

# TVS/ESD Arrays

RLSD92AxxxV Series

## TVS/ESD Arrays - RLSD92AxxxV Series

### Features

- Transient protection for data lines to IEC 61000-4-2 (ESD)  $\pm 15\text{kV}$  (air),  $\pm 8\text{kV}$  (contact)  
IEC 61000-4-4 (EFT) 40A (tp = 5/50ns)  
Cable Discharge Event (CDE)
- Ultra-small package (1.0 x 0.6 x 0.5mm)
- Protects one data or I/O line
- Low clamping voltage
- Solid-state silicon-avalanche technology



### Mechanical Characteristics

- SOD-923 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel per EIA 481
- Lead Finish: Matte tin
- RoHS Compliant

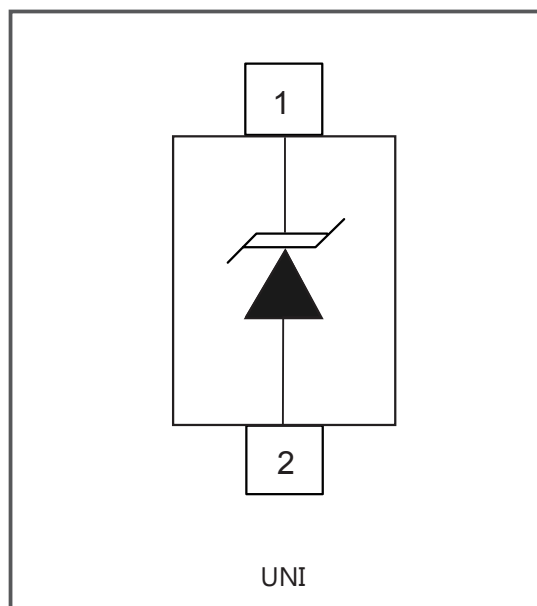
### Applications

- 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	40	Watts
Peak Pulse Current (tp = 8/20μs)	IPP	4	A
ESD per IEC 61000-4-2 (Air)	VESD	+/-15	Kv
ESD per IEC 61000-4-2 (Contact)	VESD	+/-8	Kv
Operating Temperature	TJ	-55 to +125	°C
Storage Temperature	TSTG	-55 to +150	°C
Storage Temperature	TSTG	-55 to +150	°C

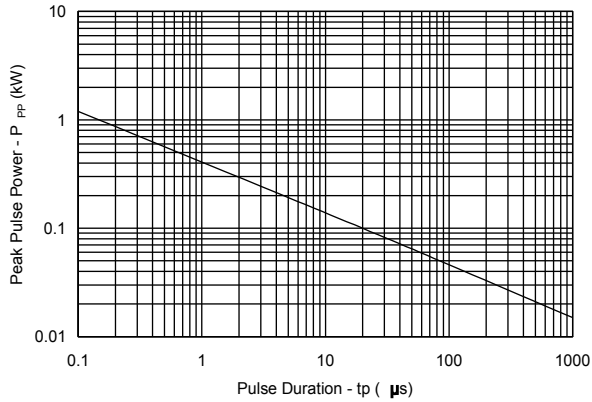
### Electrical Characteristics Per Lin (@ 25°C Unless Otherwise Specified)

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)
RLSD92A031V	150	3.3	10	5	2.5	80
RLSD92A051V	150	5	12	5	1	65
RLSD92A071V	150	7	15	5	1	50
RLSD92A121V	150	12	23	5	1	30
RLSD92A151V	150	15	30	1	1	20

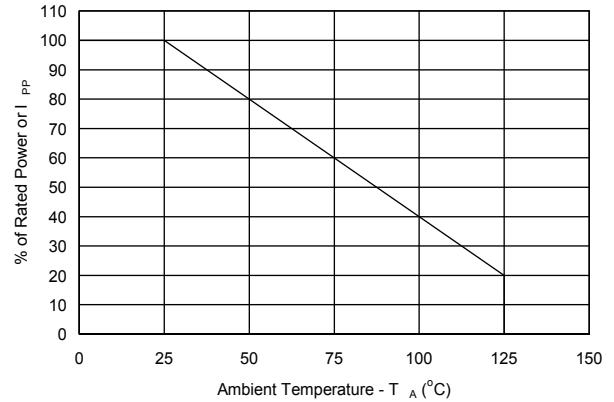
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### Typical Characteristics

