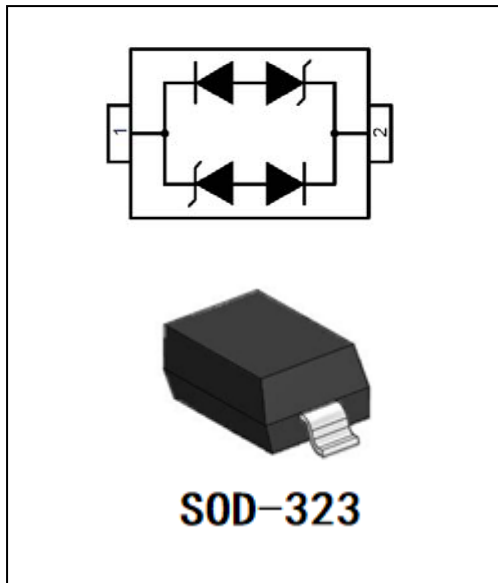


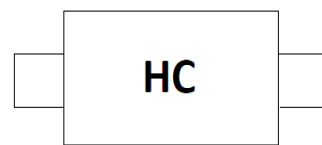
1-Line Low Capacitance Bi-directional TVS Diode



Features

- 360W peak pulse power (8/20 μ 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: ± 30 Kv
- Contact discharge: ± 30 kV
 - IEC61000-4-5 (Lightning) 6A (8/20 μ s)
- RoHS Compliant

Marking Information



■ Maximum Ratings

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

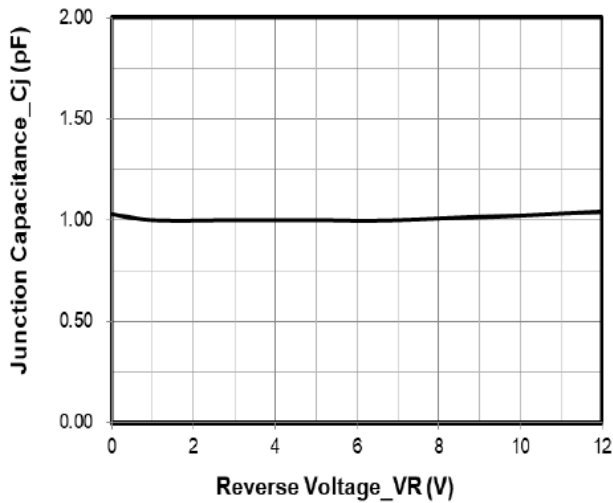


ESDSL24VD3BA

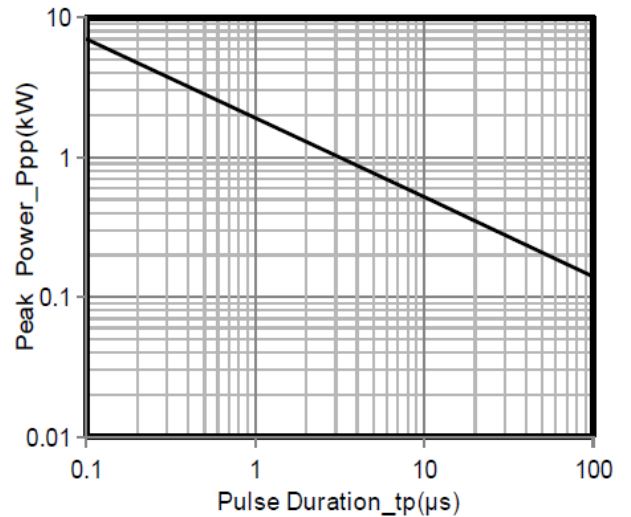
■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | CONDITIONS | MIN | TYP | MAX |
|-------------------------|------------------|------|-------------------------------------|-----|-----|-----|
| Reverse Working Voltage | V _{RWM} | V | | | | 24 |
| Breakdown Voltage | V _{BR} | V | I _T = 1mA | 27 | | |
| Reverse Leakage Current | I _R | μA | V _{RWM} = 12V | | | 0.2 |
| Clamping Voltage | V _C | V | I _{PP} = 1A (8/20μs pulse) | | 36 | |
| Clamping Voltage | V _C | V | I _{PP} = 6A (8/20μs pulse) | | 55 | |
| Junction Capacitance | C _J | pF | V _R = 0V, f = 1MHz | | 1 | |

