

# E5V0SBWS1A

## ESD Protection Diodes

### Features

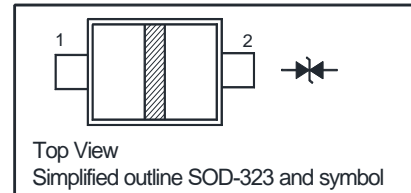
- Low leakage current
- Low capacitance
- Low clamping voltage

### Applications

- Computers and peripherals
- Audio and video equipment
- Cellular handsets and accessories
- Subscriber Identity Module (SIM) card
- Communication systems
- Portable electronics
- 10/100 Mbit/s Ethernet
- FireWire

### PINNING

PIN	DESCRIPTION
1	Anode
2	Anode

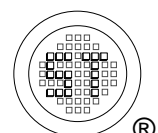


### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

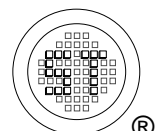
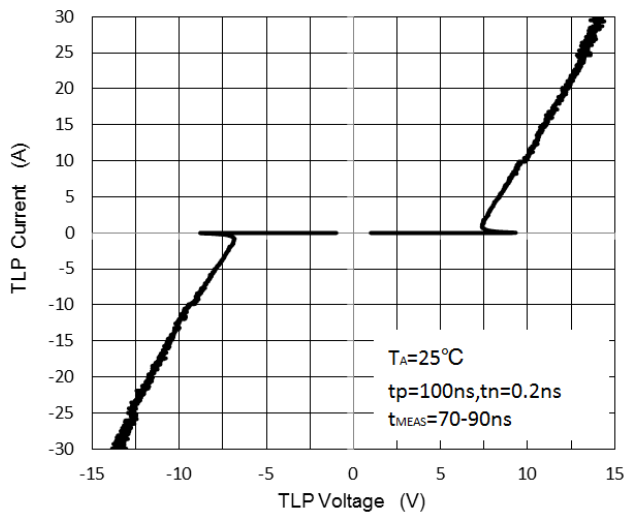
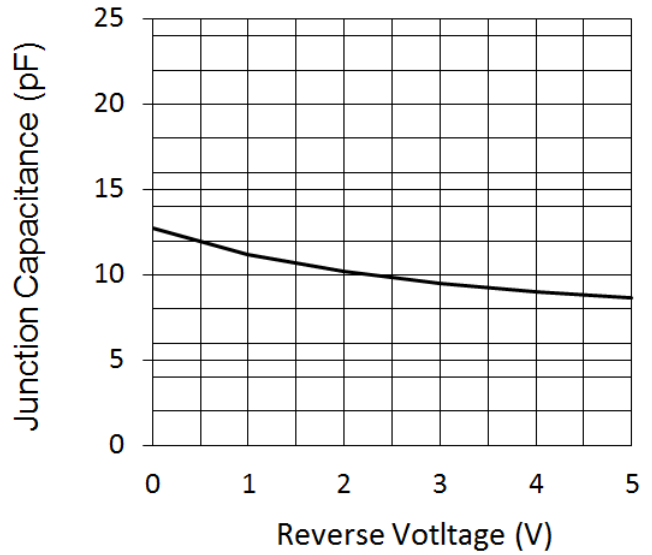
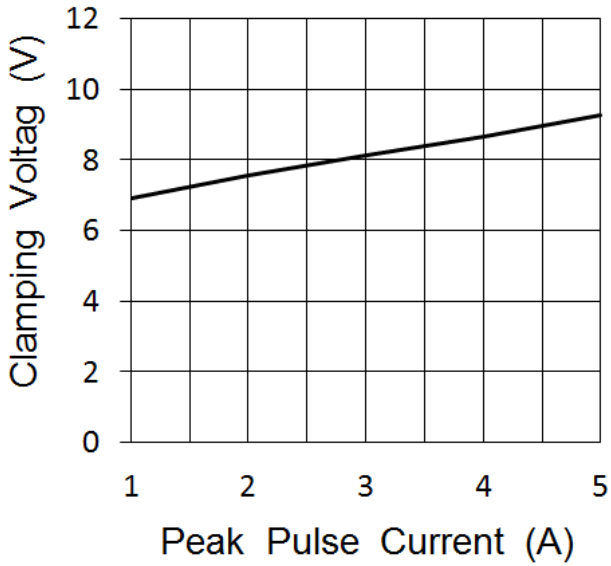
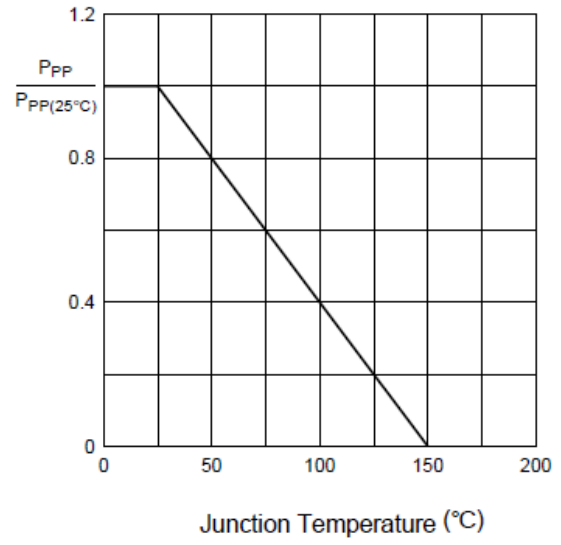
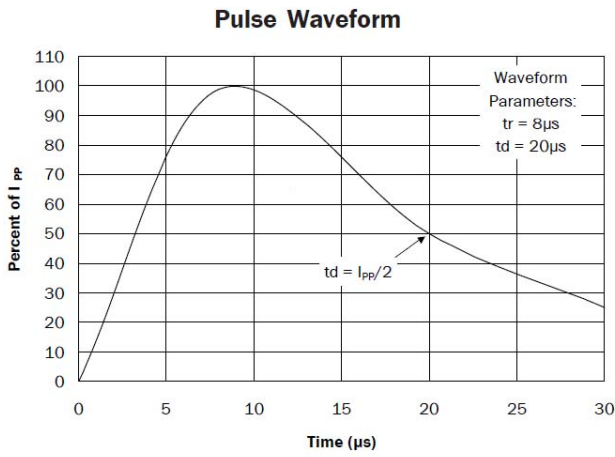
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $t_p = 8/20 \mu\text{s}$ )	$P_{PK}$	90	W
Peak Pulse Current ( $t_p = 8/20 \mu\text{s}$ )	$I_{PP}$	6.5	A
IEC61000-4-2 (ESD) Air Contact	$V_{ESD}$	$\pm 30$ $\pm 30$	KV
Junction Temperature Range	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Stand-Off Voltage	$V_{RWM}$	-	5	V
Reverse Breakdown Voltage at $I_R = 5 \text{ mA}$	$V_{(BR)R}$	5.8	7.8	V
Reverse Current at $V_{RWM} = 5 \text{ V}$	$I_R$	-	10	nA
Clamping Voltage at $I_{PP} = 5 \text{ A}$ , $t_p = 8/20 \mu\text{s}$ at $I_{PP} = 6.5 \text{ A}$ , $t_p = 8/20 \mu\text{s}$	$V_C$	-	12.5 15	V
Junction Capacitance at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$	$C_j$	-	13	pF



