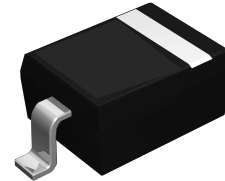
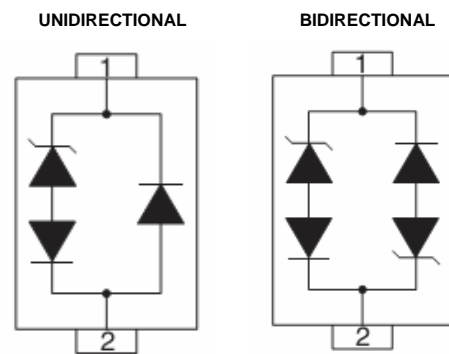


### Features

- 350W peak pulse power per line (tp= 8/20μs)
- SOD-323 package
- Replacement for MLV(0805)
- Unidirectional or Bidirectional configurations
- Protects one power or I/O port
- ESD protection > 40 KV
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to  
IEC61000-4-2 (ESD) ±15KV(air), ±8KV(contact);  
IEC61000-4-4 (EFT) 40A (5/50ns)  
IEC61000-4-5 (surge): 24A, 8/20us-Level 2 (line-ground)  
& level 3 (line-line)



SOD-323



Schematic Diagram

### Applications

- Ethernet- 10/100/1000 Base T
- Cellular phones
- Handheld- Wireless Systems
- PDAs
- USB Interface

### Absolute Maximum Ratings

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

Rating	Symbols	Value	Units
Unidirectional Peak Pulse Power (T <sub>P</sub> =8/20μS)	P <sub>PP</sub>	350	W
Operating Temperature	T <sub>J</sub>	-55 to +150	°C
Storage temperature	T <sub>STG</sub>	-55 to +150	°C

### Electrical Characteristics per line

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

Divice	V <sub>RWM</sub>	IR @ V <sub>RWM</sub>	Min Breakdown Voltage V <sub>BR</sub> @1mA	Max Clamping Voltage V <sub>C</sub>		Typ C <sub>J</sub>
				@I <sub>P</sub> =1A	@I <sub>PP</sub>	@0V,1MHz
	Volts	uA	Volts	Volts	Volts	pF
SPESPLC3V3D323-2U	3.3	1	4.0	7.0	19.0@ 20.0A	3
SPESPLC3V3D323-2B	3.3	1	4.0	7.0	19.0@ 20.0A	3
SPESPLC5VD323-2B	5	1	6.0	9.8	18.3@ 17.0A	3
SPESPLC12VD323-2B	12	1	13.3	19.0	28.6@ 11.0A	3
SPESPLC24VD323-2B	24	1	26.7	43.0	56.0@ 6.0A	3

### Typical Characteristics

Fig.1 Peak Pulse Power vs Pulse Time

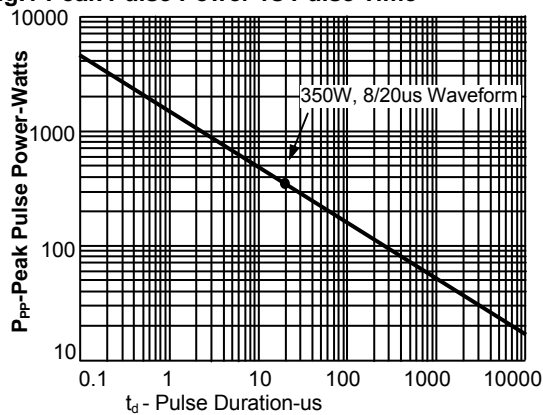
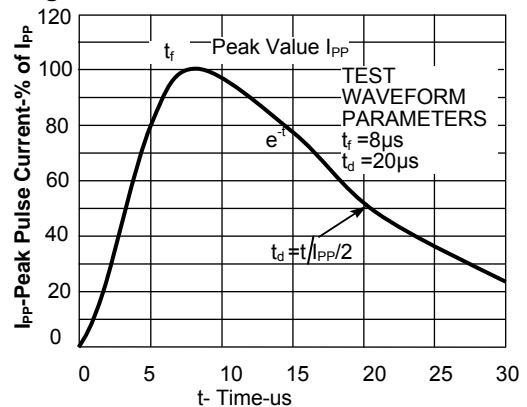
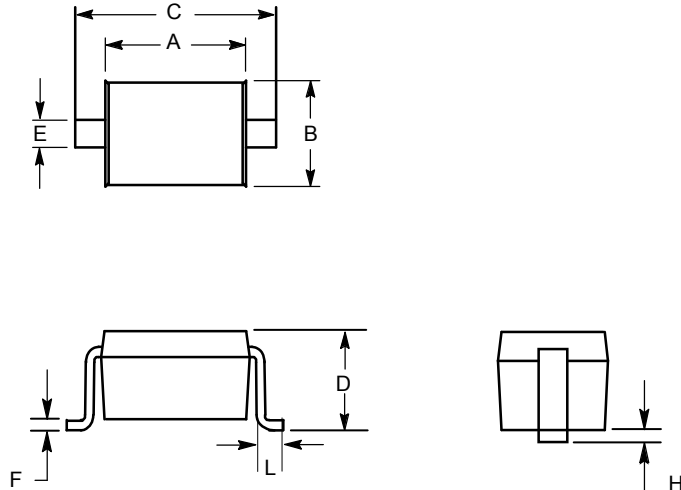


Fig.2 Pulse Waveform



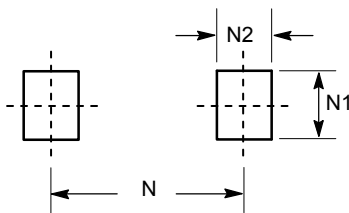
### Product Dimensions



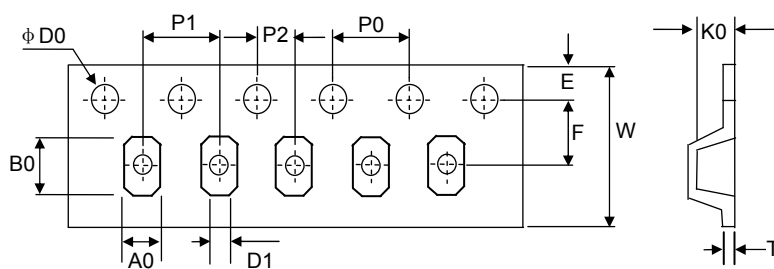
### SOD-323

Dim	millimeters	
	min	max
A	1.60	1.90
B	1.15	1.45
C	2.39	2.70
D	0.80	1.10
E	0.25	0.40
F	0.10	0.20
H		0.10
L	0.20	-
N1	-	*0.80
N2	-	*0.80
N	-	*3.00

### PAD Dimensions



### Package Information



Unit:mm

A0	B0	K0	D1	φD0	E	F	W	P0	P1	P2	T
1.52±0.10	2.90±0.10	1.35±0.10	1.0±0.25	1.50±0.10	1.75±0.10	3.50±0.05	8.00±0.10	4.00±0.10	4.00±0.10	2.00±0.05	0.24~0.27

### Order Information

Device	Package	Net Weight	Carrier	Quantity	HSF Status
SPESPLC <sub>x</sub> VD323-2X	SOD-323	0.0045g	Tape & Reel	3000pcs	RoHS compliant