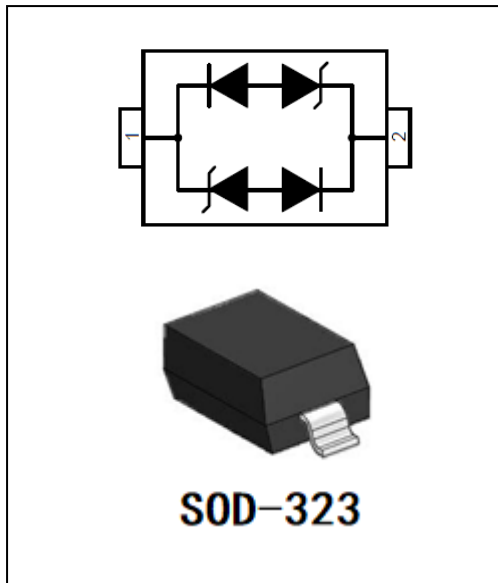


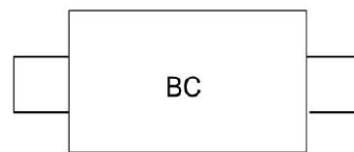
## 1-Line Low Capacitance Bi-directional TVS Diode



### Features

- 350W peak pulse power (8/20 $\mu$ s)
- Ultra low capacitance: 1pF typical
- Ultra low leakage: nA level
- Operating voltage: 8V
- 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) 18A (8/20 $\mu$ s)
- RoHS Compliant

### Marking Information



### ■ Maximum Ratings

PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (8/20 $\mu$ s)	Ppk	350	W
Peak Pulse Current (8/20 $\mu$ s)	IPP	18	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

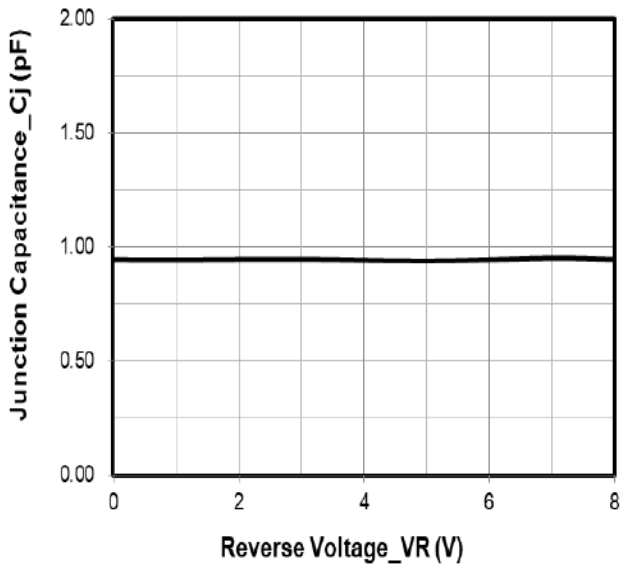


# ESDSL8V0D3BA

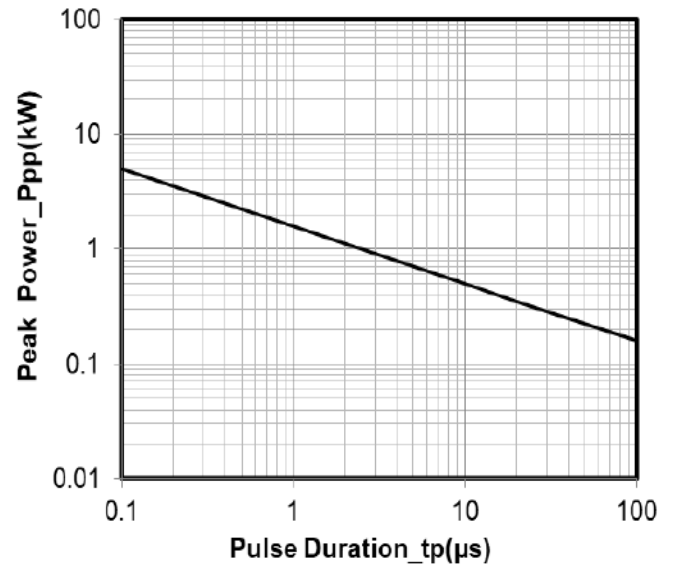
## ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Reverse Working Voltage	V <sub>RWM</sub>	V				8
Breakdown Voltage	V <sub>BR</sub>	V	IT = 1mA	8.5		10
Reverse Leakage Current	IR	μA	VRWM = 8V			0.2
Clamping Voltage	V <sub>C</sub>	V	IPP = 1A (8/20μs pulse)			9
Clamping Voltage	V <sub>C</sub>	V	IPP = 18A (8/20μs pulse)			19.5
Junction Capacitance	C <sub>J</sub>	pF	VR = 0V, f = 1MHz		1	

