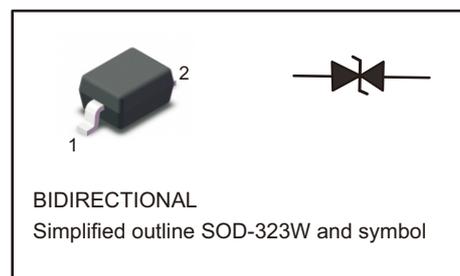


Bi-directional ESD Diode for ESD Protection

Features

- 400 Watts peak pulse power per line (tP=8/20μs)
- Protects one bi-directional I/O line
- Low clamping voltage
- Working voltage:36V
- Low leakage current
- RoHScompliant



Applications

- Cell phone handsets and accessories
- Microprocessor based equipment
- Personal digital assistants (PDA's)
- Notebooks, desktops, and servers
- Portable instrumentation

Mechanical Characteristics

- Package: SOD-323W
- Flammability Rating: UL 94V-0
- High temperature soldering guaranteed:
260°C/ 10s
- Packaging: Tape and Reel

MAXIMUM RATINGS (Ta =25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μS)	Ppk	400	W
Peak Pulse Current	Ipp	6	A
ESD per IEC 61000-4-2 (Air)	VESD	±30	KV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	TJ	-55~ +125	°C
Storage Temperature Range	Tstg	-55~ +150	°C



ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse stand-off voltage	VRWM				36.0	V
Breakdown Voltage	VBR	IT=1mA	40.0		47.5	V
Reverse Leakage Current	IR	V=VRWM , Ta=25°C			0.2	uA
Clamping Voltage	VC	IPP=1A , tp=8/20us			60.0	V
		IPP=6A , tp=8/20us			70	
Junction Capacitance	Cj	VR=0V , f=1HMz			25.0	pF

Fig.1 Power Derating Curve

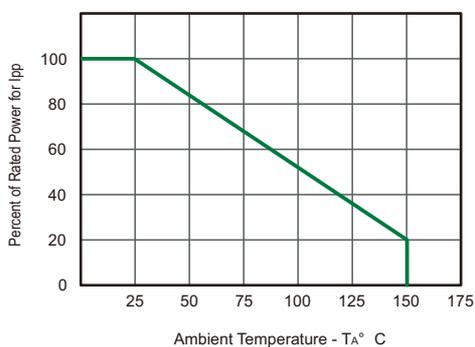
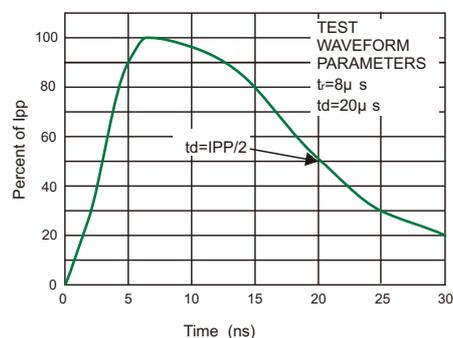


Fig.2 Pulse Waveform

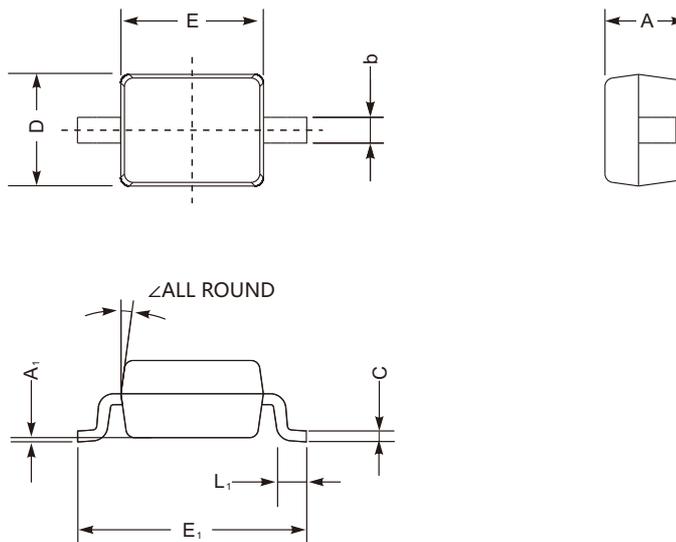




PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

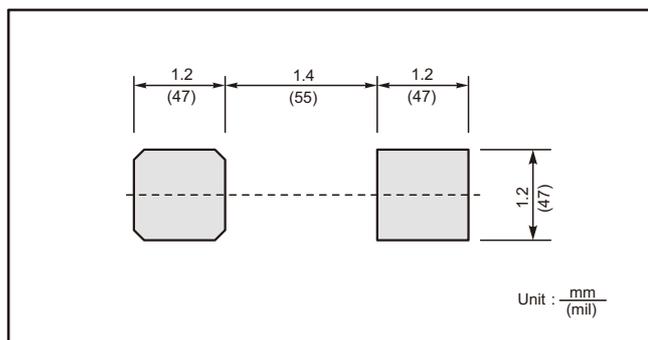
SOD-323W



SOD-323W mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
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



Marking

Type number	Marking code
ESDB36V0D3	2N



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