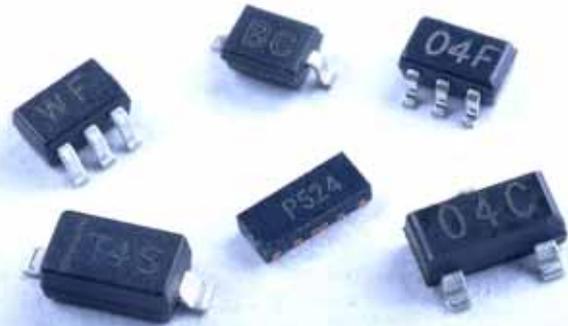


ELECTRONICS



# 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

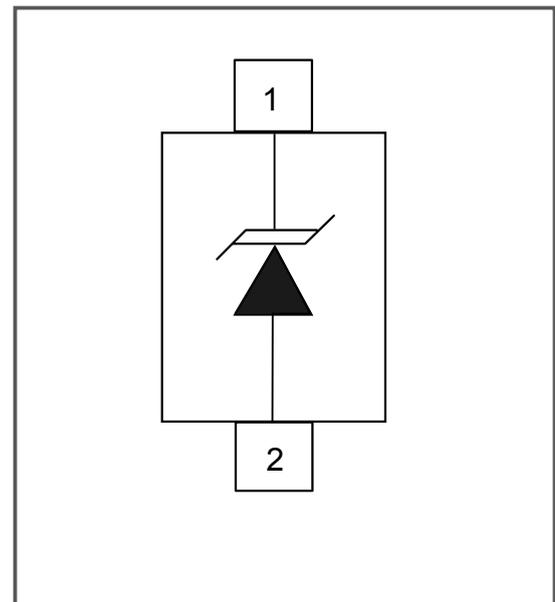
### Applications

- 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



## TVS/ESD Arrays - RLSD32AxxxV Series

## Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power (tp = 8/20µs)	P <sub>pk</sub>	350	Watts
Maximum Peak Pulse Current (tp = 8/20µs)	I <sub>pp</sub>	24	Amps
ESD voltage (HBM contact)	V <sub>ESD</sub>	±8	Kv
ESD voltage (AIR contact)	V <sub>ESD</sub>	±15	Kv
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

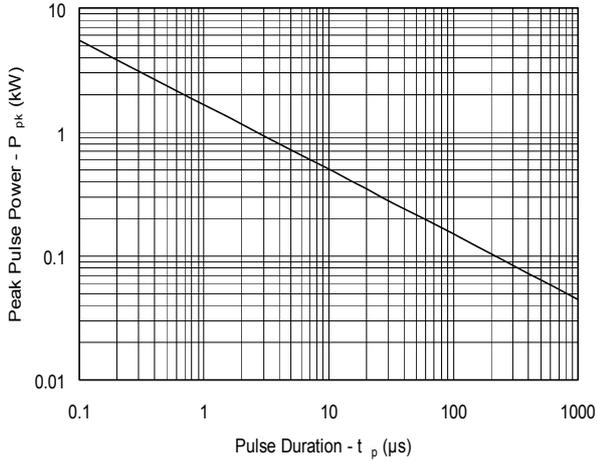
## Electrical Characteristics Per Lin (@ 25°C Unless Otherwise Specified)

Type Number	Peak Power Dissipation @8/20µS P <sub>ppm</sub>	Reverse Stand-Off Voltage	Peak Pulse Voltage @8/20µS	Peak Pulse Current @8/20µS	Reverse Leakage @V <sub>rwm</sub>	Maximum Capacitance @1MHZ
		V <sub>rwm</sub>	V <sub>c@IPP</sub>	IPP	IR@V <sub>rwm</sub>	Co
		Max			Max	Max
	W	V	V	A	µA	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

