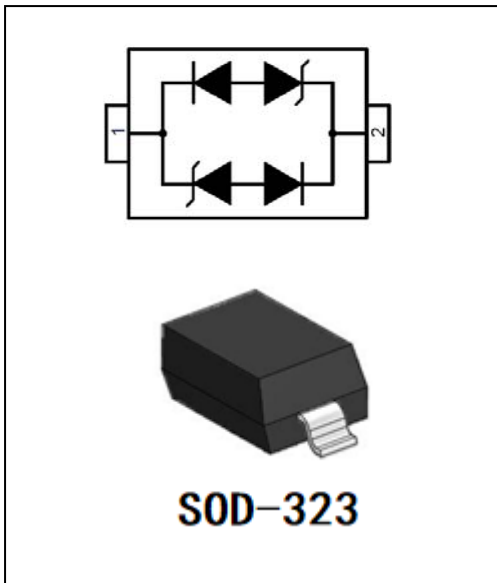


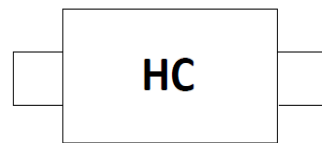
## 1-Line Low Capacitance Bi-directional TVS Diode



### Features

- 360W peak pulse power (8/20 $\mu$ s)
- Ultra low capacitance: 1pF typical
- Ultra low leakage: nA level
- Operating voltage: 24V
- Low clamping voltage
- Protects one power line or data line
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
  - Air discharge:  $\pm 30$ Kv
  - Contact discharge:  $\pm 30$ kV
  - IEC61000-4-5 (Lightning) 6A (8/20 $\mu$ s)
  - IEC61000-4-5(EFT)40A(5/50ns)
- RoHS Compliant

### Marking Information



### Maximum Ratings

PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (8/20 $\mu$ s)	Ppk	360	W
Peak Pulse Current (8/20 $\mu$ s)	IPP	6	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	$\pm 30$ $\pm 30$	KV
Operating Temperature Range	TJ	-55 to +125	$^{\circ}$ C
Storage Temperature Range	Tstg	-55 to +150	$^{\circ}$ C

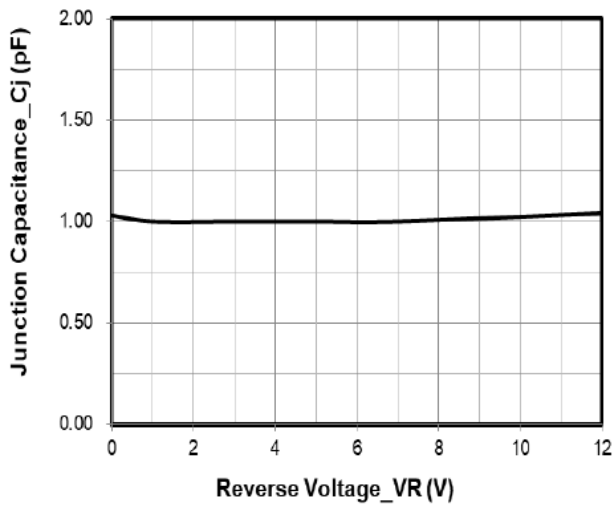


# ESDSL24VD3BA

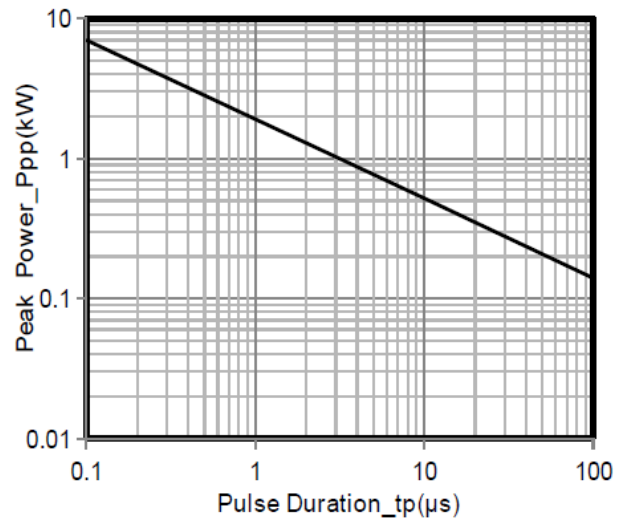
## ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Reverse Working Voltage	V <sub>RWM</sub>	V				24
Breakdown Voltage	V <sub>BR</sub>	V	I <sub>T</sub> = 1mA	27		
Reverse Leakage Current	I <sub>R</sub>	μA	V <sub>RWM</sub> = 24V			0.2
Clamping Voltage	V <sub>C</sub>	V	I <sub>PP</sub> = 1A (8/20μs pulse)		36	
Clamping Voltage	V <sub>C</sub>	V	I <sub>PP</sub> = 6A (8/20μs pulse)		55	
Junction Capacitance	C <sub>J</sub>	pF	V <sub>R</sub> = 0V, f = 1MHz		1	

