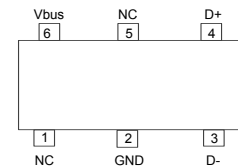
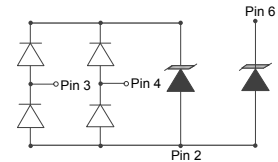
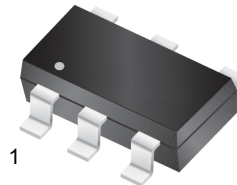


Low Capacitance ESD/TVS Array in SOT23-6

Features

- 300Watts 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(0.6pF typical I/O to I/O)
- ESD capability according to AEC-Q101:
human body model: class H3B: > 8 kV
- ESD Protection for high-speed data lines to:
IEC 61000-4-2 $\pm 30kV$ contact $\pm 30kV$ air
IEC 61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 20 A (8/20 μs)



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 2.0, MHL
- Ethernet
- Unified Display Interface (UDI)
- Digital Visual Interface (DVI)

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

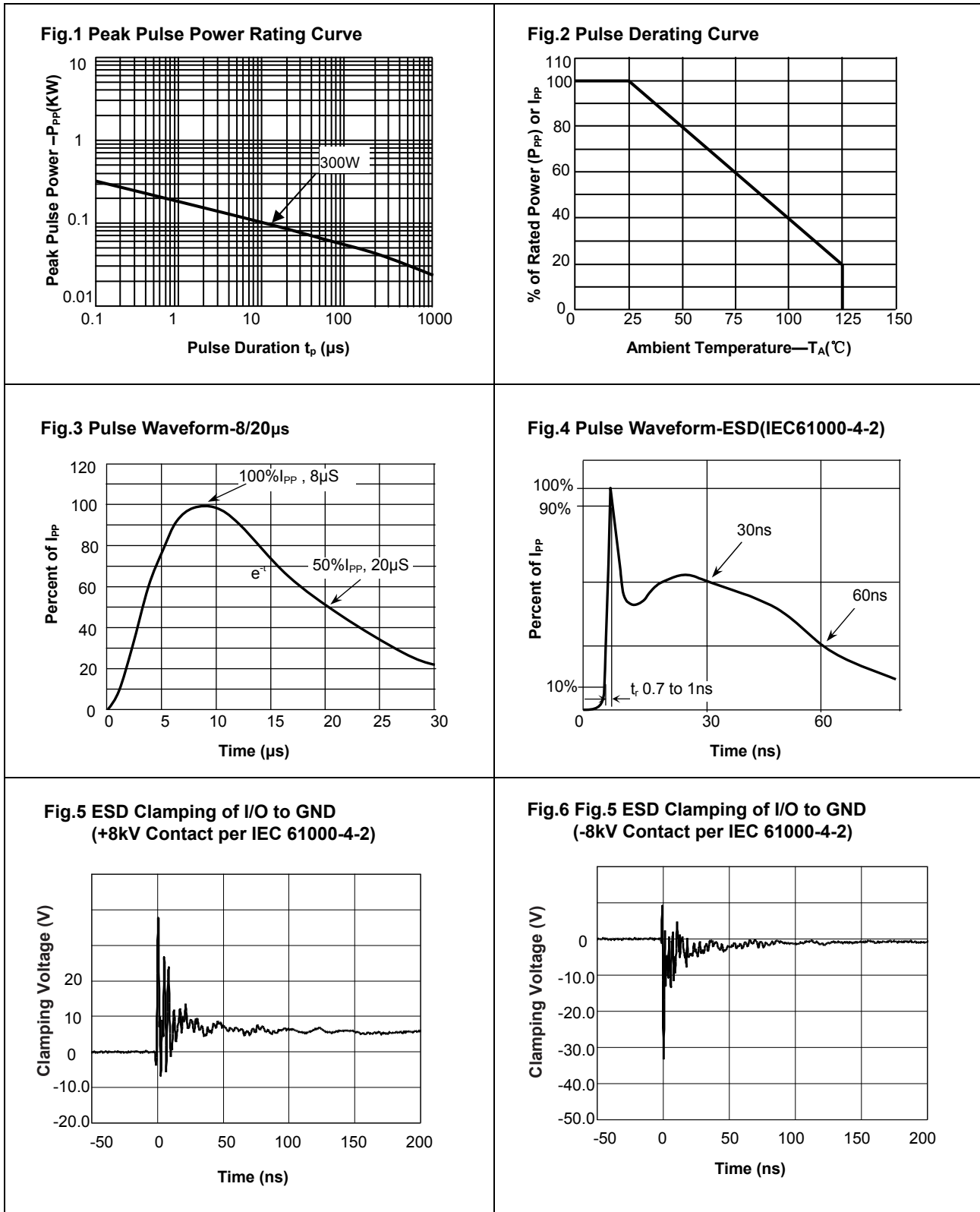
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	300	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30/30	kV
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	20	A
Junction Temperature	T_J	-55 to +150	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

