

# EVVOSEMI<sup>®</sup>

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

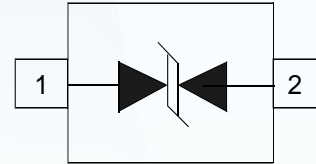
## Product Specification

▶ Domestic	Part Number	ESD5Z3.3C
▶ Overseas	Part Number	ESD5Z3.3C
▶ Equivalent	Part Number	ESD5Z3.3C

EV is the abbreviation of name EVVO

## DESCRIPTION

The ESD5Z3.3C is designed to protect voltage sensitive components from ESD and transient voltage events. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium. This device has been specifically designed to protect sensitive components which are connected to data and transmission lines from overvoltage caused by ESD (electrostatic discharge), CDE (Cable Discharge Events), and EFT (electrical fast transients).



## Features

- IEC61000-4-2 ( ESD)  $\pm 15\text{KV}$  (Air)  
 $\pm 8\text{KV}$  (contact)
- IEC61000-4-4 ( EFT) 40A (5/50ns)
- Peak power dissipation: 84W (8/20us)
- Protects one directional I/O line
- Low clamping voltage
- Working voltages : 3.3V
- Low leakage current

## Applications

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

## Mechanical Characteristics

- Package: SOD-523
- Flammability Rating: UL 94V-0
- Terminals: Gold plated, solderable per MIL-STD-750

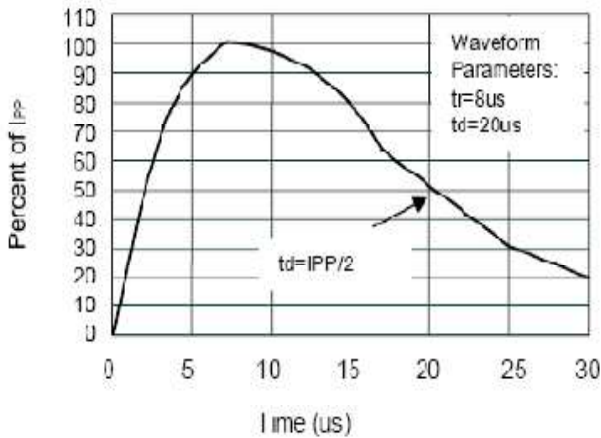
## Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Air)	VESD	$\pm 25$	KV
ESD per IEC 61000-4-2 (Contact)		$\pm 20$	
Peak Pulse Power (8/20 $\mu\text{s}$ )	PPP	84	W
Operating Temperature	TOPT	-40 to +150	$^\circ\text{C}$
Storage Temperature	TSTG	-40 to +150	$^\circ\text{C}$

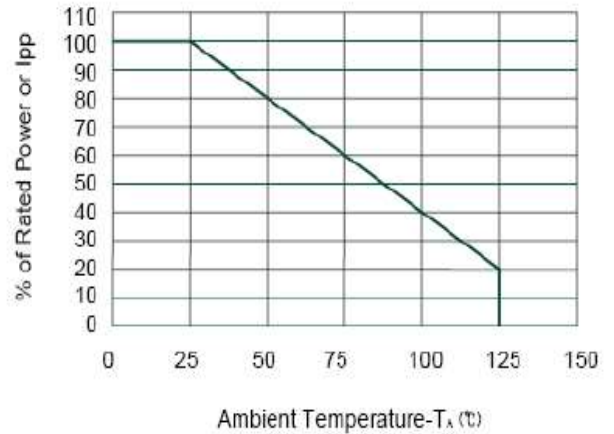
**Electrical Characteristics** (T<sub>A</sub>=25°C unless otherwise specified)

Symbol	Param	Test Condition	Min	Typ	Max	Units
V <sub>RWM</sub>	Reverse Working Voltage				3.3	V
V <sub>BR</sub>	Reverse Breakdown Voltage	I <sub>T</sub> = 1mA	3.6			V
I <sub>R</sub>	Reverse Leakage Current	V <sub>RWM</sub> = 3.3V			1.0	μA
V <sub>C</sub>	Clamping Voltage	I <sub>PP</sub> = 1A, t <sub>p</sub> = 8/20μs			8.0	V
V <sub>C</sub>	Clamping Voltage	I <sub>PP</sub> = 7A, t <sub>p</sub> = 8/20μs			12	V
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> = 0V, f = 1MHz			15	pF

**ELECTRICAL CHARACTERISTICS CURVE**

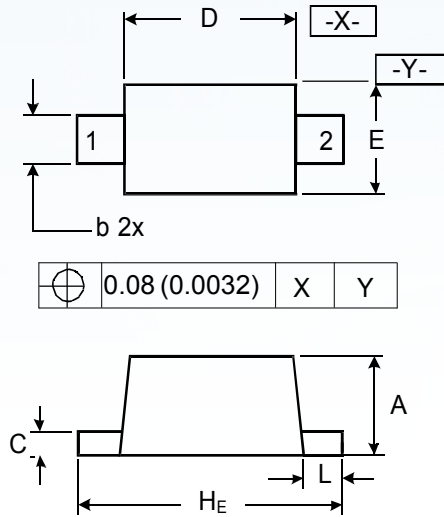


**Pulse Waveform**



**Power Derating Curve**

### Outline Drawing – SOD-523



**DIMENSIONS**

SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.50	0.70	0.020	0.028
b	0.25	0.35	0.010	0.014
C	0.07	0.20	0.0028	0.0079
D	1.10	1.30	0.043	0.051
E	0.70	0.90	0.028	0.035
HE	1.50	1.70	0.059	0.067
L	0.15	0.25	0.006	0.010

### Marking



### Ordering information

Order code	Package	Baseqty	Deliverymode
ESD5Z3.3C	SOD-523	3000	Tape and reel

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