Features

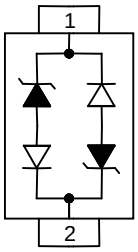
- Transient protection for high-speed data lines
  IEC 61000-4-2 (ESD) ±8kV (Contact) ±15kV (Air)
  IEC 61000-4-4 (EFT) 40A (5/50 ns)
- Protects one I/O line (bidirectional)
- Working voltages : 36V
- Low clamping voltage
- Low leakage current
- Response time is < 1 ns

SOD-323

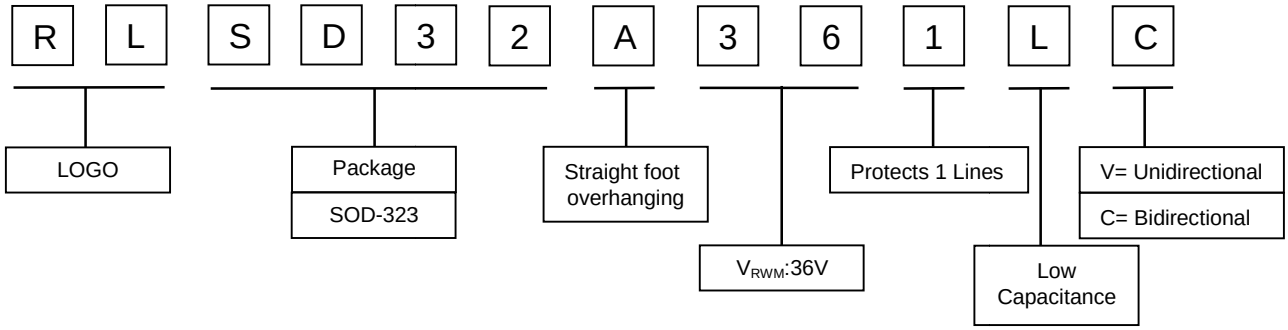
Applications

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

Electrical symbol



Part Number Code



Absolute Maximum Rating

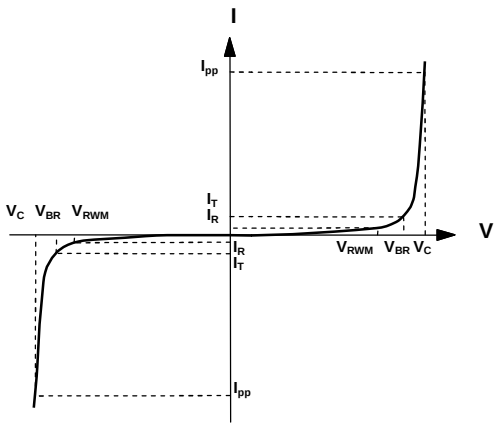
Rating	Symbol	Value	Units
Peak Pulse Power (tp =8/20μs)	P_{PP}	350	Watts
ESD Voltage (Contact)	V_{ESD}	±8	kV
ESD Voltage (Air)	V_{ESD}	±15	kV
Operating Temperature	T_{OPT}	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Type Number	Reverse Stand-Off Voltage	Minimum Breakdown Voltage	Peak Pulse Voltage @8/20μS	V_C@Ipp (8/20μS)		Reverse Leakage	Typical Capacitance
	V_{RWM}	V_{BR} @1mA	V_C@1A	I_{PP}	Max.	I_R@V_{RWM}	DC=0V C_J@ 1 MHz
	V	V	V	A	V	μA	pF
RLSD32A361LC	36	40	60	4.5	75.0	1	0.8

Electrical Parameters (T=25°C)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
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



