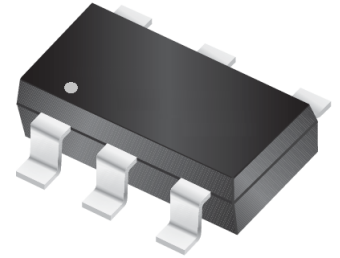


## LOW Capacitance ESD TVS Array

### Features

- 120Watts 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 (0.7pF typical I/O to I/O)
- ESD Protection for high-speed data lines to:
  - IEC 61000-4-2  $\pm 15KV$  contact  $\pm 8KV$  air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 7A (8/20  $\mu s$ )
- RoHS compliant

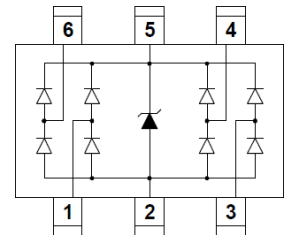
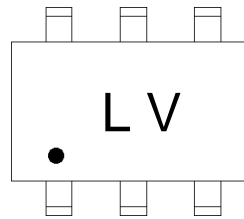


Marking : .LV SOT23-6

### Schematic Diagram

### Applications

- Video lines protection
- 100/1000M Ethernet protection
- Fingerprint sensor
- Other LAN application
- Other 3.3V application



### Absolute Maximum Ratings ( $T_A=25^\circ C$ , Unless otherwise specified.)

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P=8/20\mu s$ )	$P_{PP}$	120	W
Peak Pulse Current ( $t_P = 8/20\mu s$ )	$I_{PP}$	7	A
Junction Temperature	$T_J$	-55 to +125	$^\circ C$
Storage temperature	$T_{STG}$	-55 to +150	$^\circ C$

### Electrical Characteristics ( $T_A=25^\circ C$ , Unless otherwise specified.)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	4.0			V
Reverse Leakage Current	$I_R$	$V_R=3.3V$			1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP}=7A, T_P=8/20\mu s$		11	13.5	V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz, I/O$ to I/O		0.7		pF
	$C_J$	$V_R=0V, f=1MHz, I/O$ to GND		1.5		pF

## Ratings and Characteristics Curves

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Fig.1 Peak Pulse Power Rating Curve