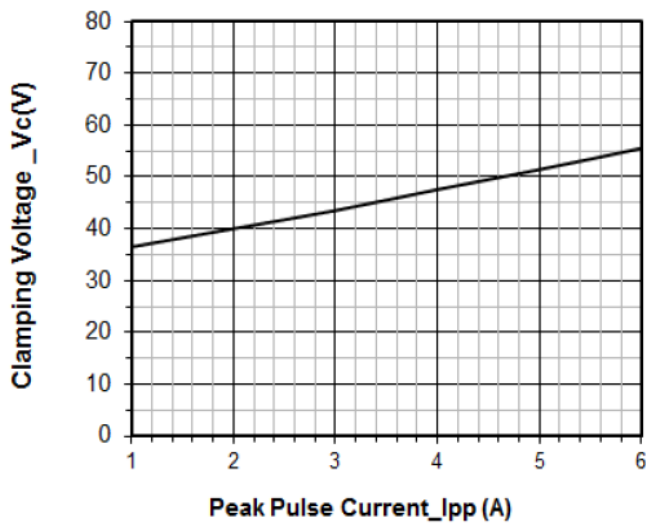
## ■ Characteristics (Typical)



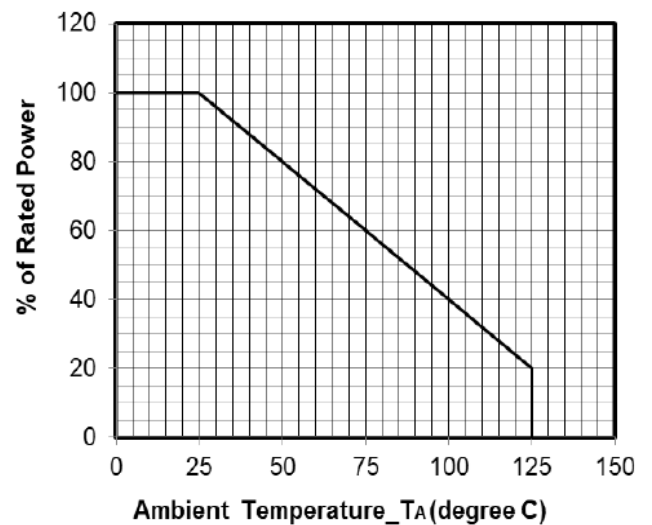
Junction Capacitance vs. Reverse Voltage



