



TVS/ESD Arrays

RLSD32AxxxLC Series

TVS/ESD Arrays - RLSD32AxxxLC Series

Features

- 350 Watts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- Bidirectional Configuration
- Protects One Power or I/O Port
- ESD Protection > 40 kilovolts
- Low Clamping Voltages
- Ultra Low Capacitance: 1.0 pF Typical



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

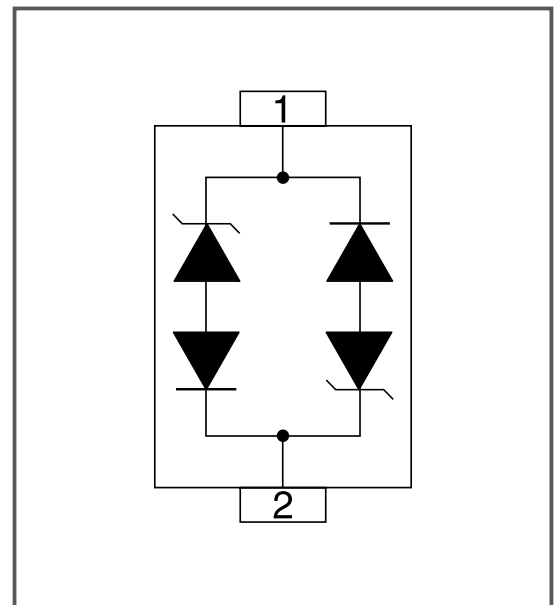
IEC COMPATIBILITY (EN61000-4)

- 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 μs)

Applications

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

Pinout and Functional Block Diagram



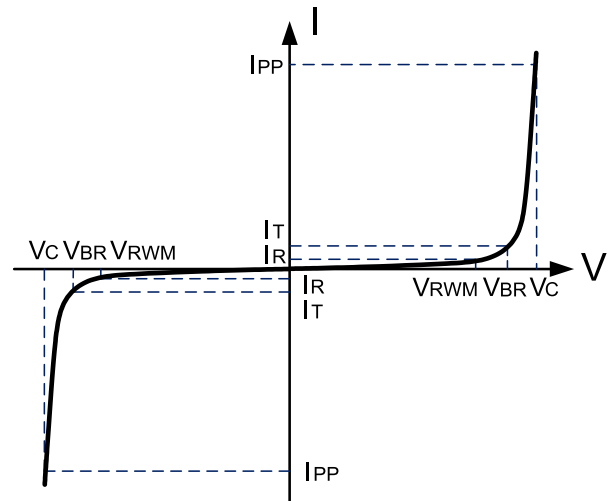
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Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power (tp =8/20μs)	P _{pk}	350	Watts
ESD voltage (Contact discharge)	V _{ESD}	±8	Kv
ESD voltage (Air discharge)	V _{ESD}	±15	Kv
Lead soldering temperature	T _L	260	°C
Storage & operating temperature range	T _{STG} , T _J	-55 to +150	°C

Electrical Parameters (T=25°C)

Symbol	Parameter
V _{RWM}	Working Peak Reverse Voltage
I _R	Maximum Reverse Leakage Current @ V _{RWM}
V _{BR}	Breakdown Voltage @ I _T
I _T	Test Current
I _F	Forward Current
V _F	Forward Voltage @ I _F



Electrical Characteristics PerLin (@ 25°C Unless Otherwise Specified)

Type Number	Peak Power Dissipation @8/20μS Pppm	Reverse Stand-Off Voltage	Peak Pulse Voltage @8/20μS	Peak Pulse Current @8/20μS	Reverse Leakage @Vrwm	Maximum Capacitance @1MHZ
		Vrwm	Vc@IPP	IPP	IR@Vrwm	Co
		Max			Max	Max
	W	V	V	A	μA	pF
RLSD32A031LC	350	3.3	7.5	5	20	1
RLSD32A051LC	350	5	9.8	5	5	1
RLSD32A081LC	350	8	13.4	5	1	1
RLSD32A121LC	350	12	19	5	1	1
RLSD32A151LC	350	15	24	5	1	1
RLSD32A181LC	350	18	29	5	1	1
RLSD32A241LC	350	24	43	1	1	1
RLSD32A361LC	350	36	60	1	1	1

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Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

