

# TVS/ESD Arrays

RLSD32AxxxLC Series

## TVS/ESD Arrays - RLSD32AxxxLC 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
- Working voltages: 5V, 8V, 12V, 15V, 18V, 24V, 36V
- Low leakage current
- Solid-state silicon avalanche technology

### Mechanical Characteristics

- EIAJ SOD-323 package
- Molding compound flammability rating: UL 94V-0
- Marking :
- Packaging : Tape and Reel per EIA 481

### Applications

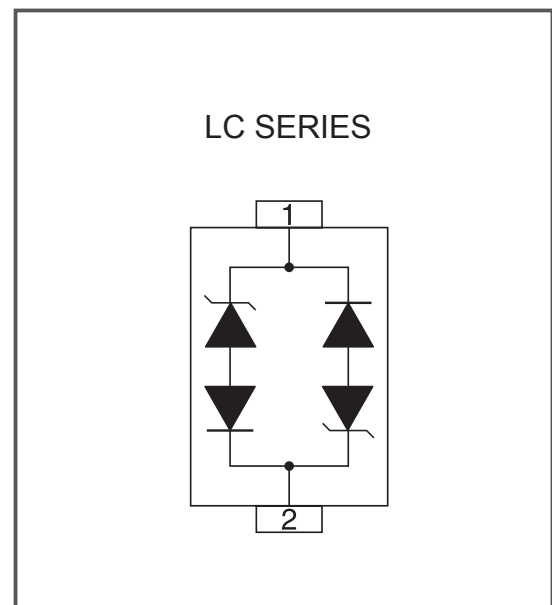
- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Pagers Peripherals

### 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



## TVS/ESD Arrays - RLSD32AxxxLC Series

### Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power (tp =8/20μs)	PPP	350	Watts
ESD voltage (Contact discharge)	VESD	±8	Kv
ESD voltage (Air discharge)	VESD	±15	Kv
Lead soldering temperature	TL	260	°C
Storage & operating temperature range	TSTG ,TJ	-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	pF
RLSD32A031LV	350	3.3	7.5	5	20	1.5
RLSD32A051LV	350	5	9.8	5	5	1.5
RLSD32A081LV	350	8	13.4	5	1	1.5
RLSD32A121LV	350	12	19	5	1	1.5
RLSD32A151LV	350	15	24	5	1	1.5
RLSD32A181LV	350	18	29	5	1	1.5
RLSD32A241LV	350	24	43	1	1	1.5
RLSD32A361LV	350	36	60	1	1	1.5

