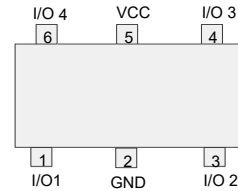
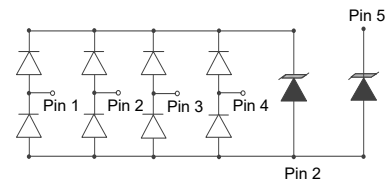
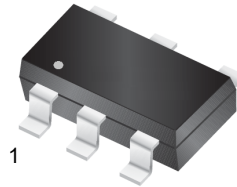


Ultra Low Capacitance ESD TVS Array in SOT23-6

Features

- 60Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT23-6 Package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance (0.3pF typical I/O to I/O)
- ESD Protection for high-speed data lines to:
 - IEC 61000-4-2 $\pm 25kV$ contact $\pm 25kV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 4A (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

- Ethernet
- USB 3.0, USB 2.0, MHL
- Unified Display Interface (UDI)
- Digital Visual Interface (DVI)
- High speed serial interfaces

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

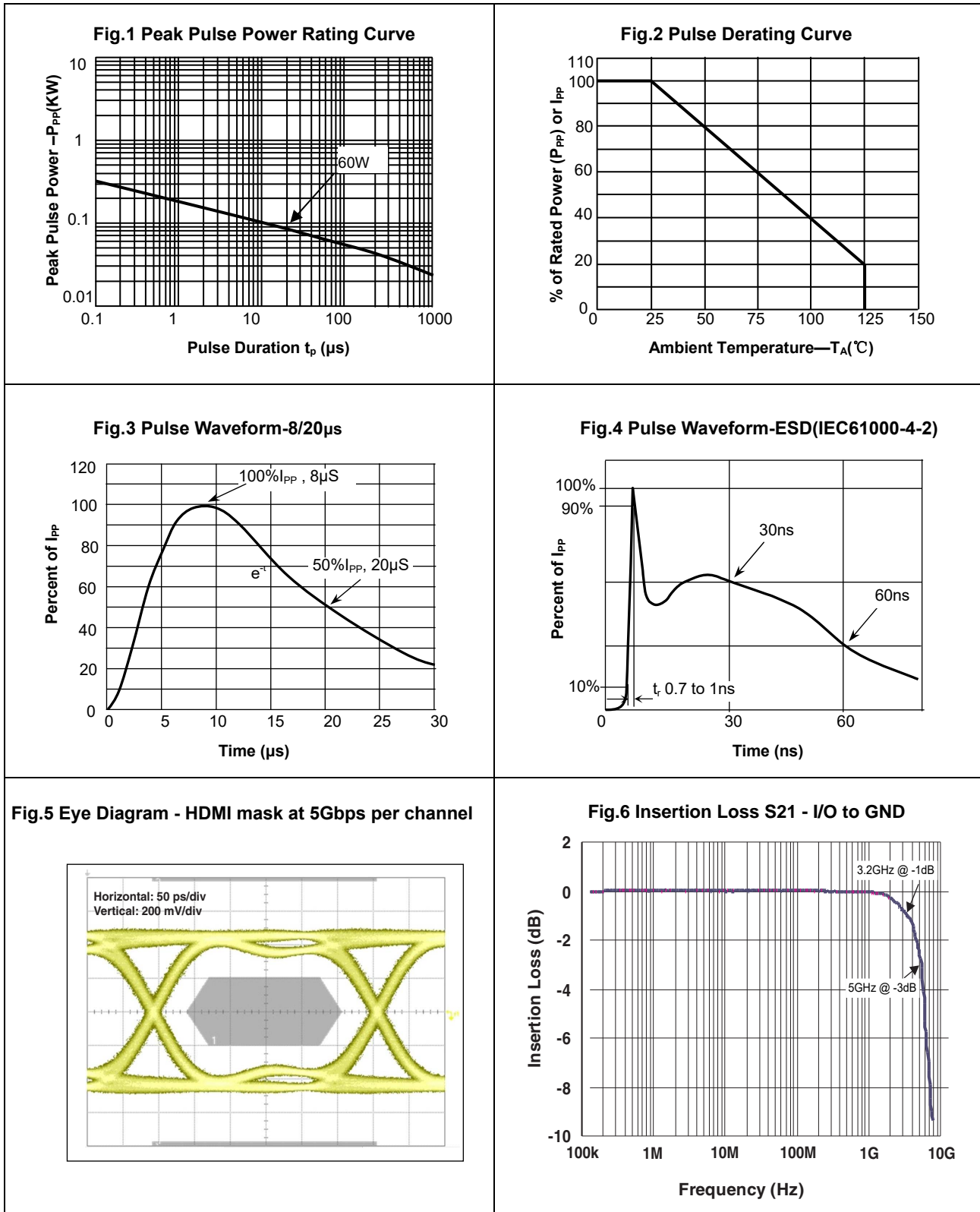
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu s$)	P_{PP}	60	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	25/25	kV
Peak Pulse Current ($T_P = 8/20\mu s$)	I_{PP}	4.0	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