## ■ Characteristics (Typical)



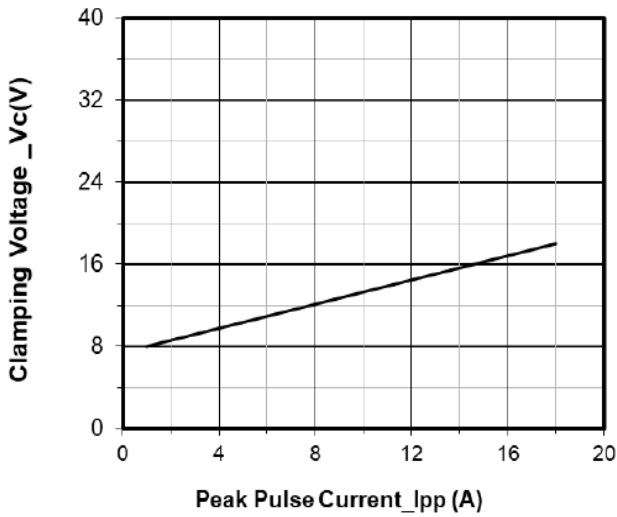
Junction Capacitance vs. Reverse Voltage



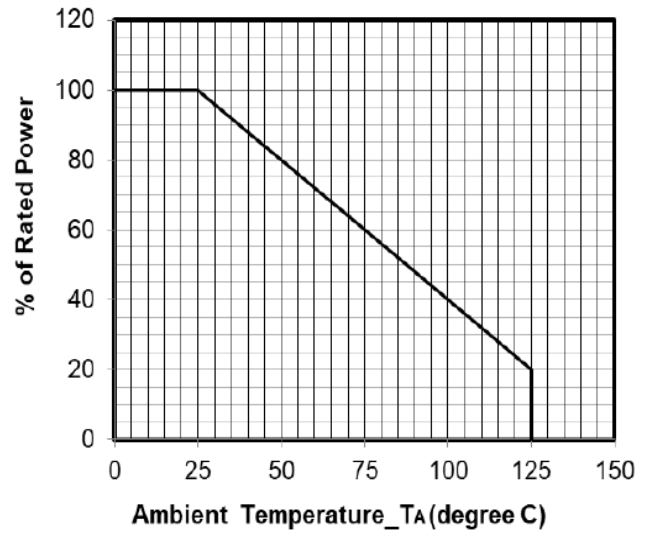
Peak Pulse Power vs. Pulse Time



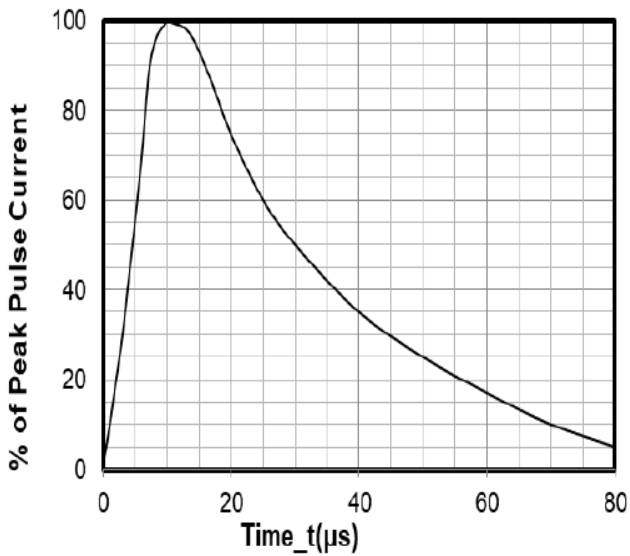
# ESDSL8V0D3BA



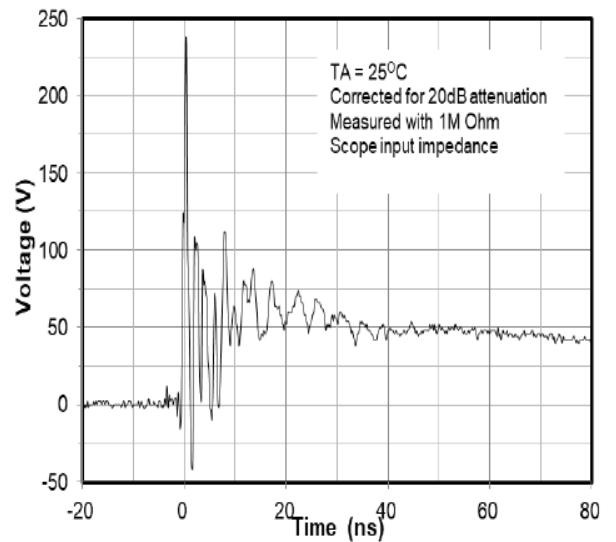
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



8 X 20µS Pulse Waveform