## TVS/ESD Arrays - RLSD32AxxxLC Series

### Typical Characteristics

Figure 1. Power Derating Curve

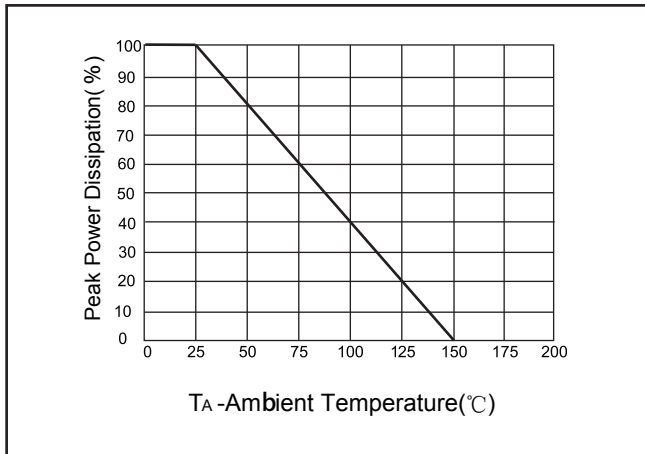


Figure 2. Pulse Waveforms

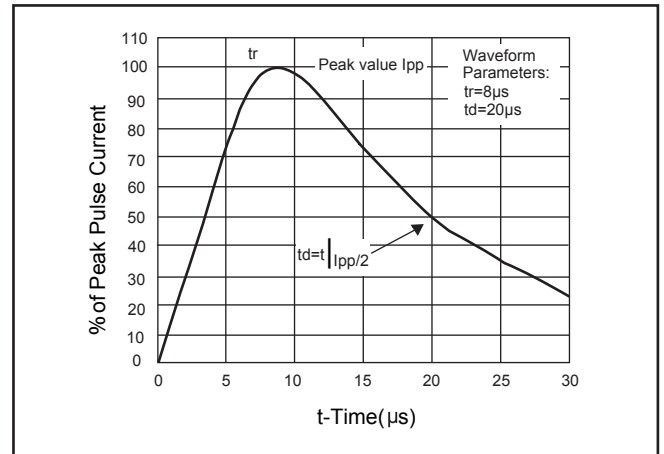


Figure 3. Non-Repetitive Peak Pulse vs Pulse Time

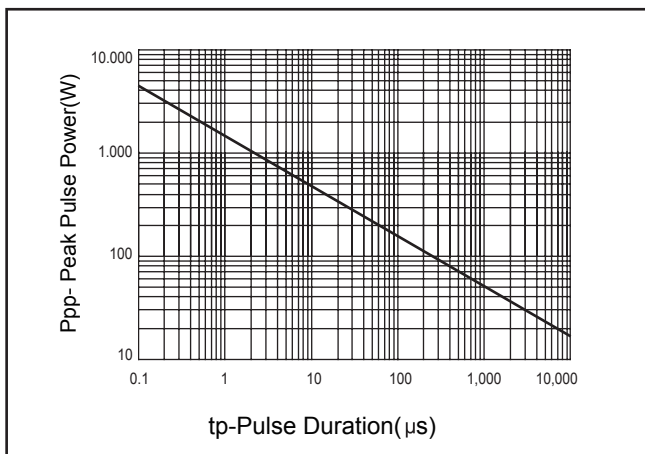
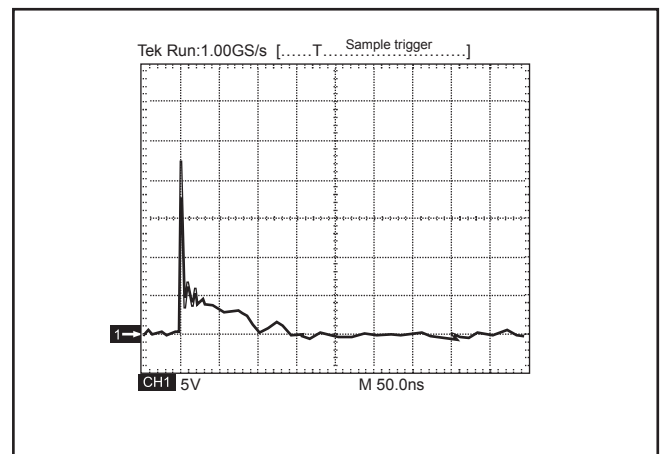
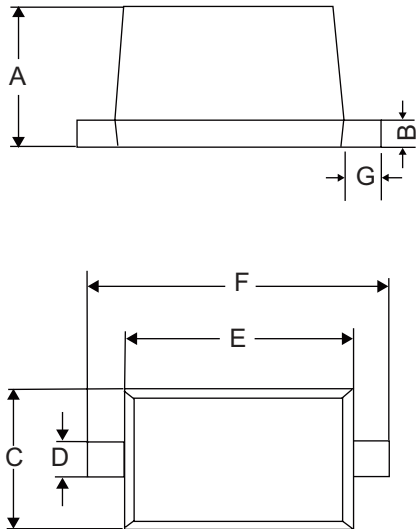


Figure 4. ESD Clamping (8kv Contact IEC61000-4-2)