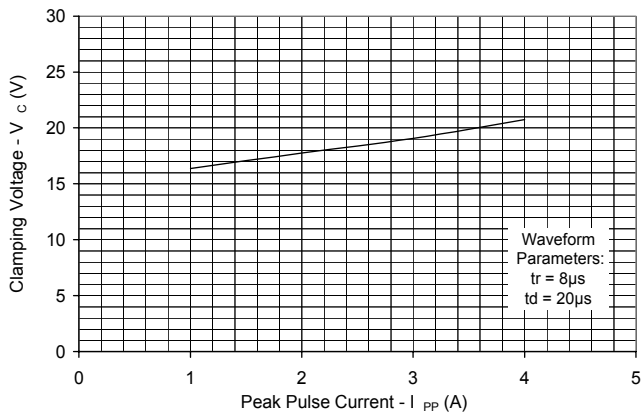
Non-Repetitive Peak Pulse Power vs. Pulse Time



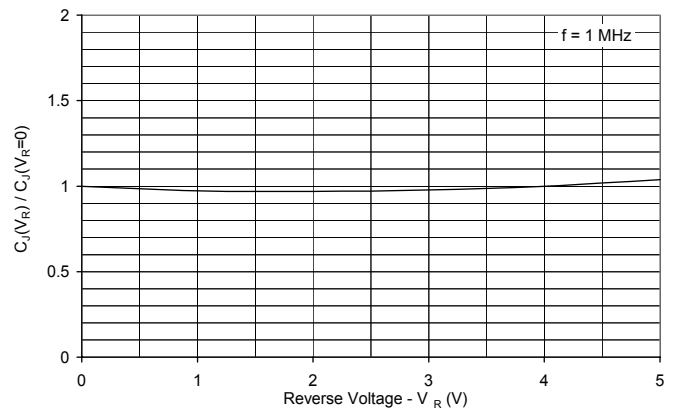
Power Derating Curve



Clamping Voltage vs. Peak Pulse Current

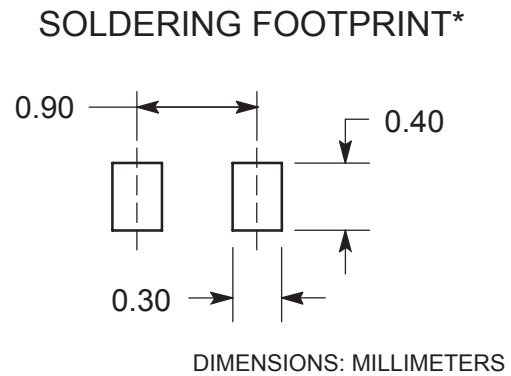
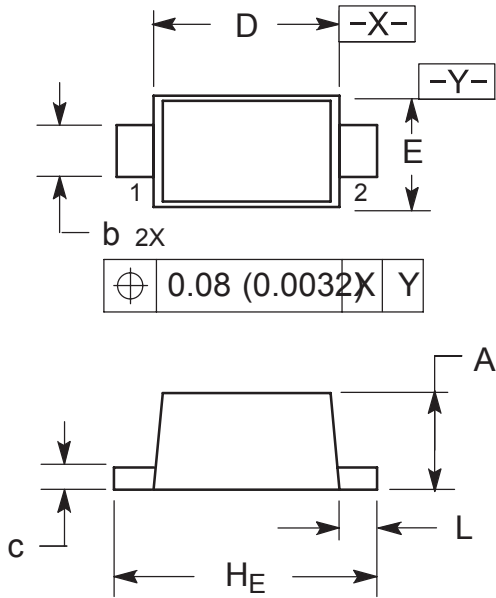