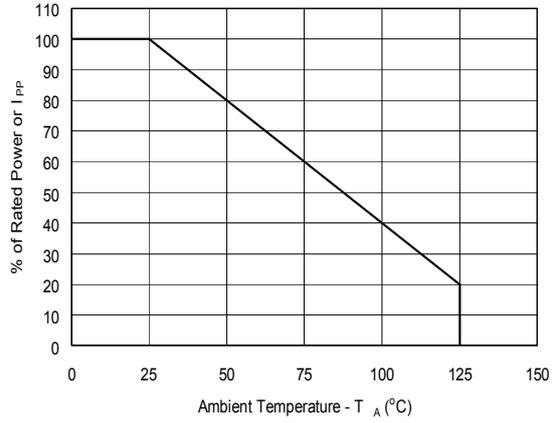
# TVS/ESD Arrays - RLSD32AxxxV Series

## Typical Characteristics

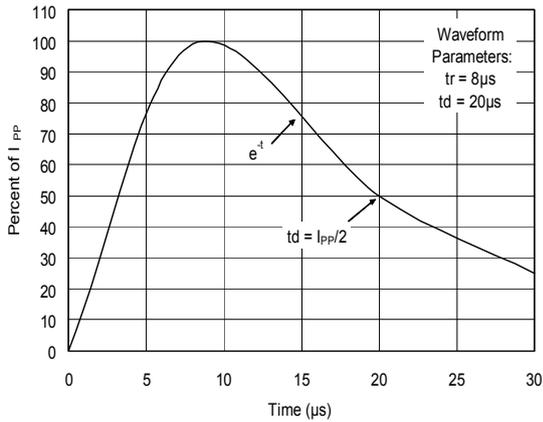
Non-Repetitive Peak Pulse Power vs. Pulse Time