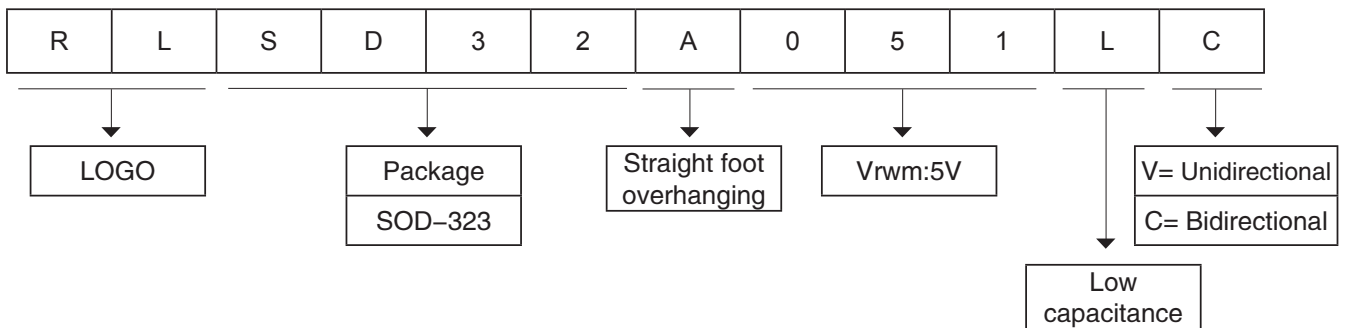
## TVS/ESD Arrays - RLSD32AxxxLC Series

### Package dimension SOD-323



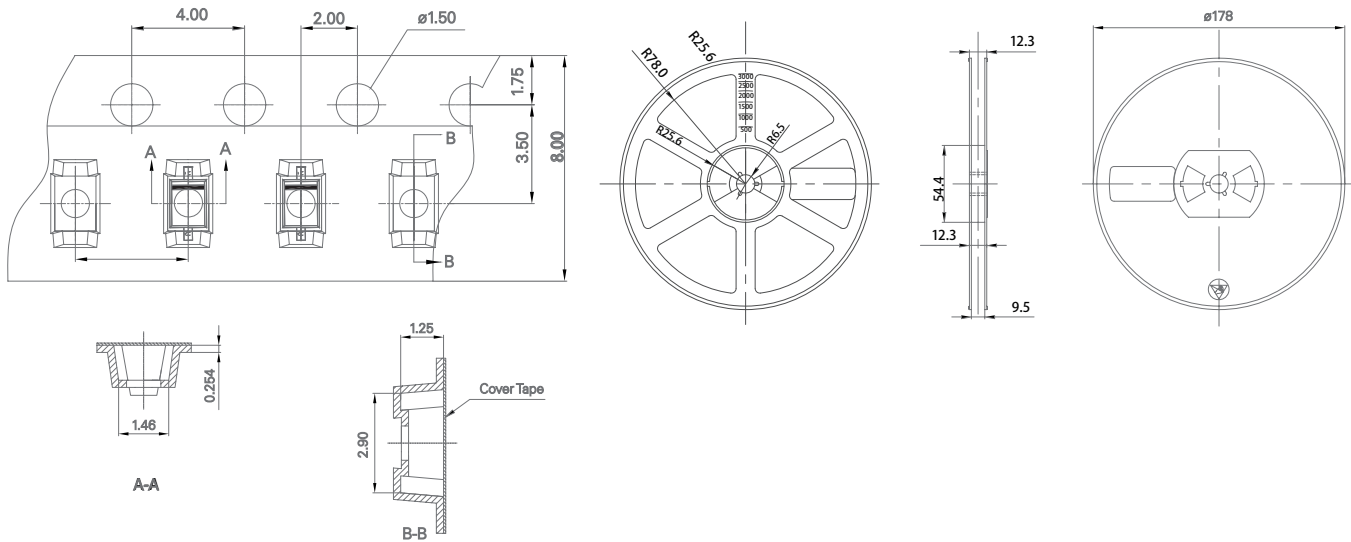
Dimensions				
Symbol	Inches		Millimeters	
	Min	Max	Min	Max
A	---	0.043	---	1.1
B	0.004	0.010	0.10	0.25
C	0.045	0.054	1.2	1.4
D	0.012	0.016	0.3	0.4
E	0.060	0.071	1.5	1.8
F	0.090	0.107	2.3	2.7
G	0.006	0.010	0.15	0.25

### Part Number Code



## TVS/ESD Arrays - RLSD32AxxxLC Series

### Tape and reel



### Ordering Information

Part Number	Package	Min. Order Qty.
RLSD32AxxxLC	SOD-323	3000pcs

### Warehouse Storage Conditions of Products

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

## RuiLongYuan Electronics Co., Ltd.

---

- Reproducing and modifying information of the document is prohibited without permission from Ruilongyuan International Inc.
- Ruilongyuan International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Ruilongyuan International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Ruilongyuan International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Ruilongyuan International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Ruilongyuan International Inc. for any damages resulting from such improper use or sale.

---

**Tel: +86-755-8290 8296**

**Fax: +86-755-8290 8002**

**E-mail: [jack@ruilon.com](mailto:jack@ruilon.com)**