Normalized Capacitance vs. Reverse Voltage



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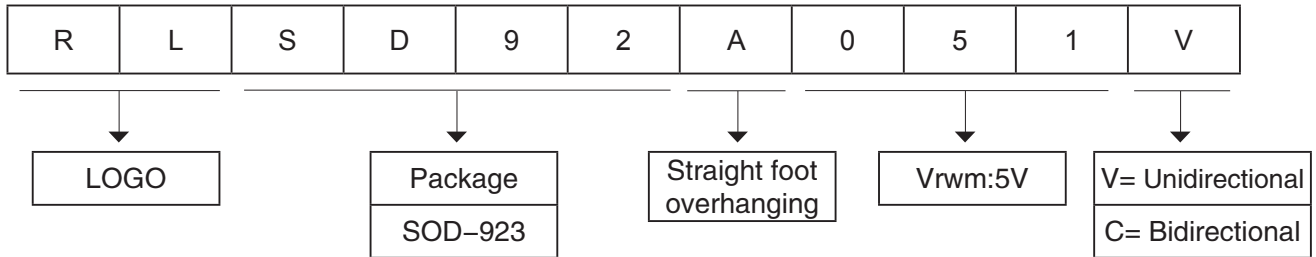
### Package dimension SOD-923



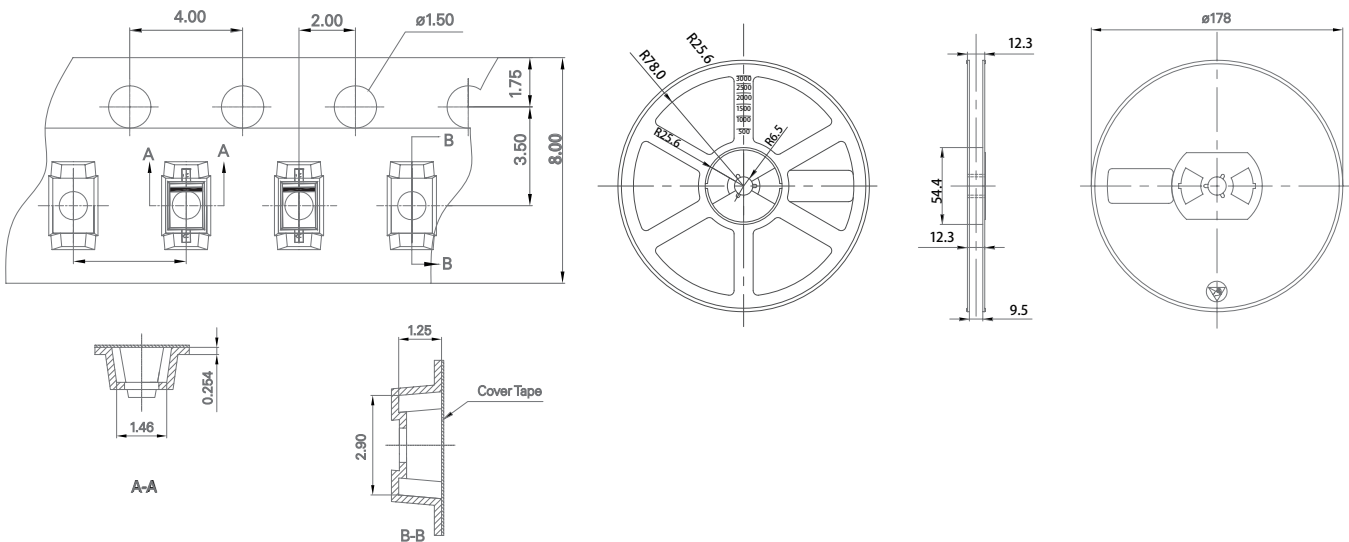
DIM	Dimensions					
	Inches			Millimeters		
	Min	Nom	Max	Min	Nom	Max
A	0.013	0.015	0.016	0.34	0.37	0.40
B	0.006	0.008	0.010	0.15	0.20	0.25
C	0.003	0.005	0.007	0.07	0.12	0.17
D	0.030	0.031	0.038	0.75	0.80	0.85
E	0.022	0.024	0.026	0.55	0.60	0.65
H <sub>E</sub>	0.039	0.039	0.041	0.95	1.00	1.05
L	0.002	0.004	0.006	0.05	0.10	0.15

## TVS/ESD Arrays - RLSD92AxxxV Series

### Part Number Code



### Tape and reel



### Ordering Information

Part Number	Package	Min. Order Qty.
RLSD923AxxxV	SOD-923	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

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