

# TVS/ESD Arrays

RLSD32AxxxV Series

## TVS/ESD Arrays - RLSD32AxxxV Series

### Features

- 350 Watts peak pulse power ( $t_p = 8/20\mu s$ )
- Transient protection for data lines to  
IEC 61000-4-2 (ESD)  $\pm 15kV$  (air),  $\pm 8kV$  (contact)  
IEC 61000-4-4 (EFT) 40A (5/50ns)  
IEC 61000-4-5 (Lightning) 24A (8/20 $\mu s$ )
- Small package for use in portable electronics
- Suitable replacement for MLV's in ESD protection applications
- Protects one I/O or power line
- Low clamping voltage
- Solid-state silicon avalanche technology



### Mechanical Characteristics

- SOD-323 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel per EIA 481
- Lead Finish: Matte tin
- RoHS Compliant

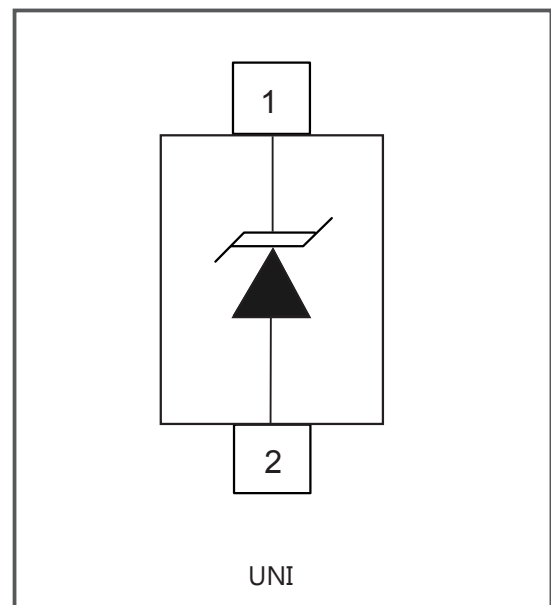
### Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Pagers Peripherals

### Life Support Note

- Not Intended for Use in Life Support or Life Saving Applications
- The products shown herein are not designed for use in life sustaining or life saving applications unless otherwise expressly indicated

### Pinout and Functional Block Diagram



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### Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power (tp =8/20μs)	Ppk	350	Watts
Maximum Peak Pulse Current (tp = 8/20μs)	IPP	24	Amps
ESD per IEC 61000-4-2 (Air)	V <sub>PP</sub>	+/-20	Kv
ESD per IEC 61000-4-2 (Contact)		+/-15	
Lead Soldering Temperature	T <sub>L</sub>	260 (10 sec.)	°C
Operating Temperature	T <sub>J</sub>	-55 to +125	°C
Storage Temperature	T <sub>STG</sub>	-55 to +150	°C
Storage Temperature	T <sub>STG</sub>	-55 to +150	°C

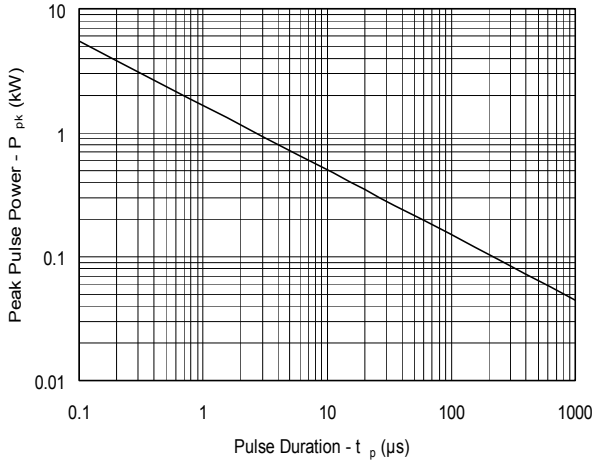
### Electrical Characteristics Per Lin (@ 25°C Unless Otherwise Specified)