Characteristic Curves

Fig 1. 8/20μs Pulse Waveform

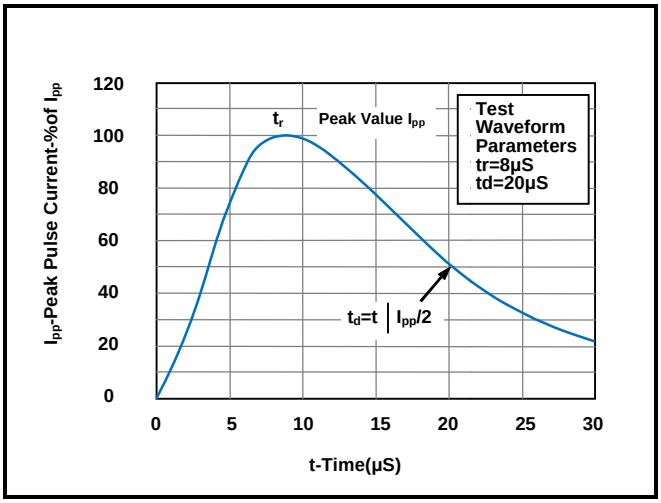


Fig2.ESD Pulse Waveform (according to IEC61000-4-2)

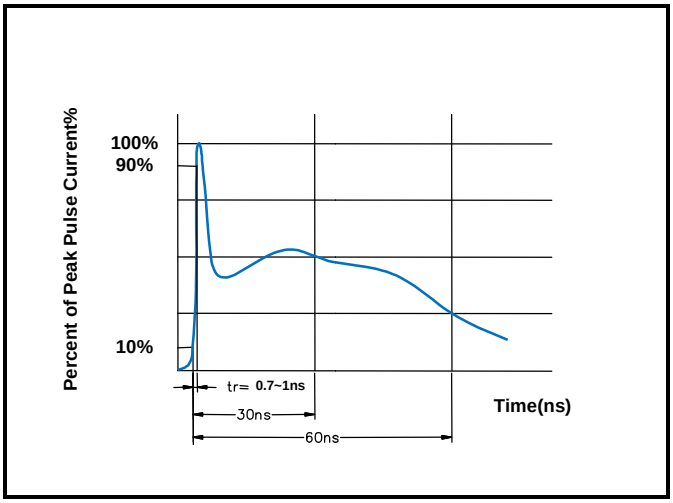


Fig 3. Power Derating Curve

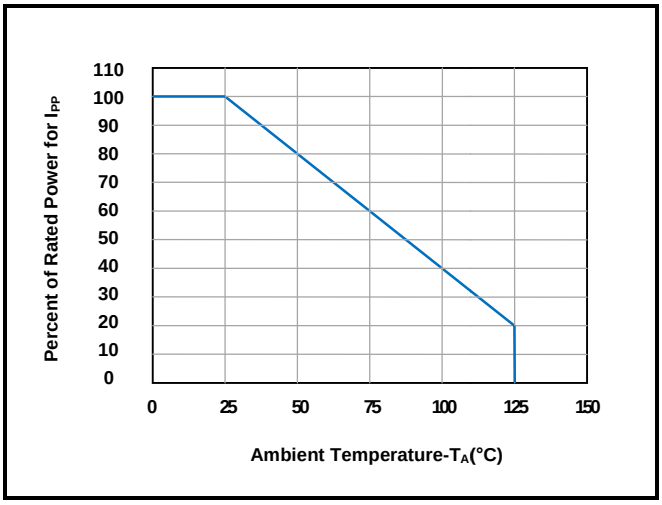
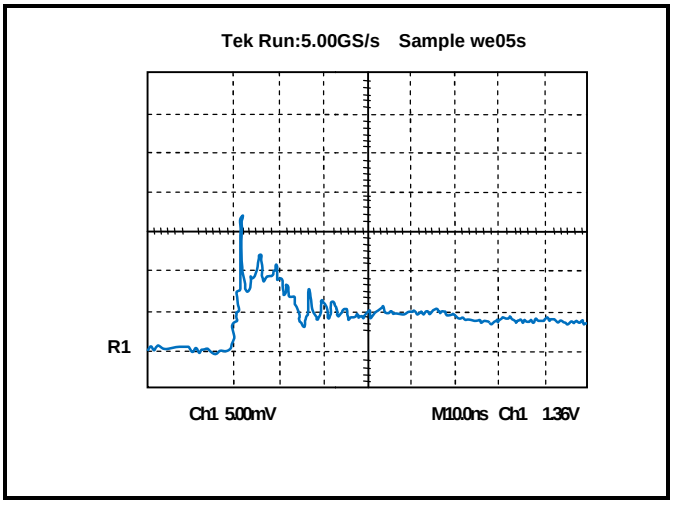
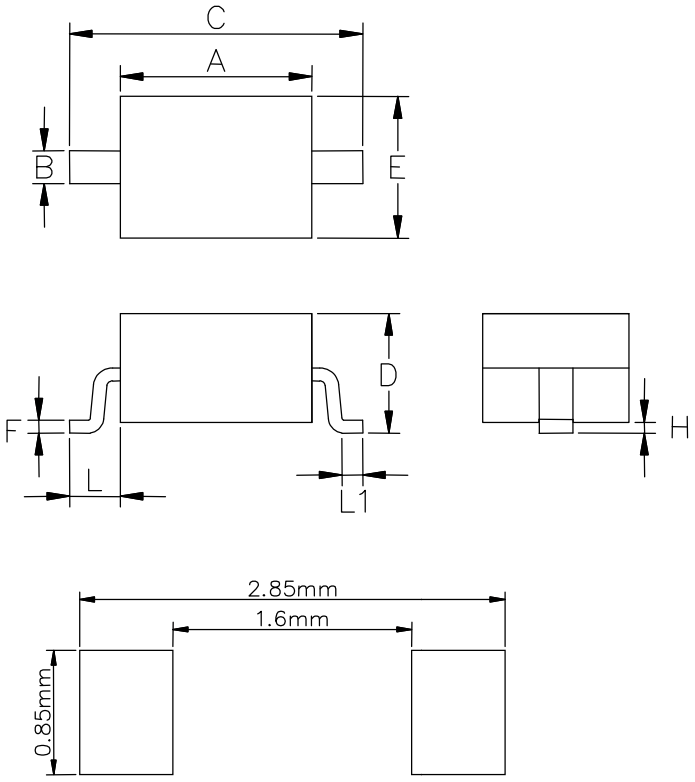


