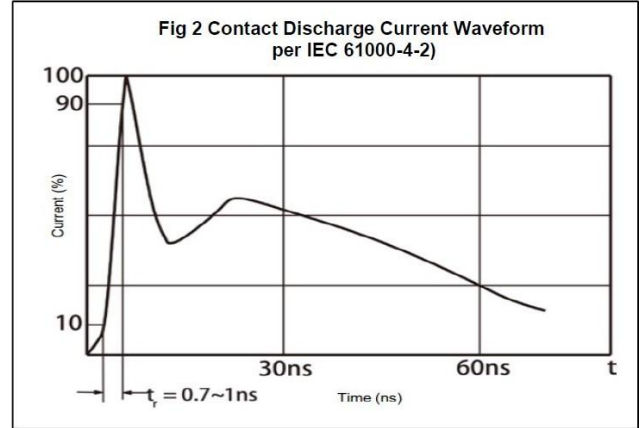
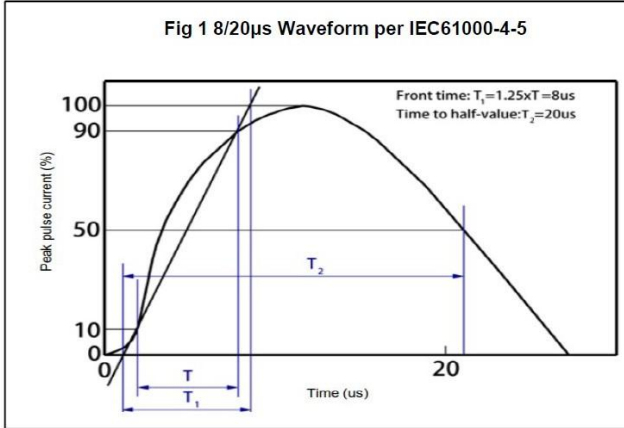
ABSOLUTE MAXIMUM RATING			
Symbol	Parameter	Value	Units
V <sub>ESD</sub>	ESD per IEC 61000-4-2 (Air)	±30	kV
	ESD per IEC 61000-4-2 (Contact)	±22	
ESD	ESD Voltage per human body model	16	kV
	ESD Voltage per machine model	400	V
P <sub>D</sub>	Total Power Dissipation on FR-5 Board (Note 1) @ Ta=25°C	150	mW
T <sub>J</sub> , T <sub>STG</sub>	Junction and Storage Temperature	-55/+150	°C
T <sub>L</sub>	Lead Solder Temperature – Maximum (10 Second Duration)	260	°C

These ratings are limiting values above which the serviceability of the diode may be impaired

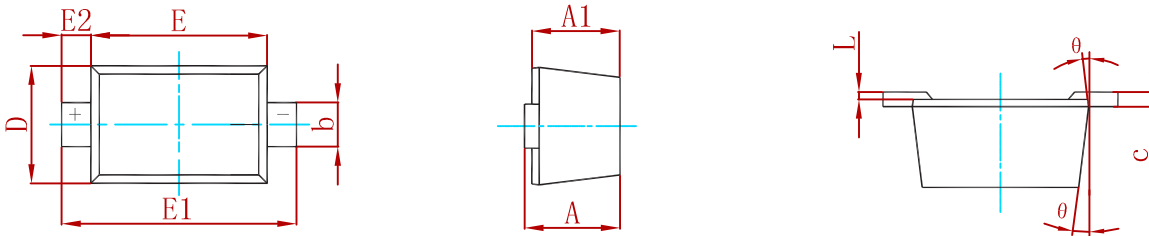
Note 1. FR-5=1.0x0.75x0.62 in.

ELECTRICAL CHARACTERISTICS (Tamb=25°C)											
P/N	MARKING	V <sub>RWM</sub>	I <sub>R</sub>	V <sub>B</sub>	I <sub>T</sub>	V <sub>C</sub>		V <sub>C</sub>		P <sub>PK</sub>	C <sub>J</sub>
		(V)	(µA)	(V)	(mA)	(V)		(V)		(W)	(pF)
		Max	Max	Min		Max	@A	Max	@A	Max	Max
ESD5Z15V	ZN + code	15.0	0.50	16.0	1	23.0	1.0	30.0	4.0	120	28

## ELECTRICAL CHARACTERISTICS CURVE

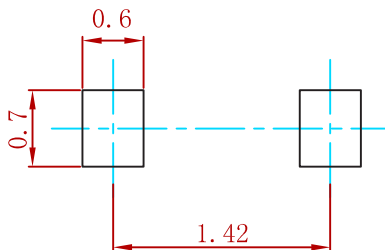


**PACKAGE MECHANICAL DATA**



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
ESD5Z15V	SOD-523	3000

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