

TVS/ESD Arrays

RLSD92A Series

TVS/ESD Arrays - RLSD92A Series

Features

- Transient protection for data lines to IEC 61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 15\text{kV}$ (contact)
IEC 61000-4-4 (EFT) 40A (tp = 5/50ns)
Cable Discharge Event (CDE)
- Ultra-small SOD-923 package (1.0 x 0.6 x 0.5mm)
- Protects one data or I/O line
- Low capacitance
- 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

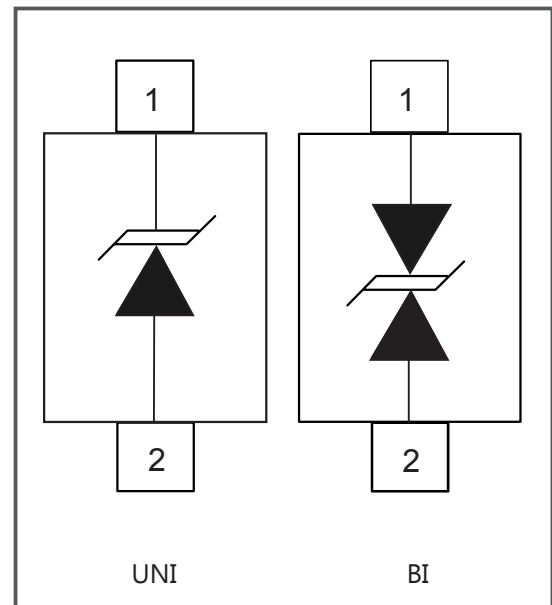
Applications

- 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	150	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

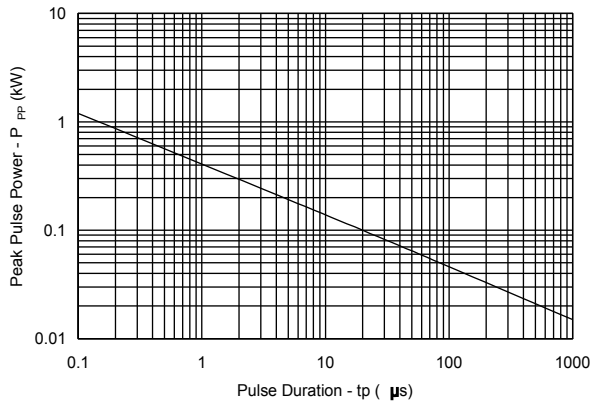
Electrical Characteristics Per Lin (@ 25°C Unless Otherwise Specified)

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	Max			
UNI	BI	W	V	V	A	μA	UNI(pF)	BI(pF)				
RLSD92A031V	RLSD92A031C	150	3.3	10	5	1	80	25				
RLSD92A051V	RLSD92A051C	150	5	12	5	1	65	15				
RLSD92A071V	RLSD92A071C	150	7	15	5	1	50	12				
RLSD92A121V	RLSD92A121C	150	12	23	5	1	30	10				
RLSD92A151V	RLSD92A151C	150	15	30	1	1	20	10				

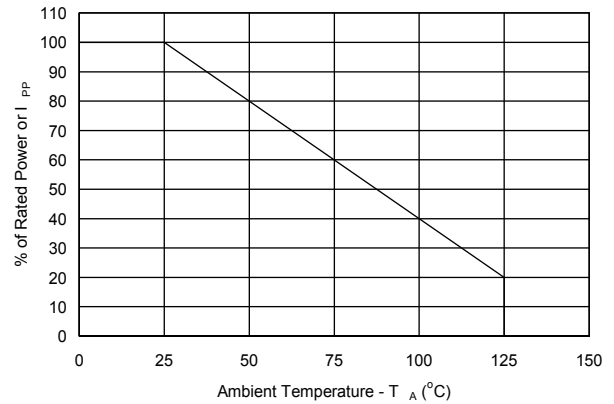
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Typical Characteristics