Figure 4.ESD Clamping(8KV Contact per IEC61000-4-2)



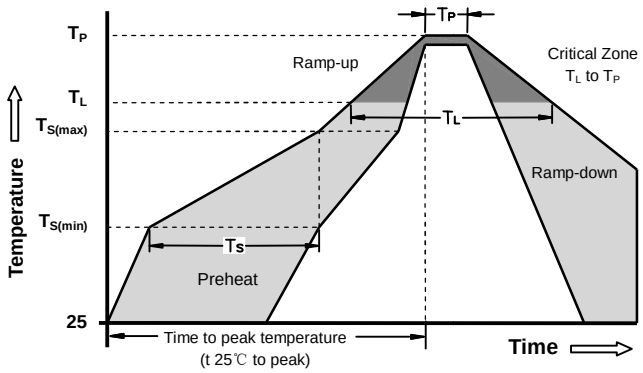
Dimensions



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	1.60	1.80	0.063	0.071
B	0.25	0.35	0.010	0.014
C	2.50	2.70	0.098	0.106
D	0.00	1.00	0.00	0.039
E	1.20	1.40	0.047	0.055
F	0.08	0.15	0.003	0.006
L	0.475REF		0.019REF	
L1	0.25	0.40	0.010	0.016
H	0.00	0.10	0.00	0.004

Part Number	Component package	Quantity	Reel Size	Molding compound flammability rating	Lead Finish
RLSD32A361LC	SOD-323	3000	7 inch	UL 94V-0	Lead Free

Soldering Parameters - Reflow Soldering (Surface Mount Devices)



Reflow Condition		Pb - Free assembly
Pre Heat	-Temperature Min ($T_{s(min)}$)	150°C
	-Temperature Max ($T_{s(max)}$)	200°C
	- Time (min to max) (t_s)	60 -180 Seconds
Average ramp up rate (Liquids Temp T_L) to peak		3°C/second max
$T_{S(max)}$ to TL - Ramp-up Rate		3°C/second max
Reflow	- Temperature (T_L) (Liquids)	217°C
	- Time (min to max) (t_s)	60 -150 Seconds
Peak Temperature (T_P)		260 +0/-5°C
Time within 5°C of actual peak Temperature (t_p)		20 - 40 Seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max
Do not exceed		280°C