■ Characteristics (Typical)



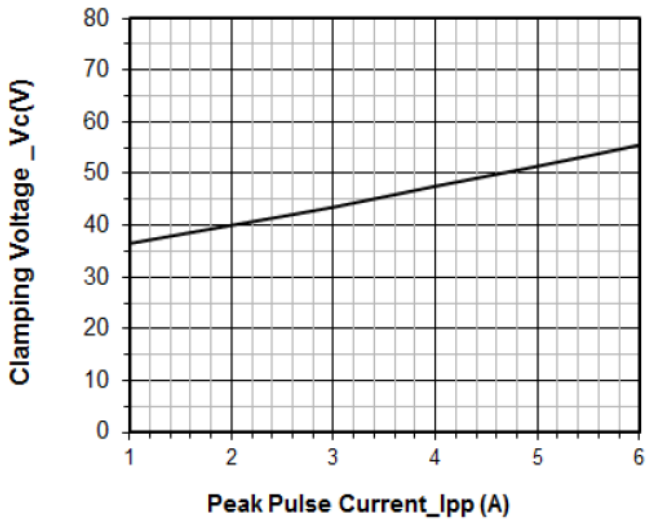
Junction Capacitance vs. Reverse Voltage



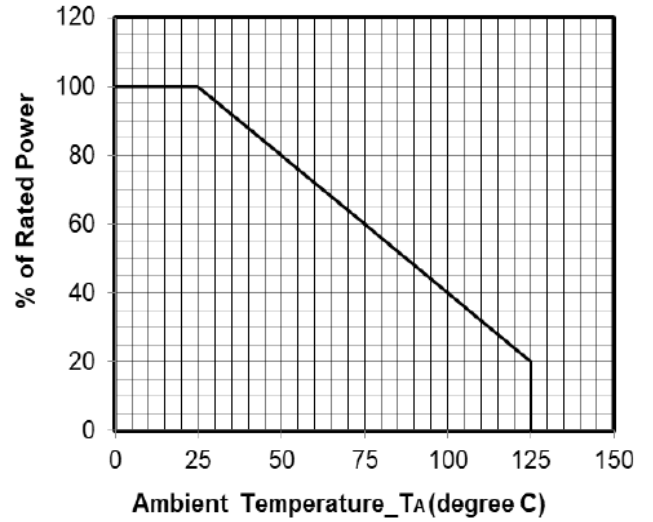
Peak Pulse Power vs. Pulse Time



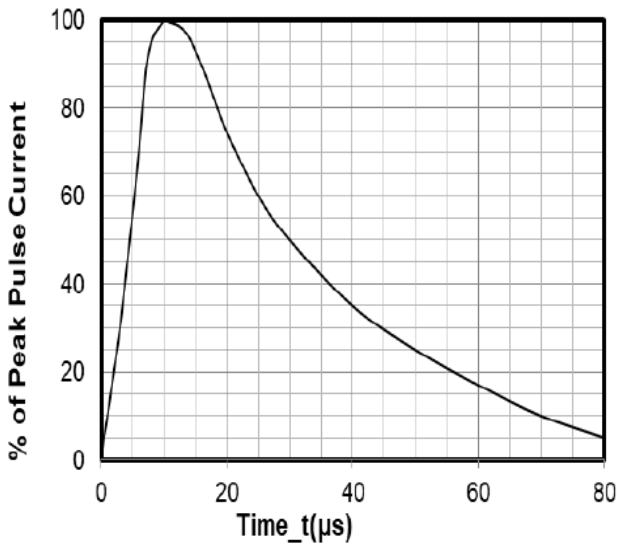
ESDSL24VD3BA



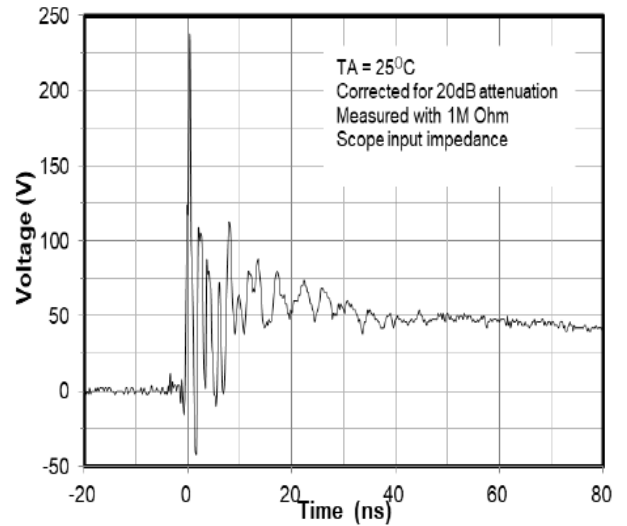
