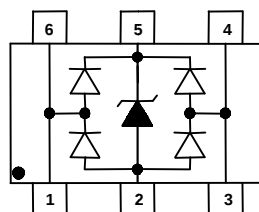


Features

- 90 Watts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- Working voltages: 5V
- 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): $\pm 15kV$ (air discharge), $\pm 8kV$ (contact discharge)

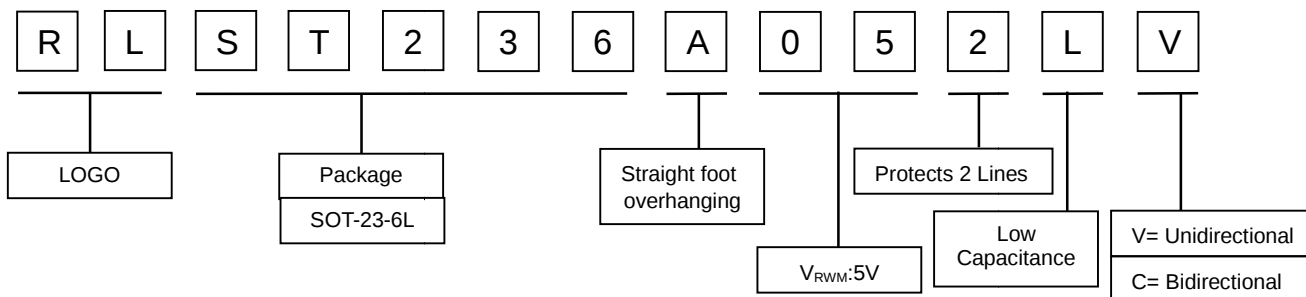
Electrical symbol



Applications

- Video/Graphics Card
- Handheld & Portable Electronics
- PC/Notebook USB2.0/IEEE1394 ports
- 10/100/1000 Ethernet
- DVI interfaces
- Wireless data (WAN/LAN) systems

Part Number Code



Absolute Maximum Rating

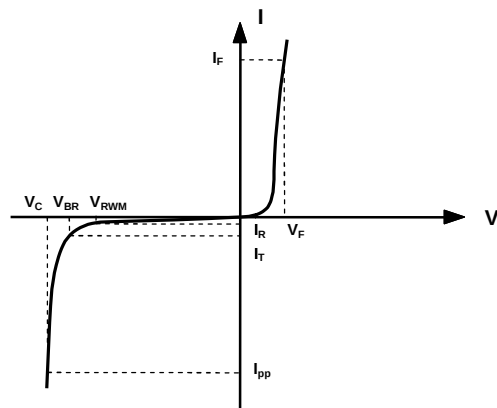
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PK}	90	Watts
ESD Voltage (Contact)	V_{ESD}	± 8	Kv
ESD Voltage (Air)	V_{ESD}	± 15	Kv
Lead Soldering Temperature	T_L	260 (10 sec.)	$^{\circ}C$
Operating Temperature	T_J	-55 to 125	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to 150	$^{\circ}C$

Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Type Number	Reverse Stand-Off Voltage	Min Breakdown Voltage	Peak Pulse Voltage @8/20 μs	Peak Pulse Current @8/20 μs	Reverse Leakage @ V_{RWM}	Typical Capacitance
	V_{RWM}	$V_{BR} @1mA$	$V_C @1A$	I_{PP}	$I_R @V_{RWM}$	DC=0V $C_J @ 1 MHz$
	V	V	V	A	μA	pF
RLST236A052LV	5	6	13	3	1	1.2

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

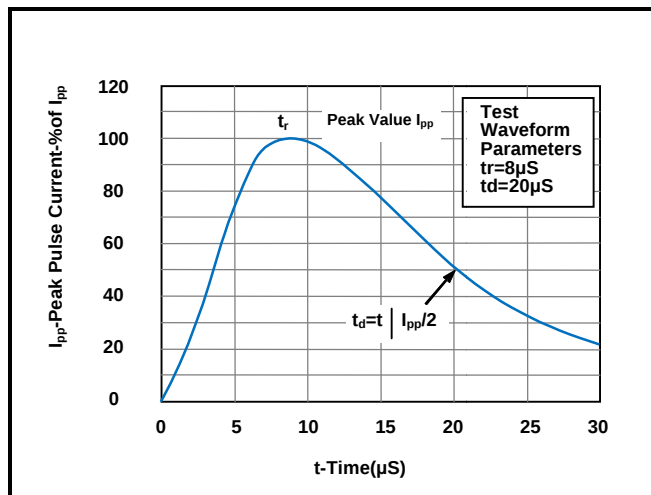


Fig 3. Power Derating Curve

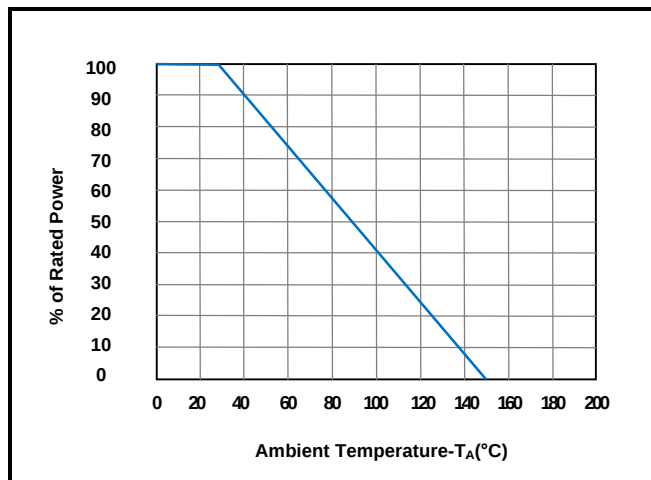


Fig2.ESD Pulse Waveform (according to IEC61000-4-2)