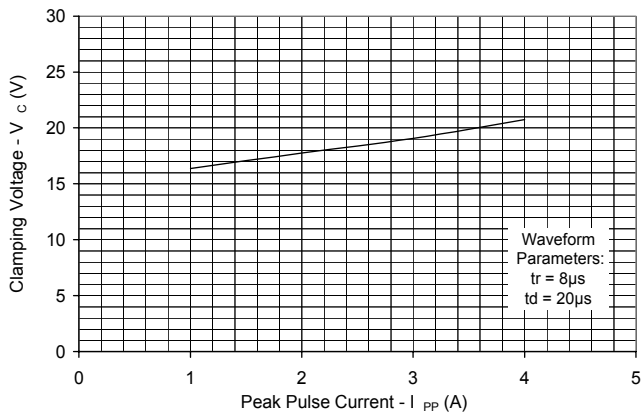
Non-Repetitive Peak Pulse Power vs. Pulse Time



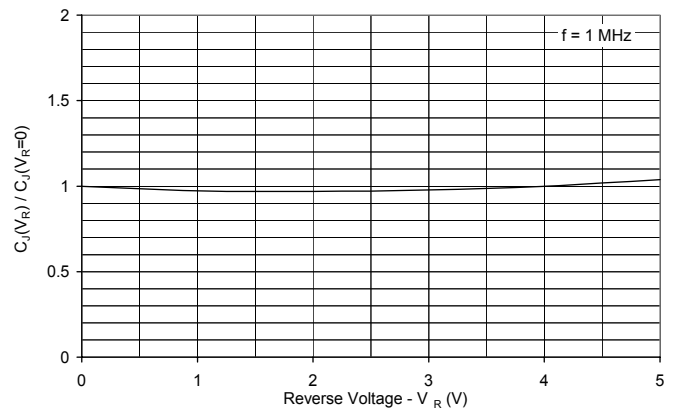
Power Derating Curve



Clamping Voltage vs. Peak Pulse Current

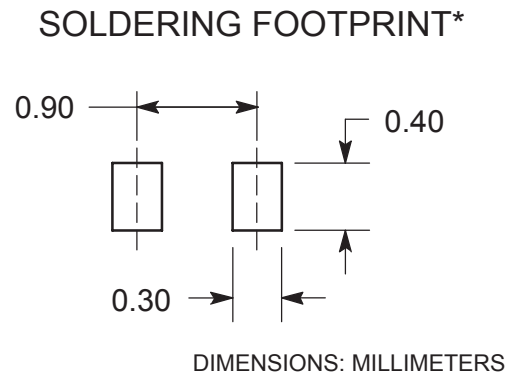
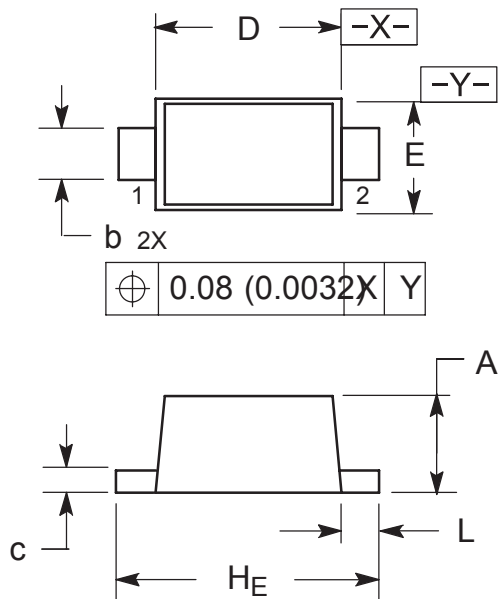