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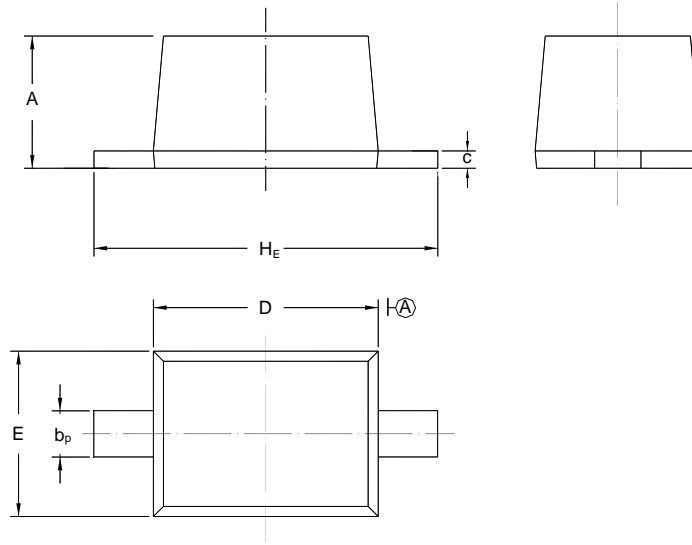


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## PACKAGE OUTLINE

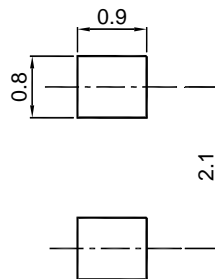
Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30

### Recommended Soldering Footprint



### Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-323	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