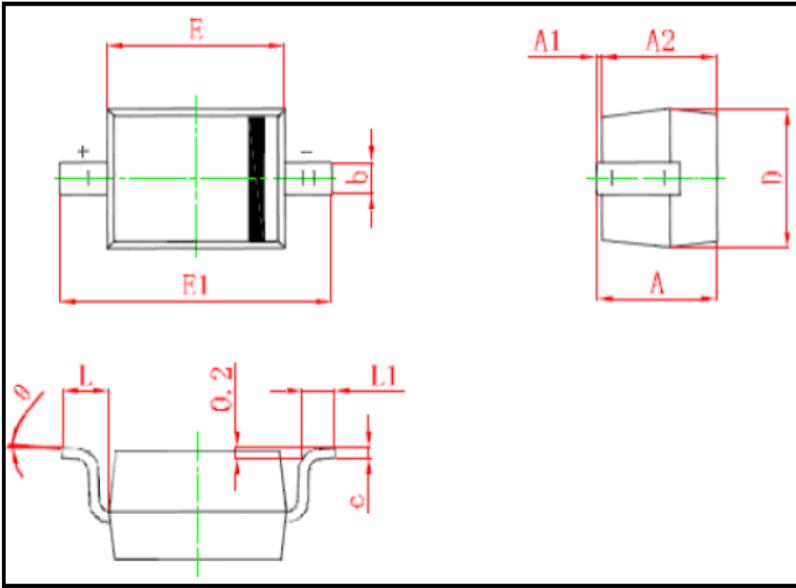


ESD Clamping Voltage  
8 kV Contact per IEC61000-4-2



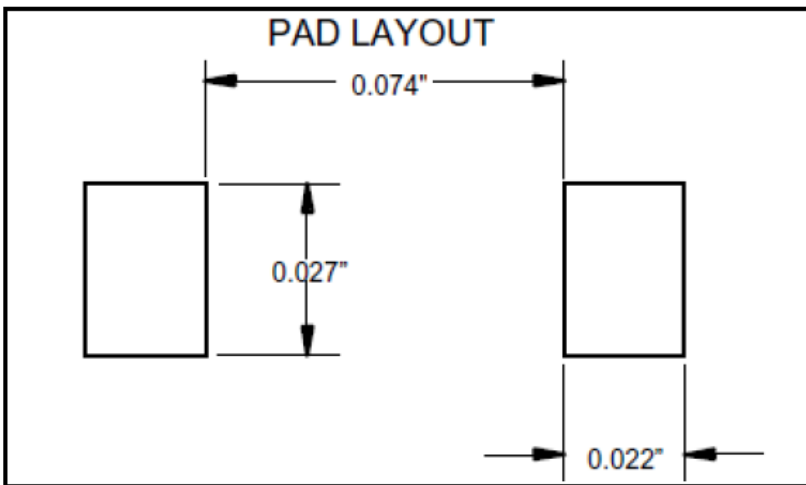
# ESDSL8V0D3BA

## ■ 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
$\theta$	0°	8°

## ■ Soldering Footprint



Unit: inches



## ESDSL8V0D3BA

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### Disclaimer

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