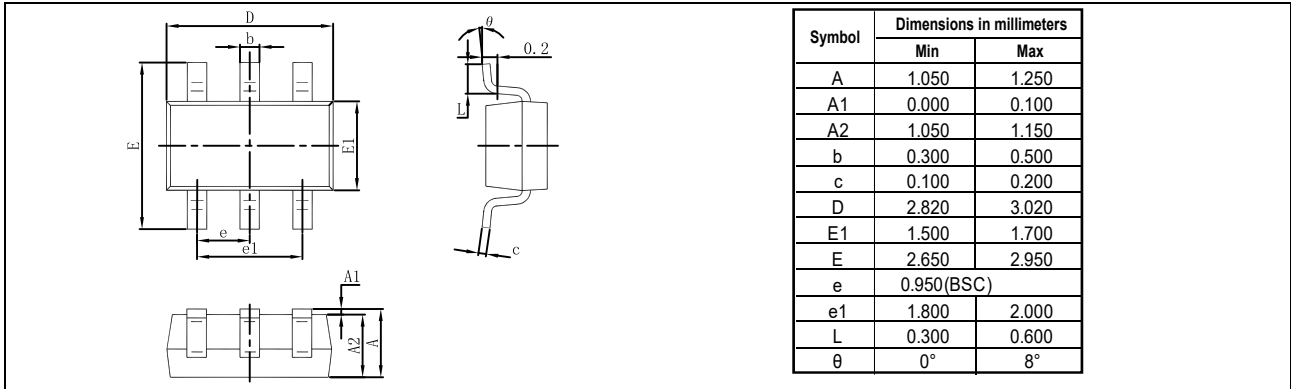
($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
I/O port 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	$I_{PP}=4.0A, t_p=8/20\mu s$		10	15	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$ I/O to I/O		0.3		pF
		$V_R = 0V, f = 1MHz$ I/O to GND		0.6		pF
VCC 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

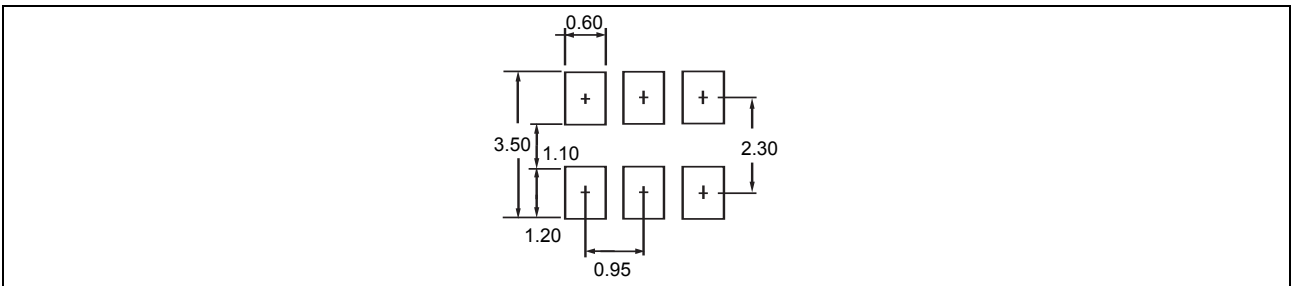
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



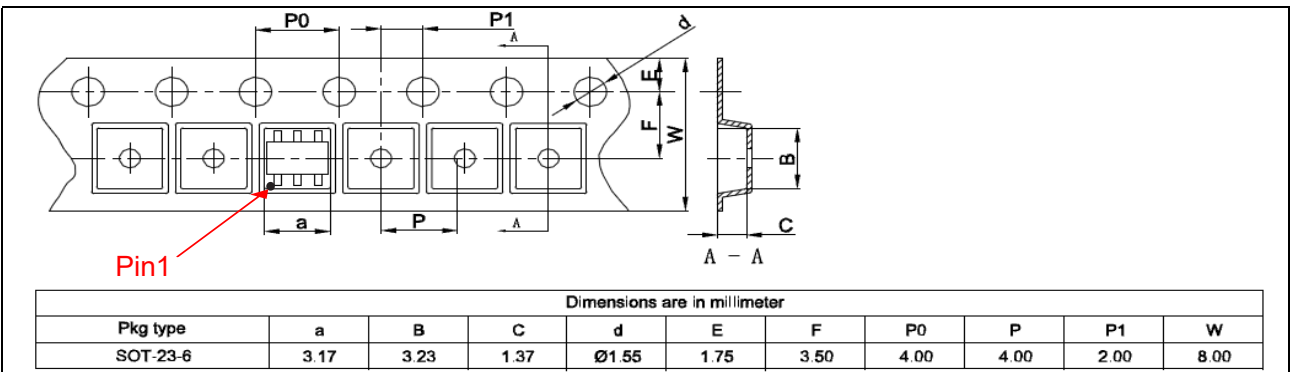
Package Dimensions



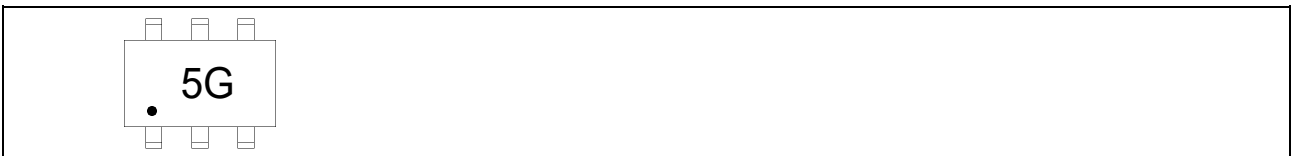
Pad dimensions



Package information



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CEST236UC5VUH	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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