

# TVS/ESD Arrays

**RLSD32AxxxC Series** 





#### **Features**

- 350 Watts peak pulse power (tp = 8/20µs)
- Transient protection for data lines to IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact) IEC 61000-4-4 (EFT) 40A (5/50ns) IEC 61000-4-5 (Lightning) 24A (8/20µs)
- Small package for use in portable electronics
- Suitable replacement for MLV's in ESD protection applications
- Protects one I/O or power line
- 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

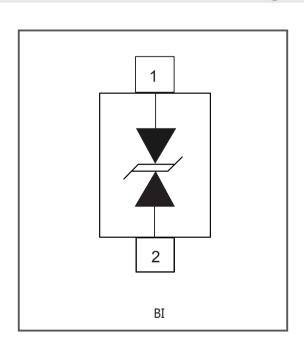
# **Applications**

- 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**





# **Absolute Maximum Rating**

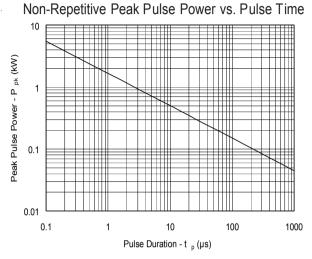
Rating	Symbol	Value	Units
Peak Pulse Power (tp =8/20µs)	P <sub>pk</sub>	350	Watts
Maximum Peak Pulse Current (tp = 8/20µs)	lpp	24	Amps
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	$V_{PP}$	+/-20 +/-15	Kv
Lead Soldering Temperature	TL	260 (10 sec.)	°C
Operating Temperature	TJ	-55 to +125	°C
Storage Temperature	TSTG	-55 to +150	°C
Storage Temperature	T <sub>STG</sub>	-55 to +150	°C

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

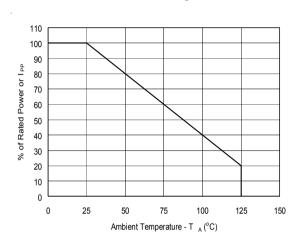
Type Number	Peak Power Dissipation @8/20µS Pppm	Reverse Stand-Off Voltage Vrwm	Peak Pulse Voltage @8/20µS Pppm Vc@IPP	Peak Pulse Current @8/20µS Pppm	Reverse Leakage @Vrwm IR@Vrwm	Maximum Capacitance @1MHZ
		Max	Veen	21.1	Max	Max
BI	W	V	V	А	μΑ	BI(pF)
RLSD32A031C	350	3.3	7.5	5	5	250
RLSD32A051C	350	5	9.8	5	5	200
RLSD32A081C	350	8	12	5	1	125
RLSD32A121C	350	12	19	5	1	70
RLSD32A151C	350	15	24	5	1	60
RLSD32A181C	350	18	29	5	1	40
RLSD32A241C	350	24	36	1	1	37
RLSD32A361C	350	36	58	1	1	30



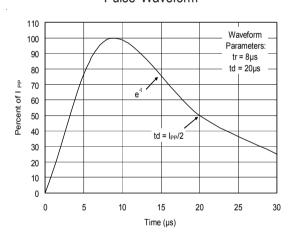
# **Typical Characteristics**



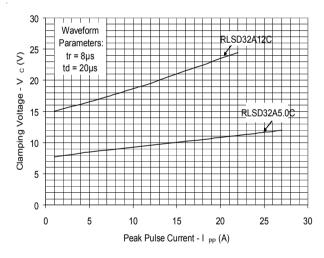
#### Power Derating Curve



#### Pulse Waveform

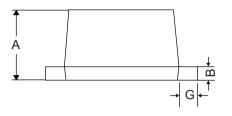


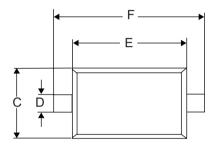
#### Clamping Voltage vs. Peak Pulse Current





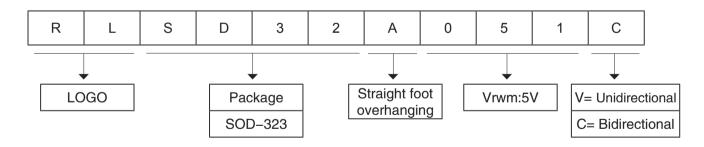
# Package dimension SOD-323





Dimensions				
Incl		nes	Millimeters	
Symbol	Min	Max	Min	Max
Α		0.043		1.1
В	0.004	0.010	0.10	0.25
С	0.045	0.054	1.2	1.4
D	0.012	0.016	0.3	0.4
Е	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

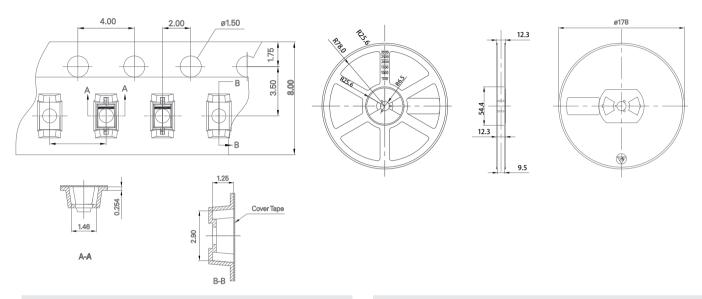
# **Part Number Code**







# Tape and reel



# **Ordering Information**

Part Number	Package	Min. Order Qty.
RLSD32AxxxC	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



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