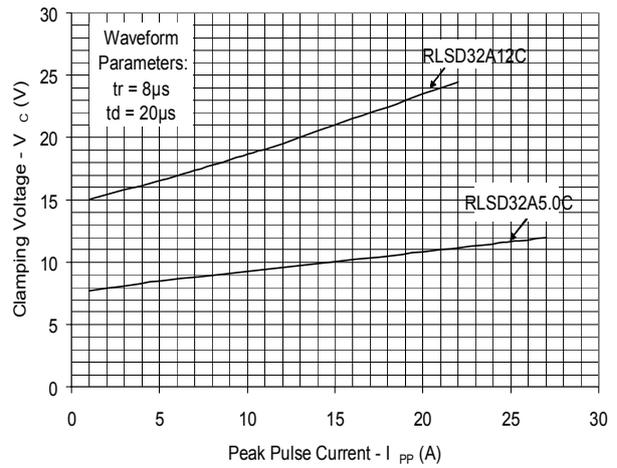
Power Derating Curve



Pulse Waveform

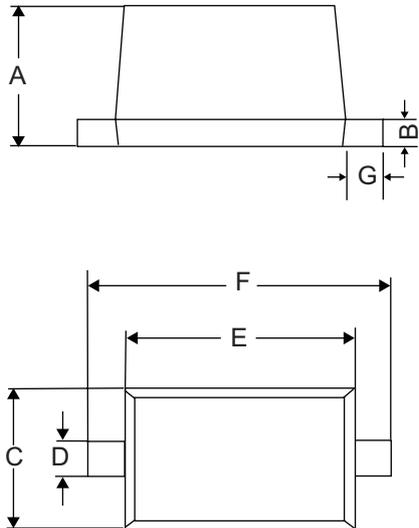


Clamping Voltage vs. Peak Pulse Current



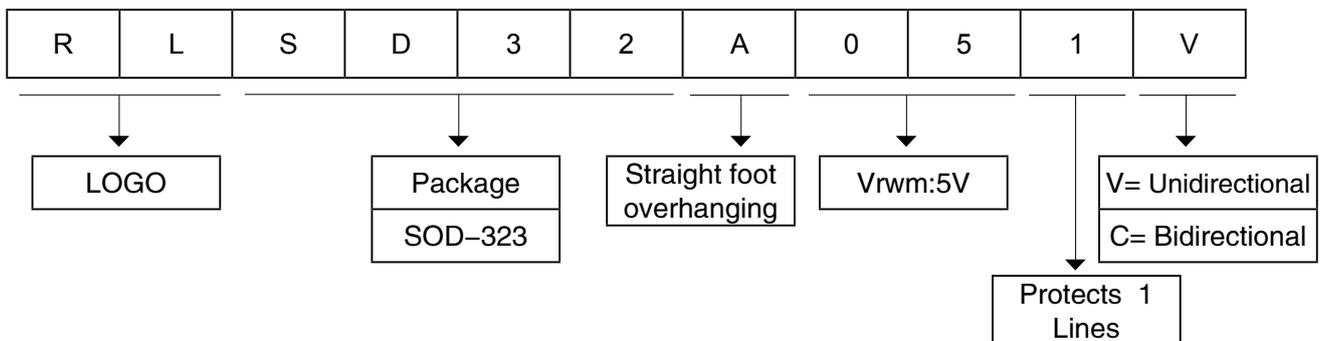
## TVS/ESD Arrays - RLSD32AxxxV Series

### Package dimension SOD-323



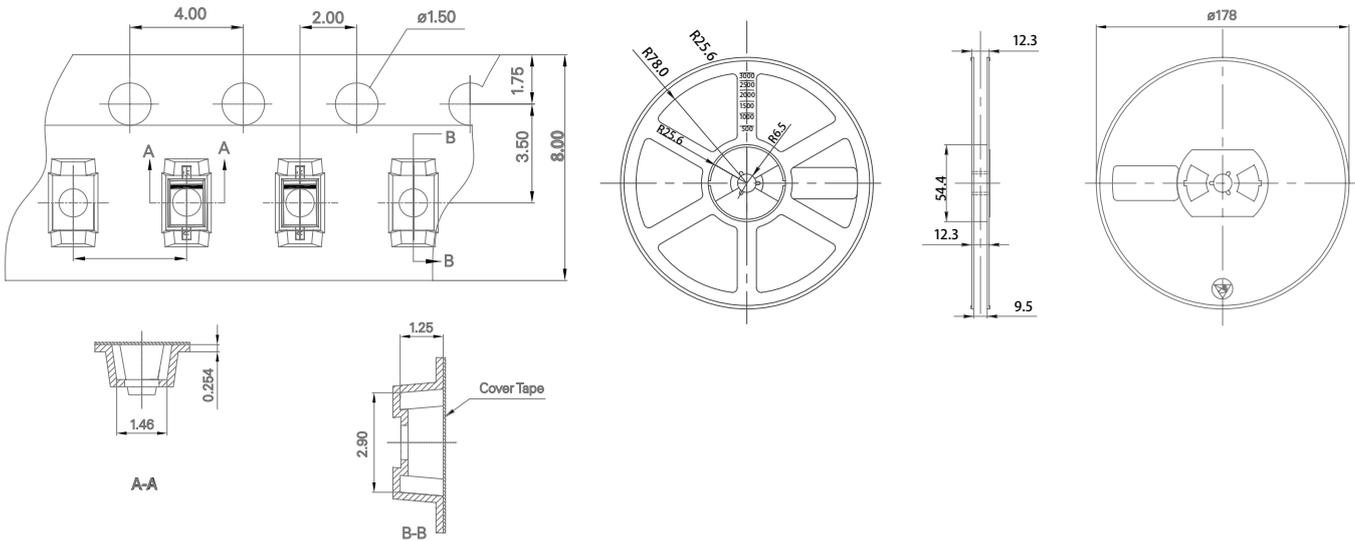
Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	---	0.043	---	1.1
B	0.004	0.010	0.10	0.25
C	0.045	0.054	1.2	1.4
D	0.012	0.016	0.3	0.4
E	0.060	0.071	1.5	1.8
F	0.090	0.107	2.3	2.7
G	0.006	0.010	0.15	0.25

### Part Number Code



# TVS/ESD Arrays - RLSD32AxxxV Series

## 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.

---

- 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.
-