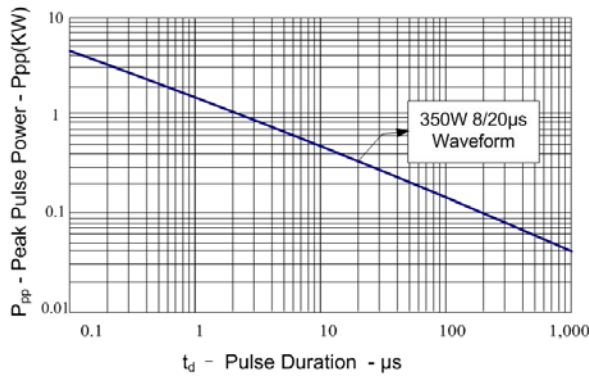


Figure 2: Power Derating Curve

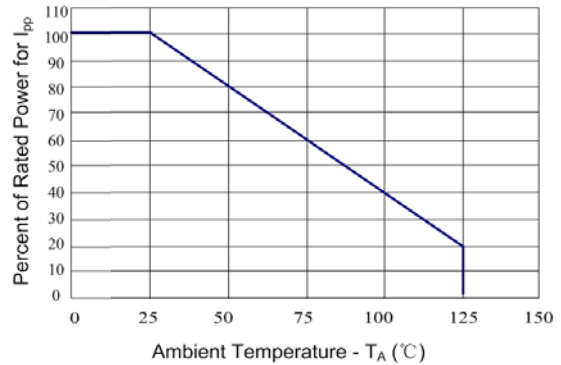


Figure 3: Clamping Voltage vs. Peak Pulse Current

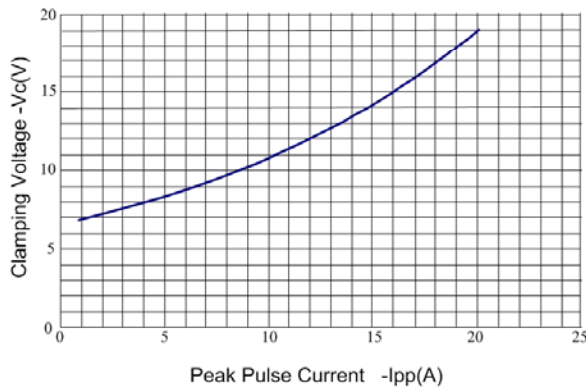


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

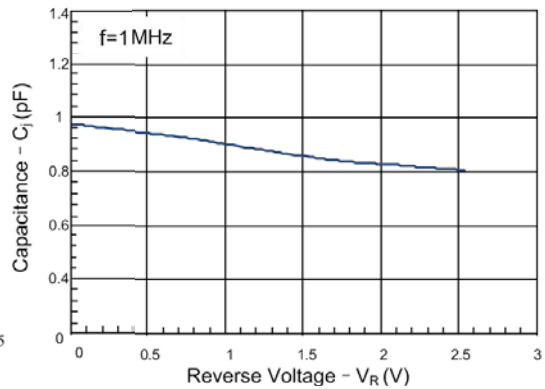


Figure 5: Pulse Waveform

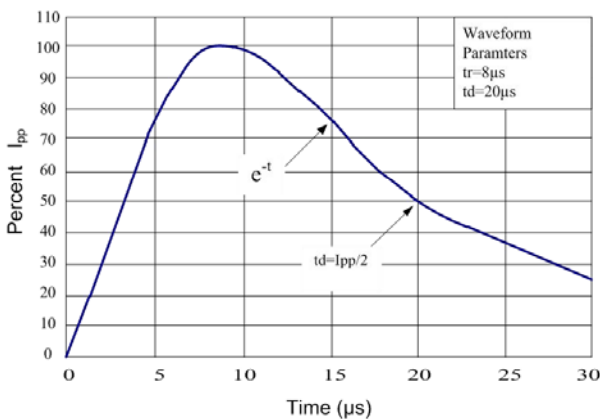
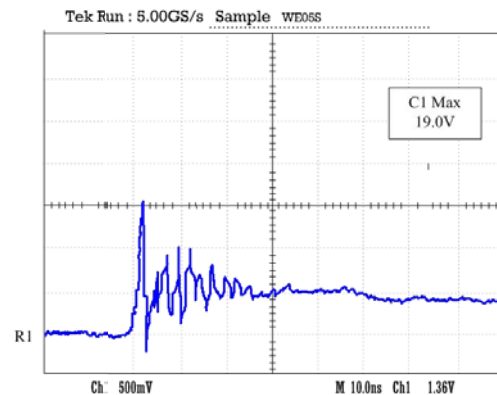
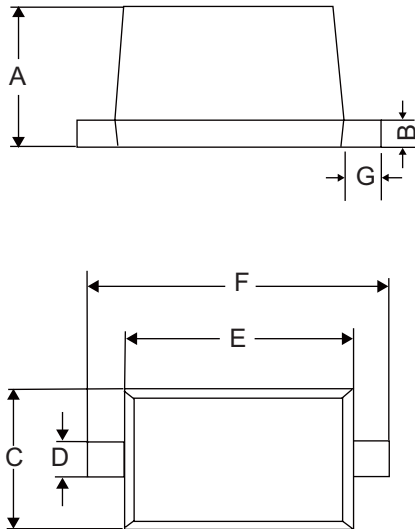


Figure 6: ESD Clamping(8kV Contact per IEC 61000-4-2)



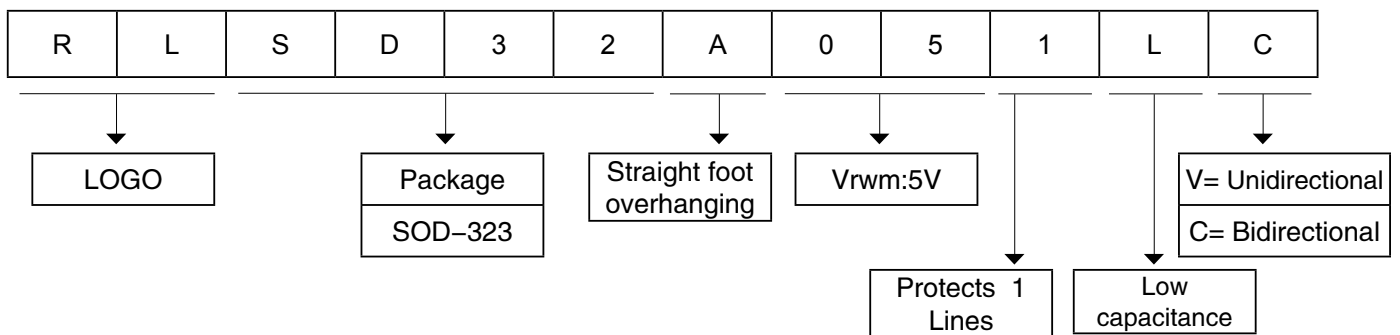
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Package dimension SOD-323



Dimensions				
Symbol	Inches		Millimeters	
	Min	Max	Min	Max
A	0.031	0.040	0.8	1.0
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



Ordering Information

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

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