Normalized Capacitance vs. Reverse Voltage



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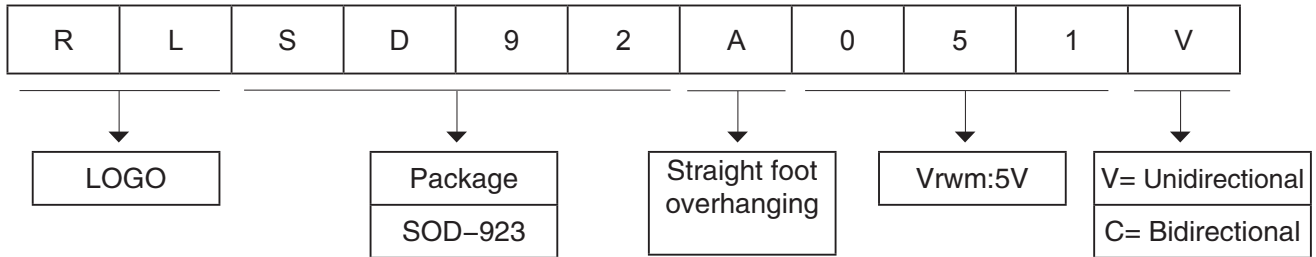
Package dimension SOD-923



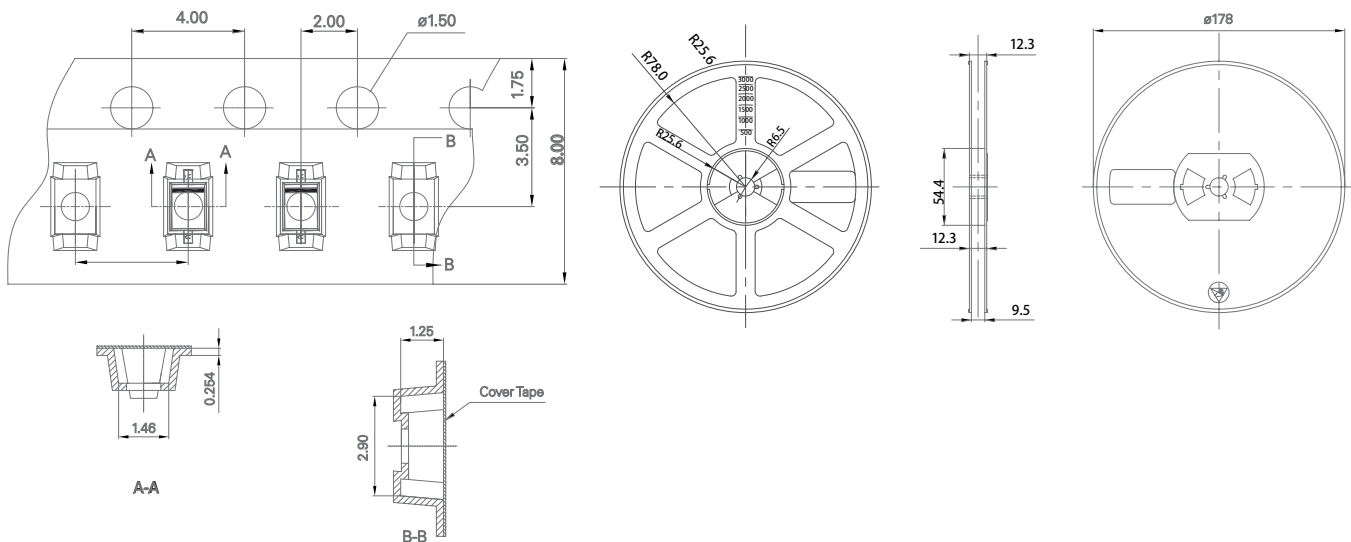
DIM	Dimensions					
	Inches			Millimeters		
	Min	Nom	Max	Min	Nom	Max
A	0.013	0.015	0.016	0.34	0.37	0.40
B	0.006	0.008	0.010	0.15	0.20	0.25
C	0.003	0.005	0.007	0.07	0.12	0.17
D	0.030	0.031	0.038	0.75	0.80	0.85
E	0.022	0.024	0.026	0.55	0.60	0.65
H _E	0.039	0.039	0.041	0.95	1.00	1.05
L	0.002	0.004	0.006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

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Part Number Code



Ordering Information



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Part Number	Package	Min. Order Qty.
RLSD92A	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.
- Period of Storage: 1 year

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