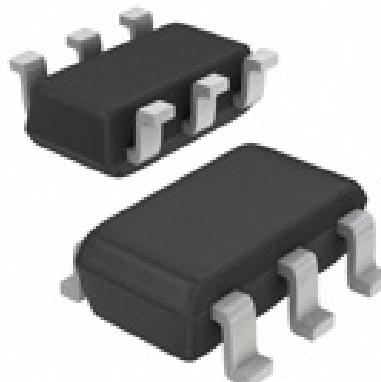


Features

- 800Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT23-6 package
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance ($C_j=1.2\text{pF}$ typ. Line to Line)
- Protection one data/power line to:
- IEC 61000-4-2 $\pm 30\text{kV}$ contact $\pm 30\text{kV}$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 40A (8/20 μs)



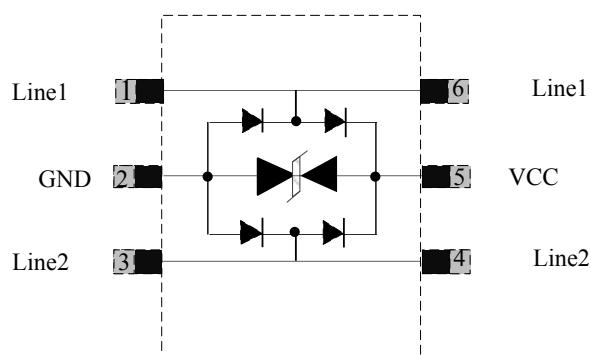
Applications

- Ethernet
- Digital Visual Interface (DVI)
- Notebook and PC Computers

Mechanical Data

- SOT23-6 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Schematic & PIN Configuration



Absolute Maximum Rating

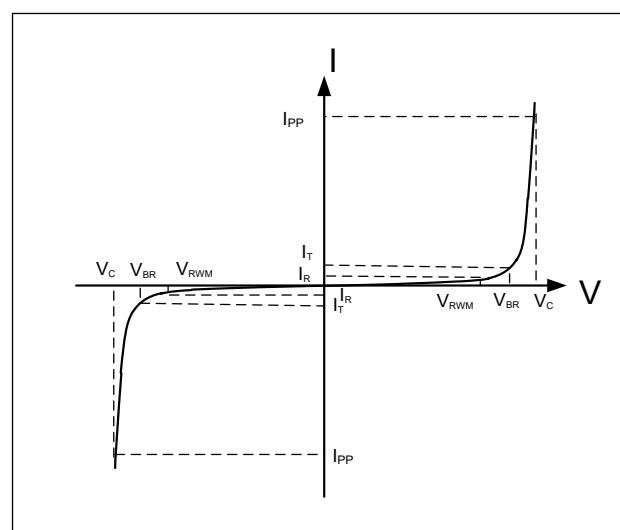
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P _{PP}	800	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (note1)	I _{PP}	40	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	30 30	kV
Lead Soldering Temperature	T _L	260(10seconds)	°C
Junction Temperature	T _J	-55 to + 125	°C
Storage Temperature	T _{stg}	-55 to + 125	°C

Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V _{RWM}				3.3	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	4			V
Reverse Leakage Current	I _R	V _{RWM} =3.3V, T=25°C			500	nA
Peak Pulse Current	I _{PP}	t _p =8/20μs			40	A
Clamping Voltage	V _C	I _{PP} =40A, t _p =8/20μs			20	V
Junction Capacitance	C _j	V _R = 0V, f = 1MHz Line to Line		1.2		pF
		V _R = 0V, f = 1MHz Line to GND		2.2		

Electrical Parameters (TA = 25°C unless otherwise noted)

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



Note: 8/20μs pulse waveform.