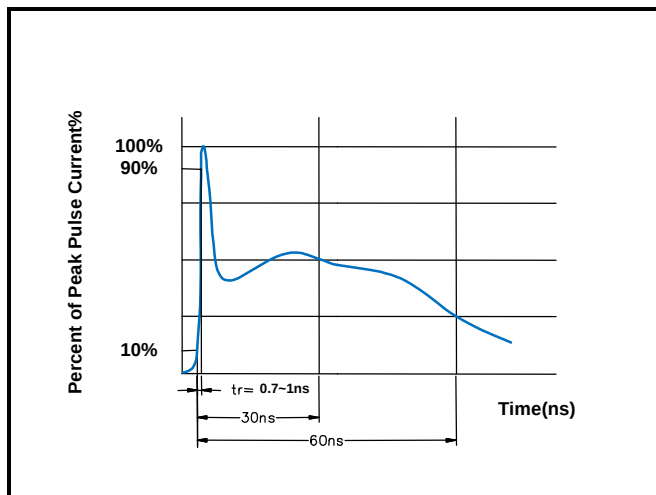
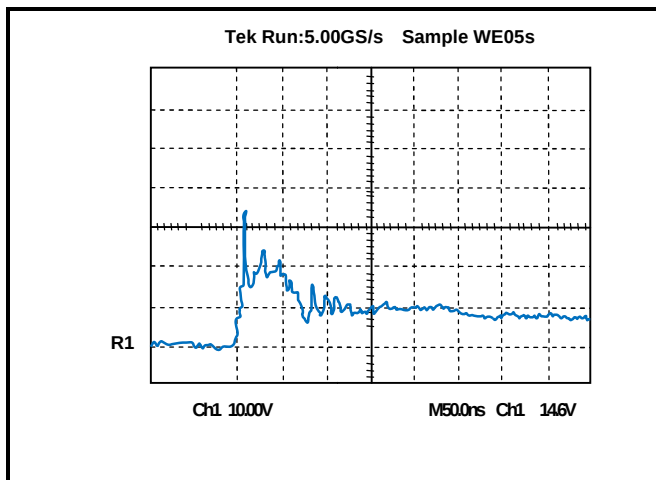
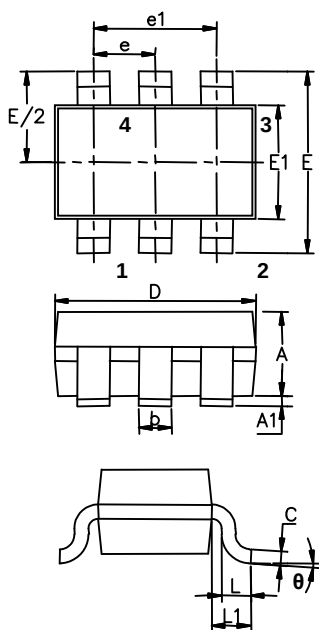


Figure 4.ESD Clamping(8KV Contact per IEC61000-4-2)



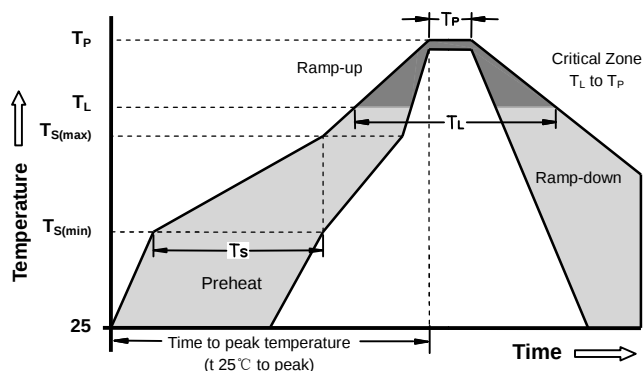
Dimensions



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A1	0.00	0.15	0.000	0.006
A	0.90	1.30	0.035	0.051
b	0.25	0.50	0.010	0.020
C	0.08	0.22	0.003	0.009
D	2.80	3.10	0.110	0.122
E1	1.50	1.75	0.60	0.069
E	Nom: 2.80 BSC		Nom: 0.110 BSC	
e	Nom: 0.95 BSC		Nom: 0.037 BSC	
e1	Nom: 1.90 BSC		Nom: 0.075 BSC	
L	0.30	0.60	0.012	0.024
L1	Nom: 0.60		Nom: 0.021	
θ	0°	10°	0°	10°

Part Number	Component package	Quantity	Reel Size	Molding compound flammability rating	Lead Finish
RLST236A052LV	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 ($T_{S(min)}$)	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 T_L - 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

