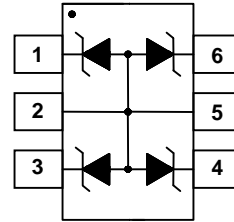


Features

- | 350 Watts Peak Pulse Power per Line (tp = 8/20µs)
- | Working voltages: 5V,12V,15V,24V
- | Low Leakage Current
- | Low operating and clamping voltages
- | Lead Free/RoHS compliant
- | Solid-state silicon avalanche technology
- | Provides ESD protection to IEC61000-4-2(ESD): ±15kV (air discharge),±8kV (contact discharge)



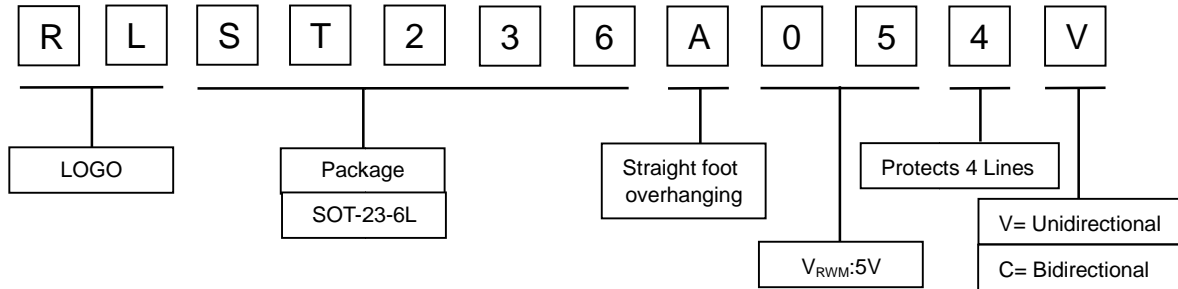
Electrical symbol



Applications

- | USB Power & Data Line Protection
- | Ethernet 10BaseT
- | I²C Bus Protection
- | Video Line Protection
- | T1/E1 secondary IC Side Protection
- | Portable Electronics
- | Microcontroller Input Protection

Part Number Code



Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power (tp =8/20µs)	P _{PK}	350	Watts
ESD Voltage (Contact)	V _{ESD}	±8	kV
ESD Voltage (Air)	V _{ESD}	±15	kV
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature	T _J	-55 to 150	°C
Storage Temperature	T _{STG}	-55 to 150	°C

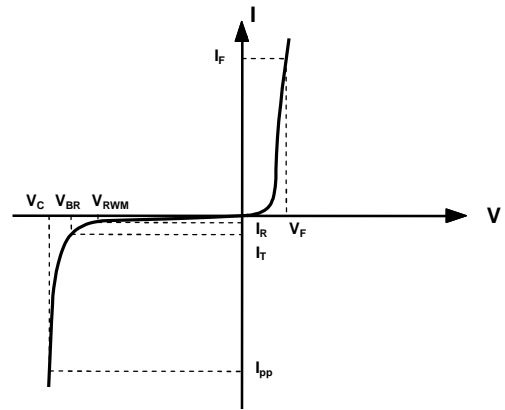
Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Type Number	Reverse Stand-Off Voltage	Minimum Breakdown Voltage	Peak Pulse Voltage @8/20µS	V _c @8/20µS		Reverse Leakage @V _{RWM}	Typical Capacitance
	V _{RWM}	V _{BR} @1mA	V _c @1A	(max.)	@I _{PP}	I _R @V _{RWM}	DC=0V C _J @ 1 MHz
	V	V	V	V	A	µA	pF
RLST236A054V	5.0	6.0	9.8	27	23	1	150
RLST236A124V	12.0	13.3	19.0	27	15	1	90
RLST236A154V	15.0	16.7	24.0	30	12	1	70
RLST236A244V	24.0	26.7	38.0	46	8	1	50



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

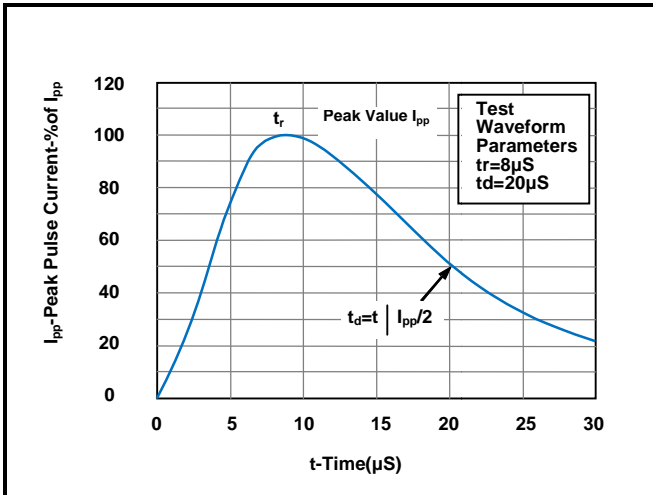


Fig 3. Power Derating Curve

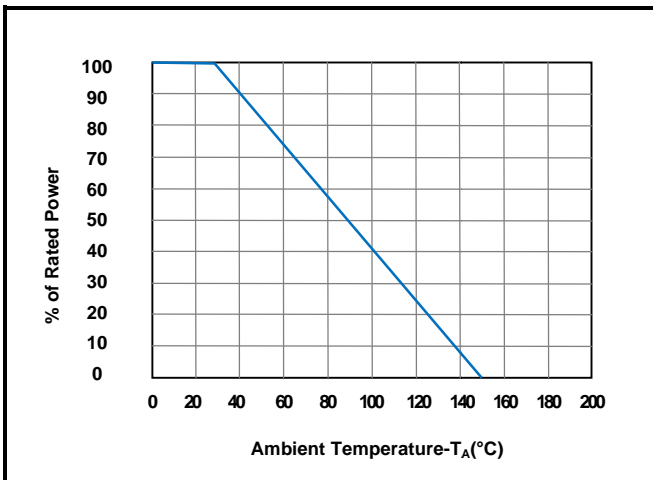


Fig2.ESD Pulse Waveform (according to IEC61000-4-2)