361° Circuit Protection System

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

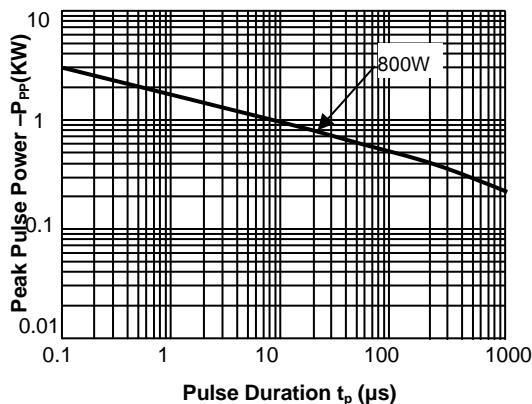


Fig.2 Pulse Derating Curve

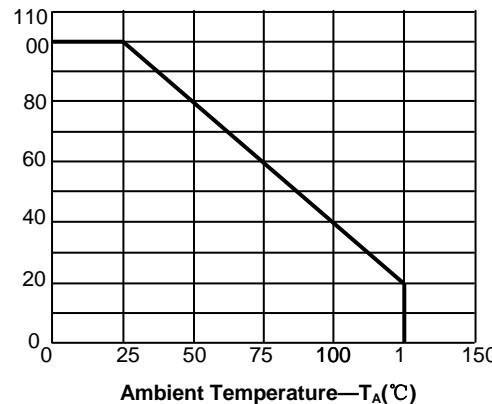


Fig.3 Pulse Waveform-8/20 μs

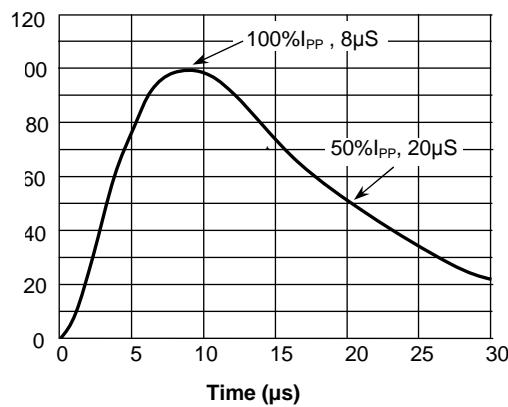
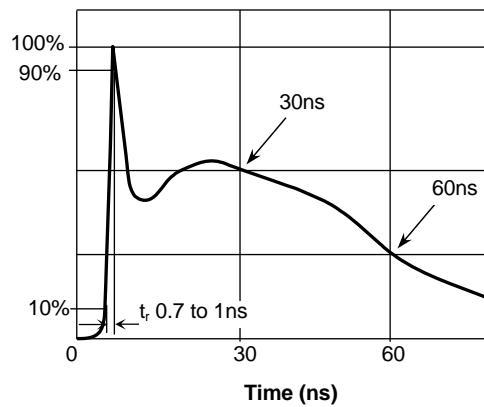


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



Outline Drawing – SOT23-6

PACKAGE OUTLINE		DIMENSIONS			
SYMBOL		INCHES		MILLIMETER	
		MIN	MAX	MIN	MAX
A		0.041	0.049	1.050	1.250
A1		0.000	0.004	0.000	0.100
A2		0.041	0.045	1.050	1.150
D		0.111	0.119	2.820	3.020
E		0.059	0.067	1.500	1.700
E1		0.104	0.116	2.650	2.950
b		0.012	0.020	0.300	0.500
e		0.037(BSC)		0.950(BSC)	
e1		0.071	0.079	1.800	2.000
L		0.012	0.024	0.300	0.600
θ		0°	8°	0°	8°

The diagram shows a detailed land pattern for the package. Key dimensions include:

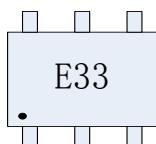
- Pad width: 0.56 / 0.022
- Pad height: 0.022
- Pad pitch: 2.6 / 0.102
- Pad thickness: 0.95 / 0.037
- Pad length: 1.6 / 0.063
- Pad width: 3.6 / 0.141
- Pad thickness: 1.0 / 0.039

Notes

- This land pattern is for reference purposes only consult your manufacturing group to ensure your company's manufacturing guidelines are met.

Reference ipc-sm-782a..

Marking



Ordering information

Order code	Package	Base qty	Delivery mode
RLST236A032LC	SOT23-6	3k	Tape and reel

361° Circuit Protection System

Specifications are subject to change without notice.
Please refer to <http://www.ruilon.com.cn> for current information.

Revised: 2022-01-24



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