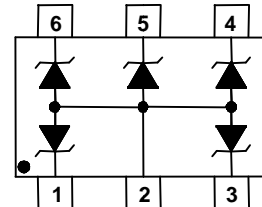


Features

- | 350 Watts Peak Pulse Power per Line (tp = 8/20µs)
- | Working voltages:3.3V, 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)



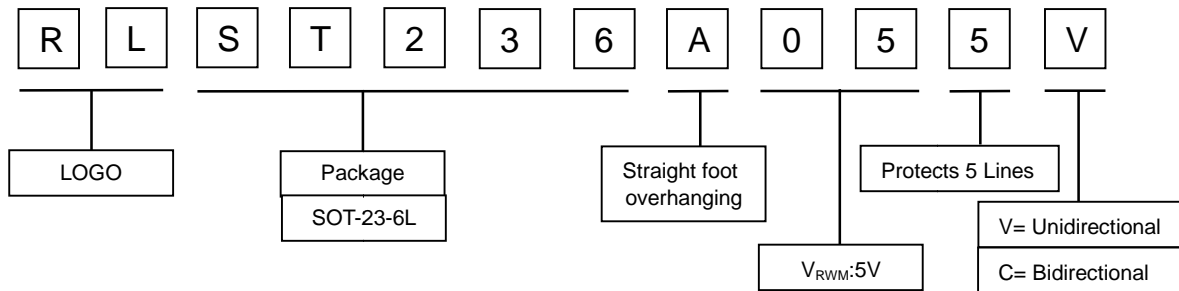
Electrical symbol



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 125	°C
Storage Temperature	T _{STG}	-55 to 150	°C

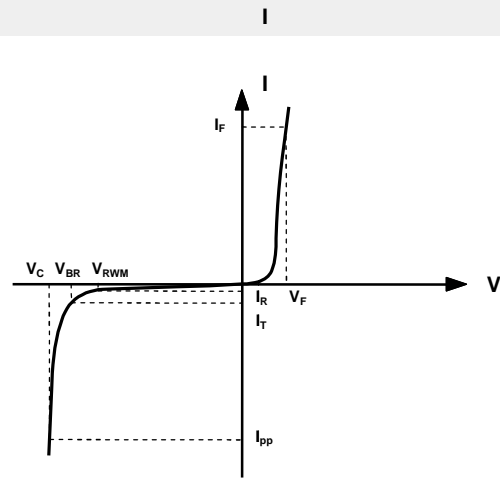


Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Type Number	Reverse Stand-Off Voltage	Min Breakdown Voltage	Peak Pulse Voltage @8/20μS	Peak Pulse Current @8/20μS	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
RLST236A035V	3.3	4.5	7.5	25	5	250
RLST236A055V	5	6	9.8	24	5	200
RLST236A125V	12	13.3	19	15	1	90
RLST236A155V	15	16.7	24	12	1	70
RLST236A245V	24	26.7	38	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

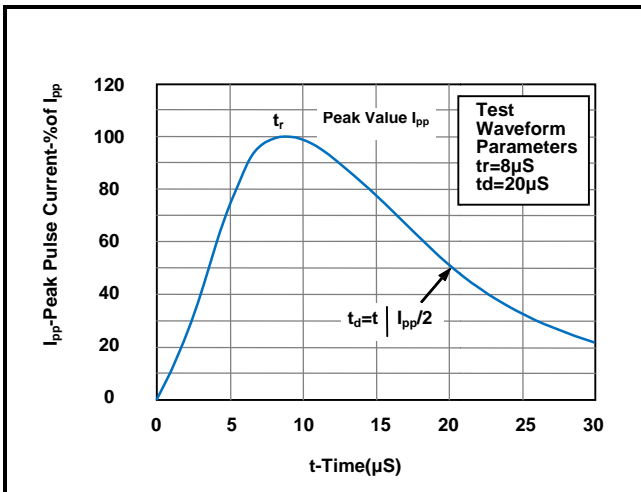


Fig2.ESD Pulse Waveform (according to IEC61000-4-2)