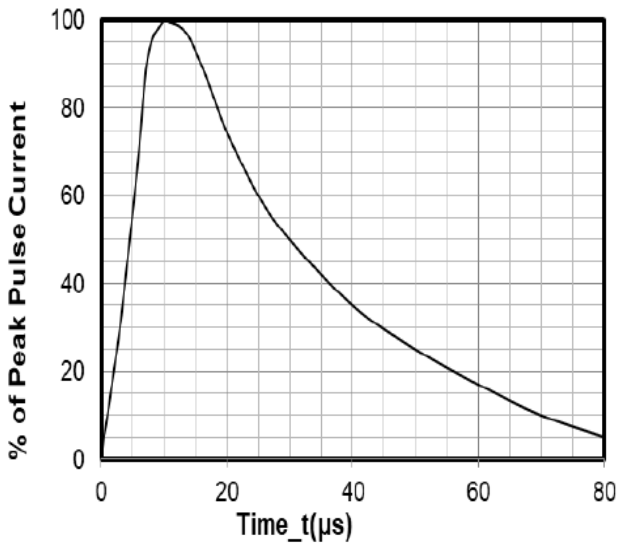
Peak Pulse Power vs. Pulse Time



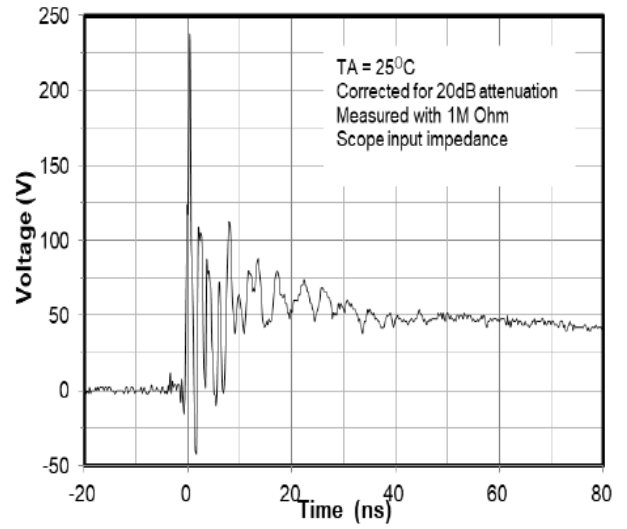
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



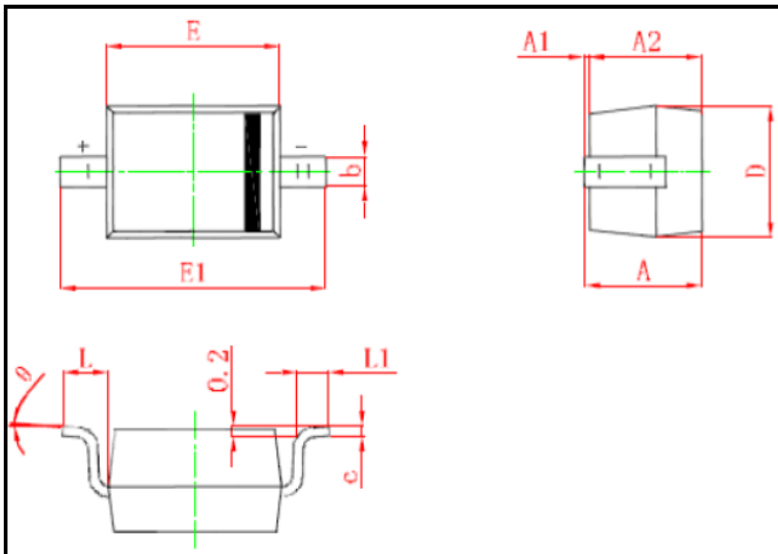
8 X 20μs Pulse Waveform



ESD Clamping Voltage

8 kV Contact per IEC61000-4-2

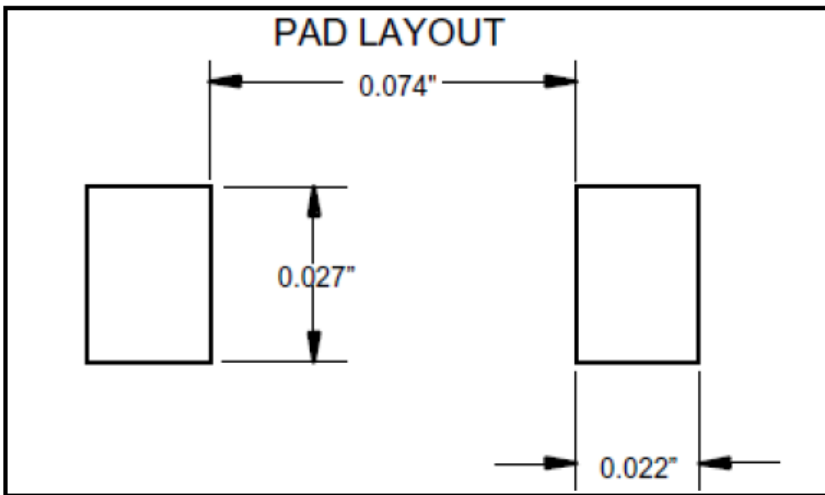
## ■ Outline Dimensions



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°



## ■ Soldering Footprint



Unit: inches



## ESDSL24VD3BA

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### Disclaimer

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