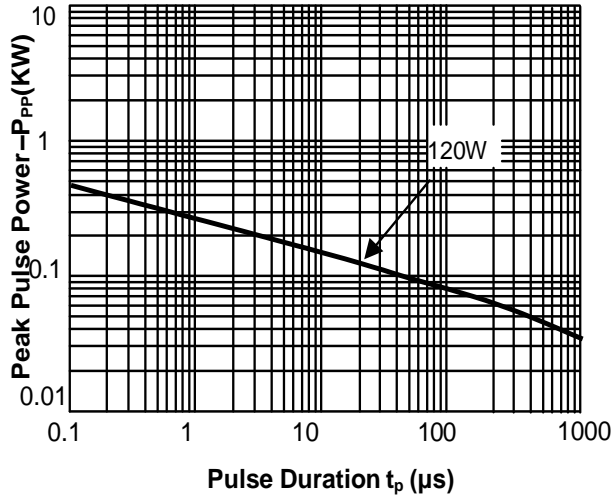


Fig.2 Pulse Derating Curve

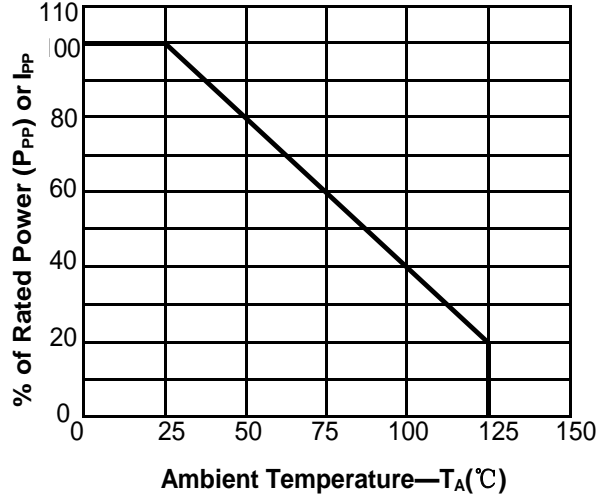


Fig.3 Pulse Waveform-8/20 $\mu\text{s}$

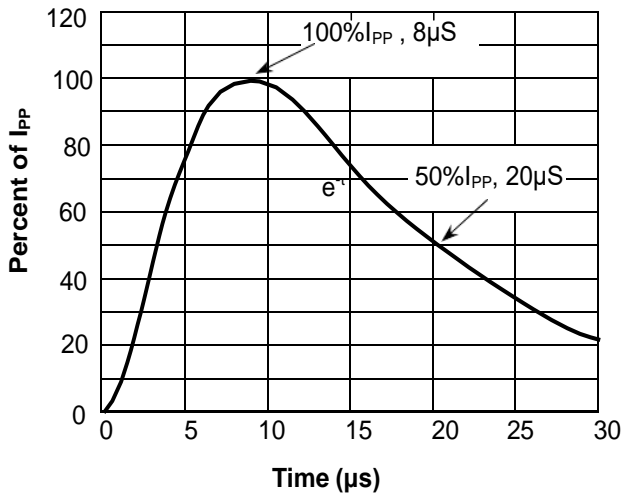
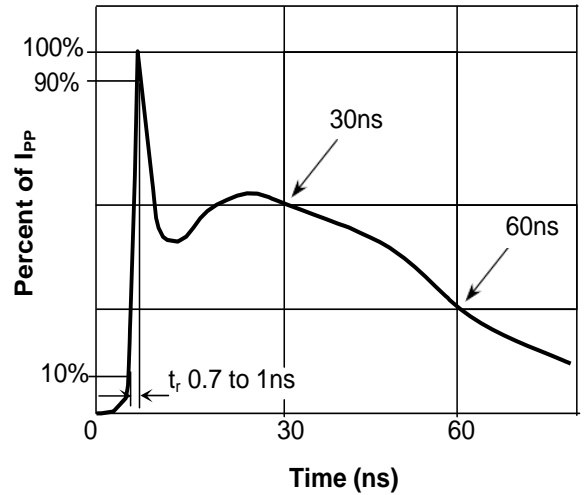
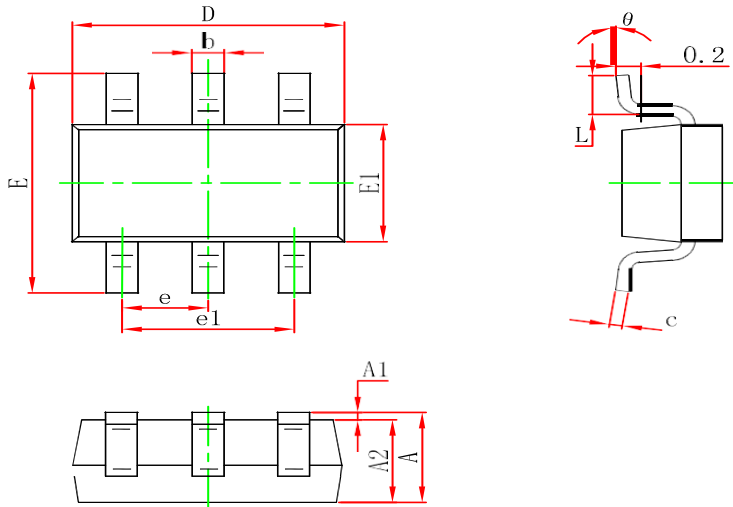


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



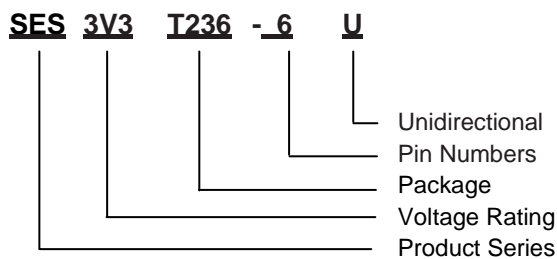
## Package Outline Dimensions

in inches (millimeters)



Symbol	Dimensions in millimeters		Dimensions in inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E1	1.500	1.700	0.059	0.067
E	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°

## Part Number System



## Revision History

Document Version	Date of release	Discription of changes
Rev.A	2014.03.25	First issue

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