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



8 X 20µs Pulse Waveform



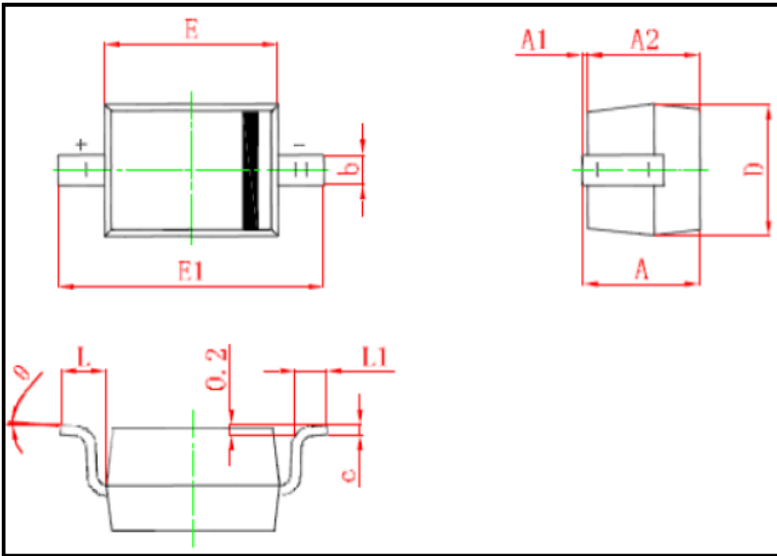
ESD Clamping Voltage

8 kV Contact per IEC61000-4-2



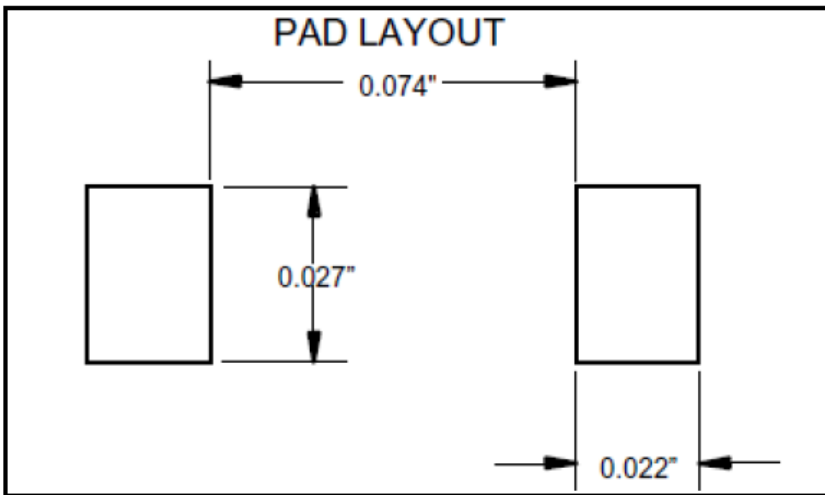
ESDSL24VD3BA

■ 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

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.