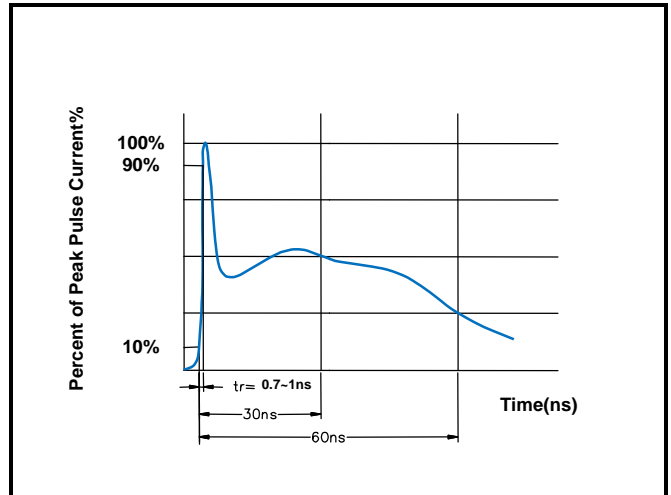
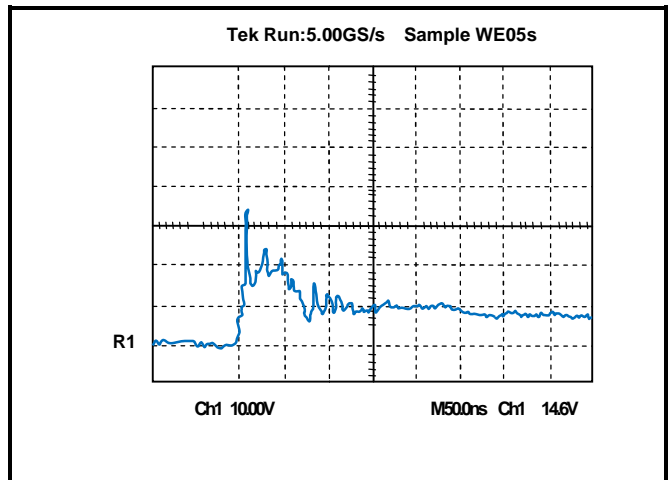
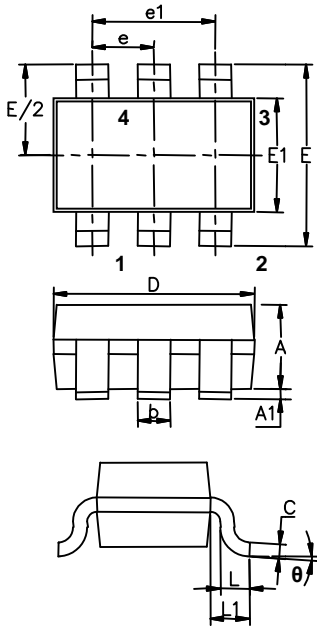


Figure 4.ESD Clamping(8KV Contact per IEC61000-4-2)



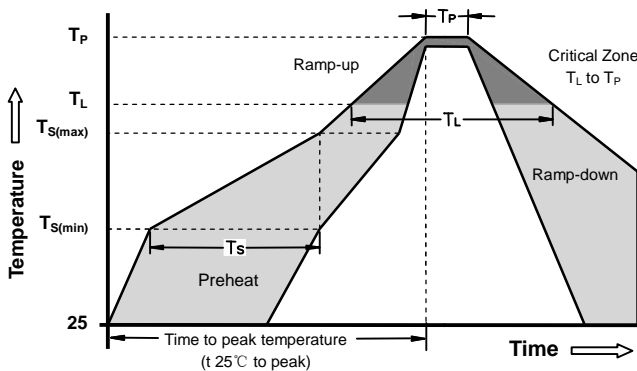
Dimensions



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A1	0.00	0.10	0.000	0.004
A	1.05	1.15	0.041	0.045
b	0.30	0.50	0.012	0.020
C	0.10	0.20	0.004	0.008
D	2.80	3.10	0.110	0.122
E1	1.50	1.70	0.059	0.067
E	2.65	2.95	0.104	0.116
e	0.95 BSC		0.037 BSC	
e1	1.80	2.00	0.071	0.079
L	0.30	0.60	0.012	0.024
L1	0.60		0.021	
θ	0°	10°	0°	10°

Part Number	Component package	Quantity	Reel Size	Molding compound flammability rating	Lead Finish
RLST236AXX4V	SOT-23-6L	3000	7 inch	UL 94V-0	Lead Free

Soldering Parameters - Reflow Soldering (Surface Mount Devices)



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