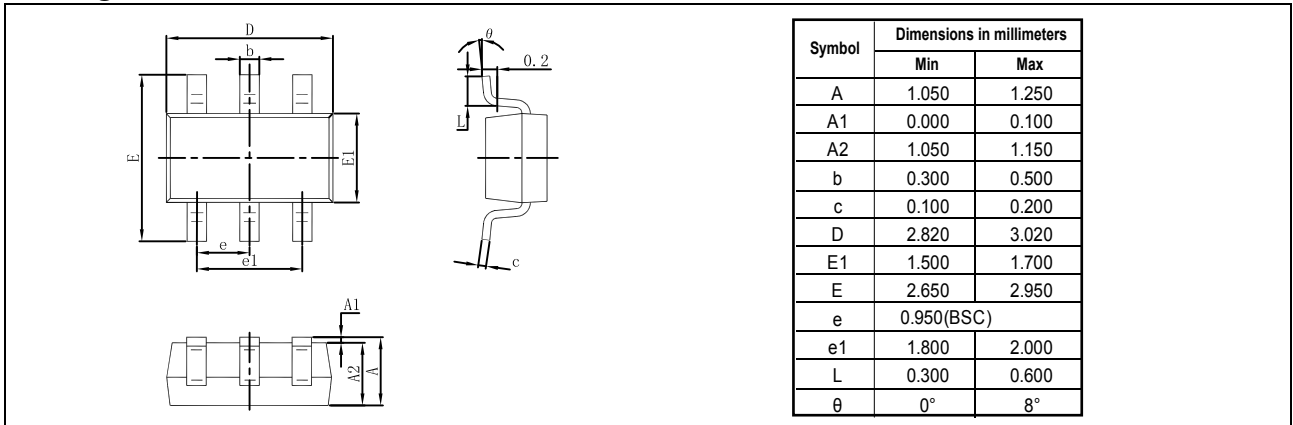
($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
D+,D- TVS						
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0	8.0		V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25\text{ °C}$		0.2	0.5	μA
Clamping Voltage	V_C	$I_{PP}=8.0A, T_p=8/20\mu s$		12	18	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$ I/O to I/O		0.6	0.7	pF
		$V_R = 0V, f = 1MHz$ I/O to GND		1.2	1.4	pF
Vbus TVS						
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0			V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25\text{ °C}$			1	μA
Clamping Voltage	V_C	$I_{PP}=20A, T_p=8/20\mu s$		12	15	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$ VCC to GND		160		pF

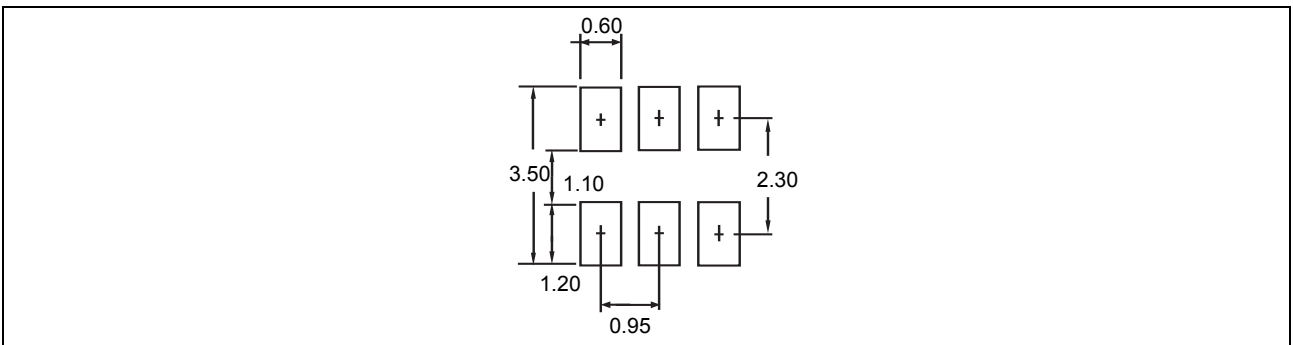
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



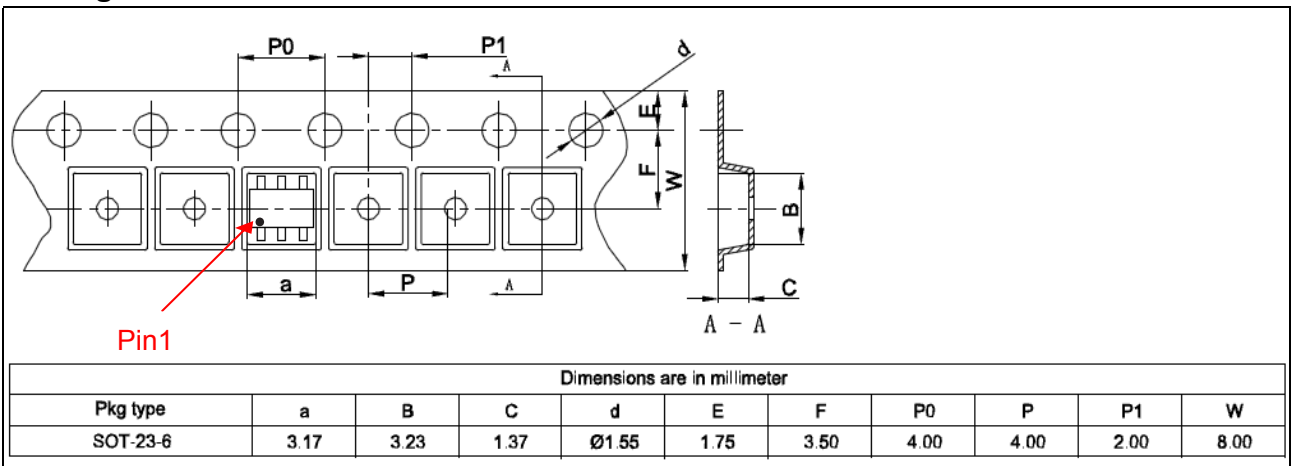
Package Dimensions



Pad dimensions



Package information



Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
CEST236LC5VUTL	5Q	SOT23-6	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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