Type Number	Peak Power Dissipation @8/20μS Pppm	Reverse Stand-Off Voltage	Peak Pulse Voltage @8/20μS Pppm	Peak Pulse Current @8/20μS Pppm	Reverse Leakage @Vrwm	Maximum Capacitance @1MHZ
		Vrwm	Vc@IPP	IPP	IR@Vrwm	Co
		Max			Max	Max
UNI	W	V	V	A	μA	UNI(pF)
RLSD32A031V	350	3.3	6.5	1	5	450
RLSD32A051V	350	5	9.8	1	5	300
RLSD32A081V	350	8	14	1	1	200
RLSD32A121V	350	12	19	1	1	130
RLSD32A151V	350	15	24	1	1	120
RLSD32A181V	350	18	29	1	1	100
RLSD32A241V	350	24	43	1	1	80
RLSD32A361V	350	36	60	1	1	60

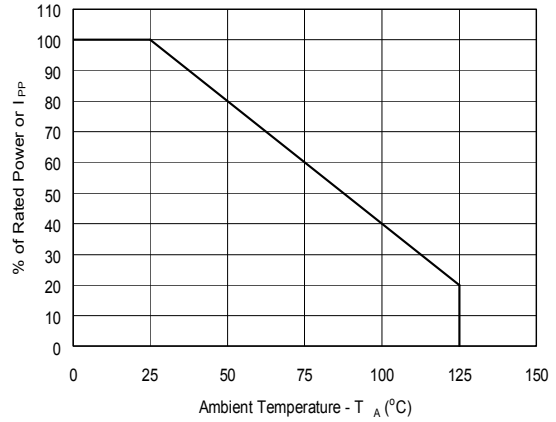
## TVS/ESD Arrays - RLSD32AxxxV Series

### Typical Characteristics

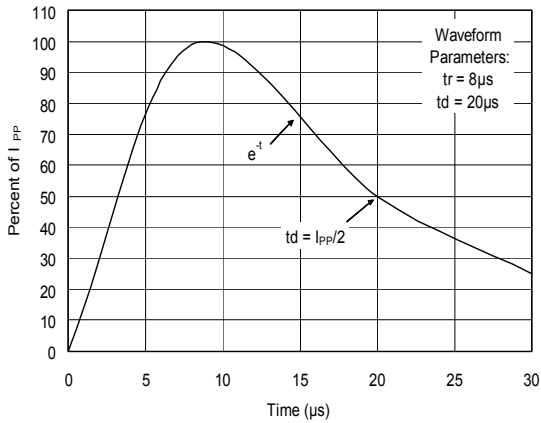
Non-Repetitive Peak Pulse Power vs. Pulse Time