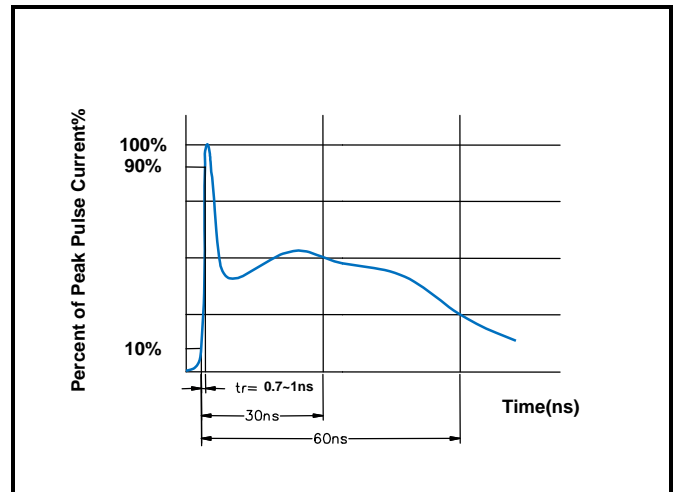


Fig 3. Power Derating Curve

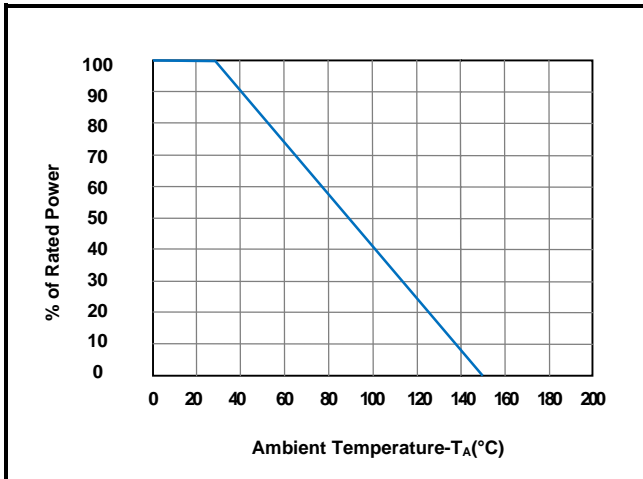
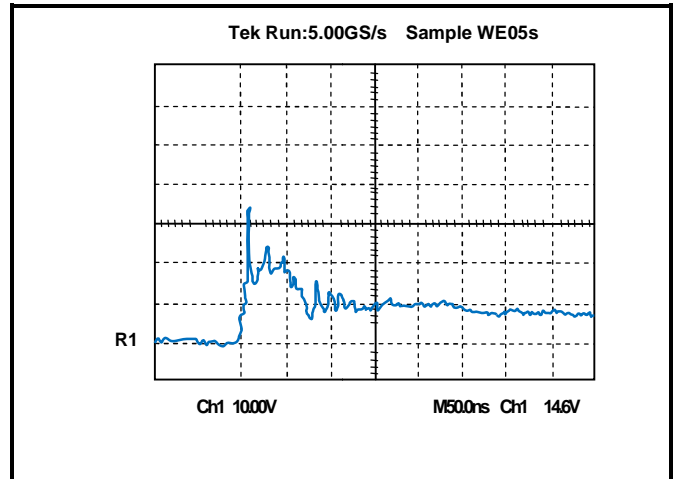
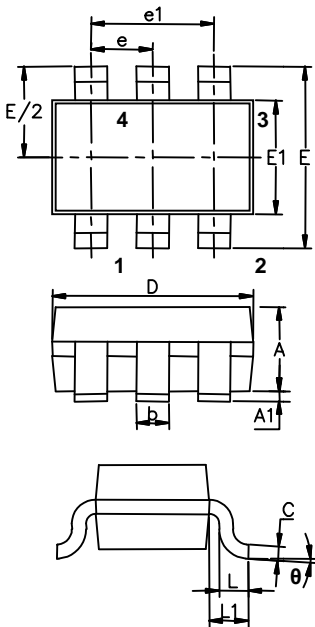


Figure 4.ESD Clamping(8KV Contact per IEC61000-4-2)



Dimensions

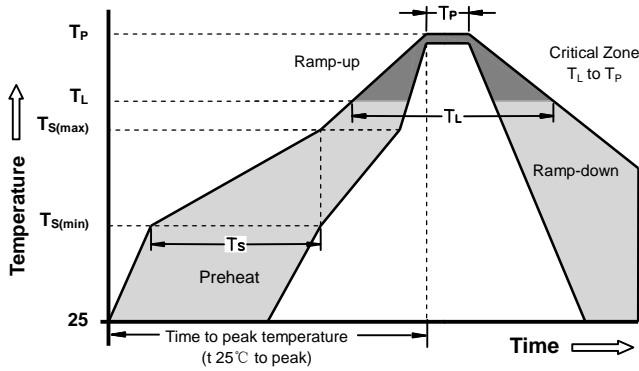


DIM	Millimeters		Inches	
	Min	Max	Min	Max
A1	0.00	0.15	0.000	0.006
A	0.90	1.30	0.035	0.051
b	0.25	0.50	0.010	0.020
C	0.08	0.22	0.003	0.009
D	2.80	3.10	0.110	0.122
E1	1.50	1.75	0.60	0.069
E	Nom: 2.80 BSC		Nom: 0.110 BSC	
e	Nom: 0.95 BSC		Nom: 0.037 BSC	
e1	Nom: 1.90 BSC		Nom: 0.075 BSC	
L	0.30	0.60	0.012	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
RLST236AXX5V	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

