

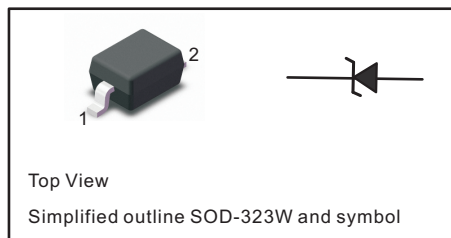
## ESD Diode Array

### Features

- 350 Watts Peak Pulse Power per (8/20 $\mu$ s)
- IEC61000-4-2 (ESD)  $\pm$ 15kV (air),  $\pm$ 8kV (contact)
- Protects one I/O line (unidirectional)
- Low clamping voltage
- Low leakage current
- Working voltages : 12V, 15V, 18V , 20V

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Networking and Telecom
- Serial and Parallel Ports
- Peripherals

### Mechanical Characteristics

- Package: SOD-323W
- Flammability Rating: UL 94V-0
- High temperature soldering guaranteed:  
260 $^{\circ}$ C/ 10s
- Packaging: Tape and Reel

### Absolute Maximum Ratings And Characteristics ( Ta = 25 $^{\circ}$ C )

Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20 $\mu$ S)	P <sub>pp</sub>	350	W
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	V <sub>ESD</sub>	$\pm$ 15 $\pm$ 8	kV
Operating Temperature Range	T <sub>J</sub>	-55 to +150	$^{\circ}$ C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	$^{\circ}$ C



Characteristics at Ta = 25°C

Type	Marking	Peak Reverse Working Voltage	Reverse Breakdown Voltage	I <sub>r</sub>	Clamping Voltage				Reverse Leakage Current	Junction Capacitance
		V <sub>RWM</sub>	V <sub>BR</sub>		V <sub>c</sub> (@IPP)		V <sub>c</sub> (@IPP)		I <sub>R</sub>	C <sub>J</sub>
		Max ( V )	Min ( V )		Max (V)	A	Max (V)	A	Max (μA)	Max (pF)
ESDU12V0D3	12	12	13.3	1	19	1	32	11	1	130
ESDU15V0D3	E5	15	16.7	1	24	1	38	10	1	120
ESDU18V0D3	18	18	20.0	1	29	1	45	9	1	100
ESDU20V0D3	20	20	22.3	1	35	1	50	8	1	90

Fig.1 Power Derating Curve

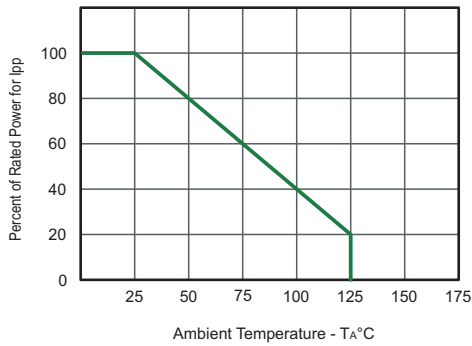
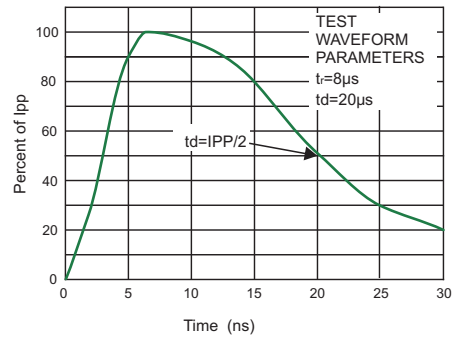


Fig.2 Pulse Waveform

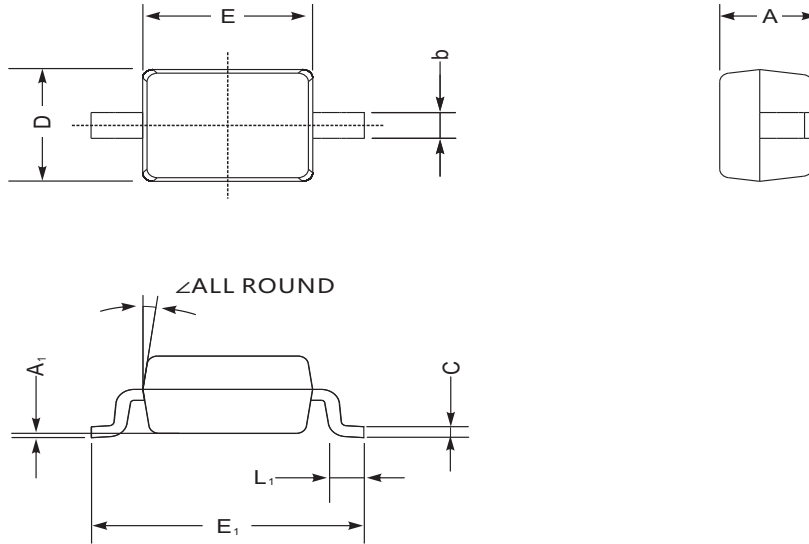




**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

SOD-323W



SOD-323W mechanical data

UNIT		A	C	D	E	E <sub>1</sub>	b	L <sub>1</sub>	A <sub>1</sub>	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	55	100	9.8	7.9	—	

**The recommended mounting pad size**

