

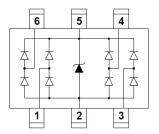
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Low Capacitance ESD TVS Array in SOT23-6

Features

- 100Watts peak pulse power (tp = 8/20µs)
- SOT23-6 Package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance (0.2pF typical I/O to I/O)
- ESD Protection for high-speed data lines to: IEC 61000-4-2 ±15KV contact ±15KV air IEC 61000-4-4 (EFT) 40A (5/50ns) IEC 61000-4-5 (Lightning) 6A (8/20µs)





Mechanical Data

- Case: SOT23-6 (plastic package).
 Lead free; RoHS compliant; Halogen free
- Molding Compound Flammability Rating: UL 94 V-0
- **Terminals:** High temperature soldering guaranteed: 260 °C/10 sec. at terminals

Applications

- USB 3.0, USB 2.0, MHL
- HDMI 2.0, Display Port 1.3, eSATA
- Unified Display Interface (UDI)
- Digital Visual Interface (DVI)
- High speed serial interfaces

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power (T _P =8/20µS)	P _{PP}	100	W
ESD contact/air discharge (IEC-61000-4-2)	V _{ESD}	15/15	kV
Peak Pulse Current (t₂ = 8/20µS)	I _{PP}	6.0	Α
Junction Temperature	TJ	-55 to +125	$^{\circ}$ C
Storage temperature	T _{STG}	-55 to +150	${\mathbb C}$

Electrical Characteristics

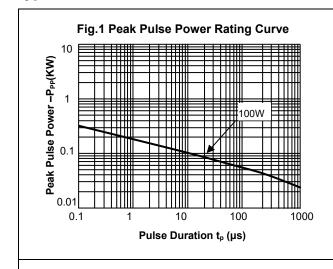
 $(T_A = 25 \, ^{\circ}C \text{ unless otherwise specified})$

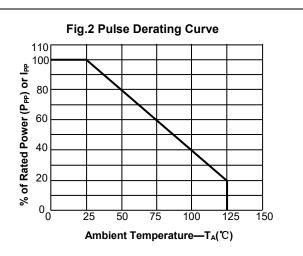
Parameter	Symbol	Condition	Min	Тур	Max	Unit
Reverse stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	I _T =1mA	6	6.8		V
Reverse Leakage Current	I _R	V _R =5V		0.01	1	μA
Clamping Voltage(SURGE)	V _C	I _{PP} =6A, T _P =8/20μs		15		V
Clamping Voltage(ESD)	Vc	$V_{ESD} = +8kV$		15		V
Junction Capacitance	С	V _R =0V,f=1MHz, I/O to I/O		0.2		pF
Junction Capacitance	Сл	V _R =0V,f=1MHz, I/O to GND		0.4		pF

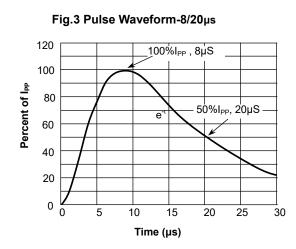


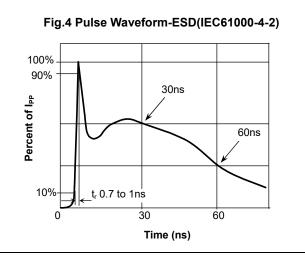
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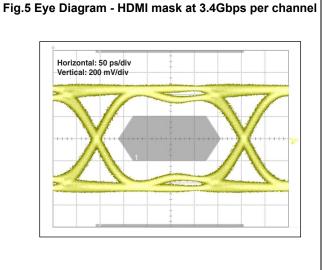
Typical Characteristics ($T_{amb} = 25 \, ^{\circ}\text{C}$ unless otherwise specified)

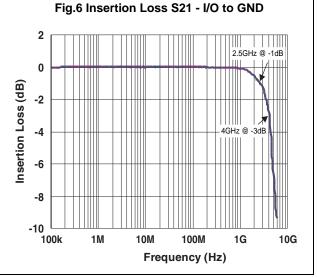






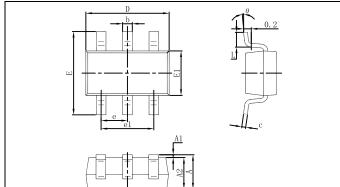






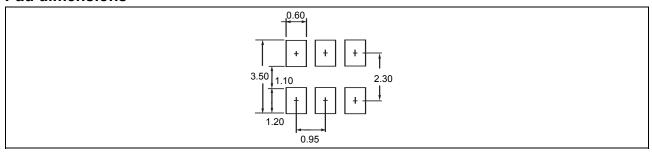
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Package Dimensions

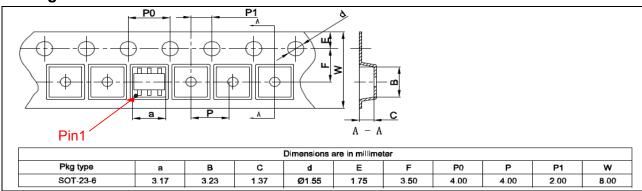


Symbol	Dimensions in millimeters		
Зуппоп	Min	Max	
Α	1.050	1.250	
A1	0.000	0.100	
A2	1.050	1.150	
b	0.300	0.500	
С	0.100	0.200	
D	2.820	3.020	
E1	1.500	1.700	
Е	2.650	2.950	
е	0.950(BSC)		
e1	1.800	2.000	
L	0.300	0.600	
θ	0°	8°	

Pad dimensions



Package information



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CEST236LC5VU-M	SOT23-6	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
5-Jul2021	3.0	Update



CEST236LC5VU-M

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