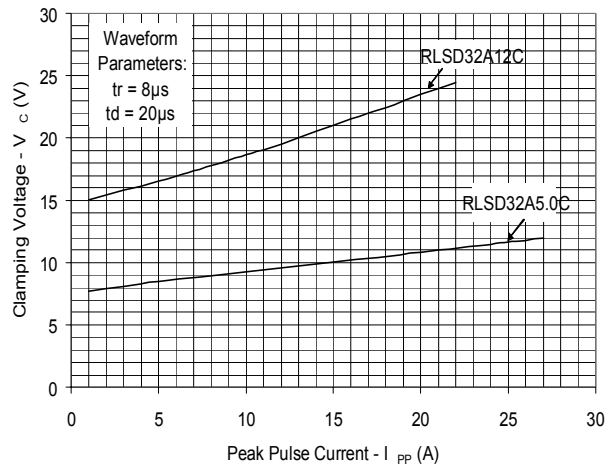
Power Derating Curve



Pulse Waveform

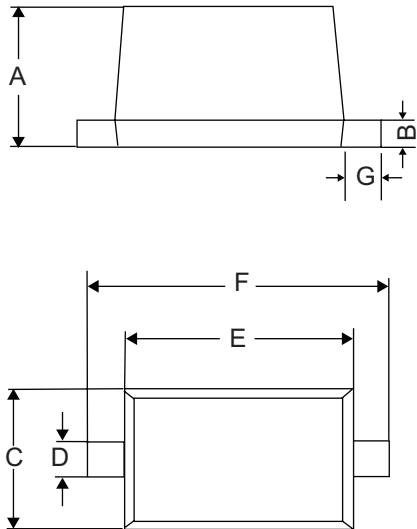


Clamping Voltage vs. Peak Pulse Current



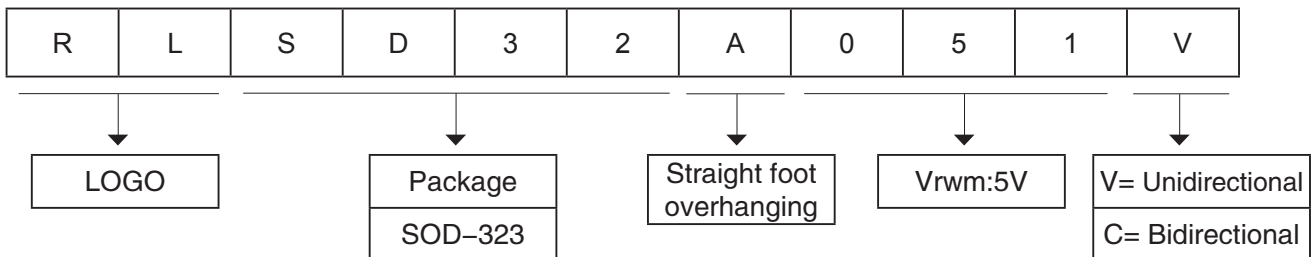
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### Package dimension SOD-323



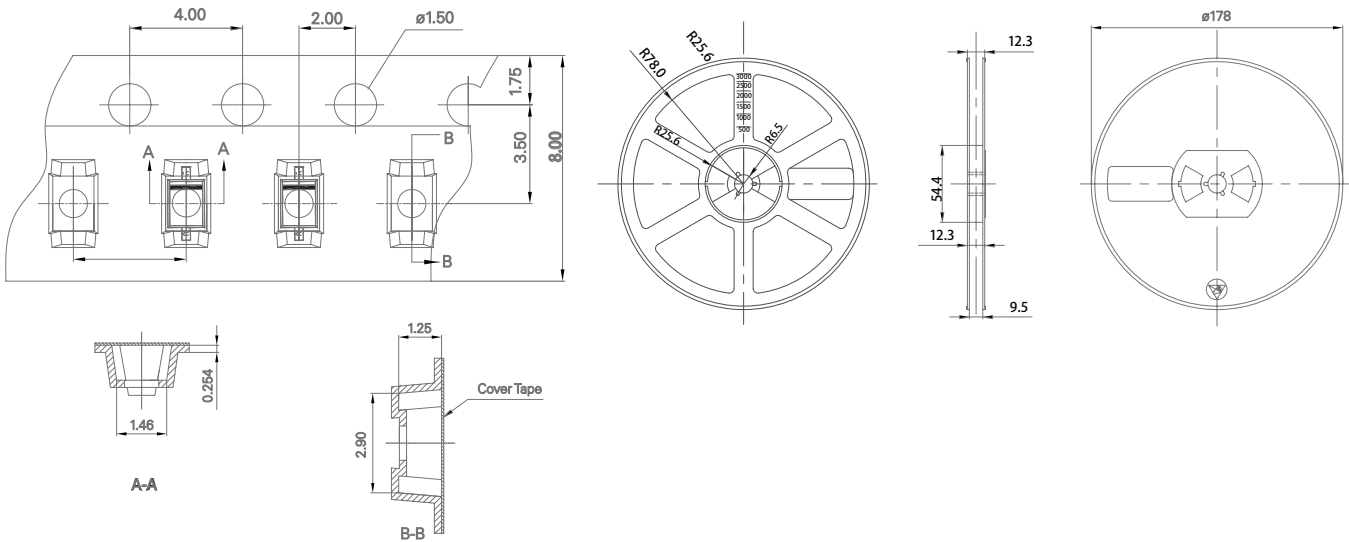
Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	---	0.043	---	1.1
B	0.004	0.010	0.10	0.25
C	0.045	0.054	1.2	1.4
D	0.012	0.016	0.3	0.4
E	0.060	0.071	1.5	1.8
F	0.090	0.107	2.3	2.7
G	0.006	0.010	0.15	0.25

### Part Number Code



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### Tape and reel



### Ordering Information

Part Number	Package	Min. Order Qty.
RLSD32AxxxV	SOD-323	3000pcs

### Warehouse Storage Conditions of Products

Storage Conditions:

1. Storage Temperature: -10°C~+40°C
2. Relative Humidity: ≤75%RH
3. Keep away from corrosive atmosphere and sunlight.
4. Period of Storage: 1 year

## RuiLongYuan Electronics Co., Ltd.

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