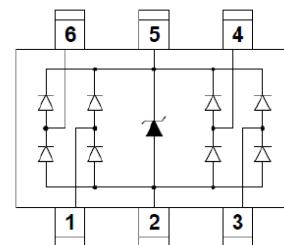


Features

- ◆ 100Watts 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 (0.2pF 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)



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

Mechanical Data

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

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power (TP=8/20μS)	P _{PP}	100	W
ESD contact/air discharge (IEC-61000-4-2)	V _{ESD}	15/15	kV
Peak Pulse Current (tP = 8/20μS)	I _{PP}	6.0	A
Junction Temperature	T _J	-55 to +125	°C
Storage temperature	T _{STG}	-55 to +150	°C

Ordering/Mark information

CES T236 LC 5V US

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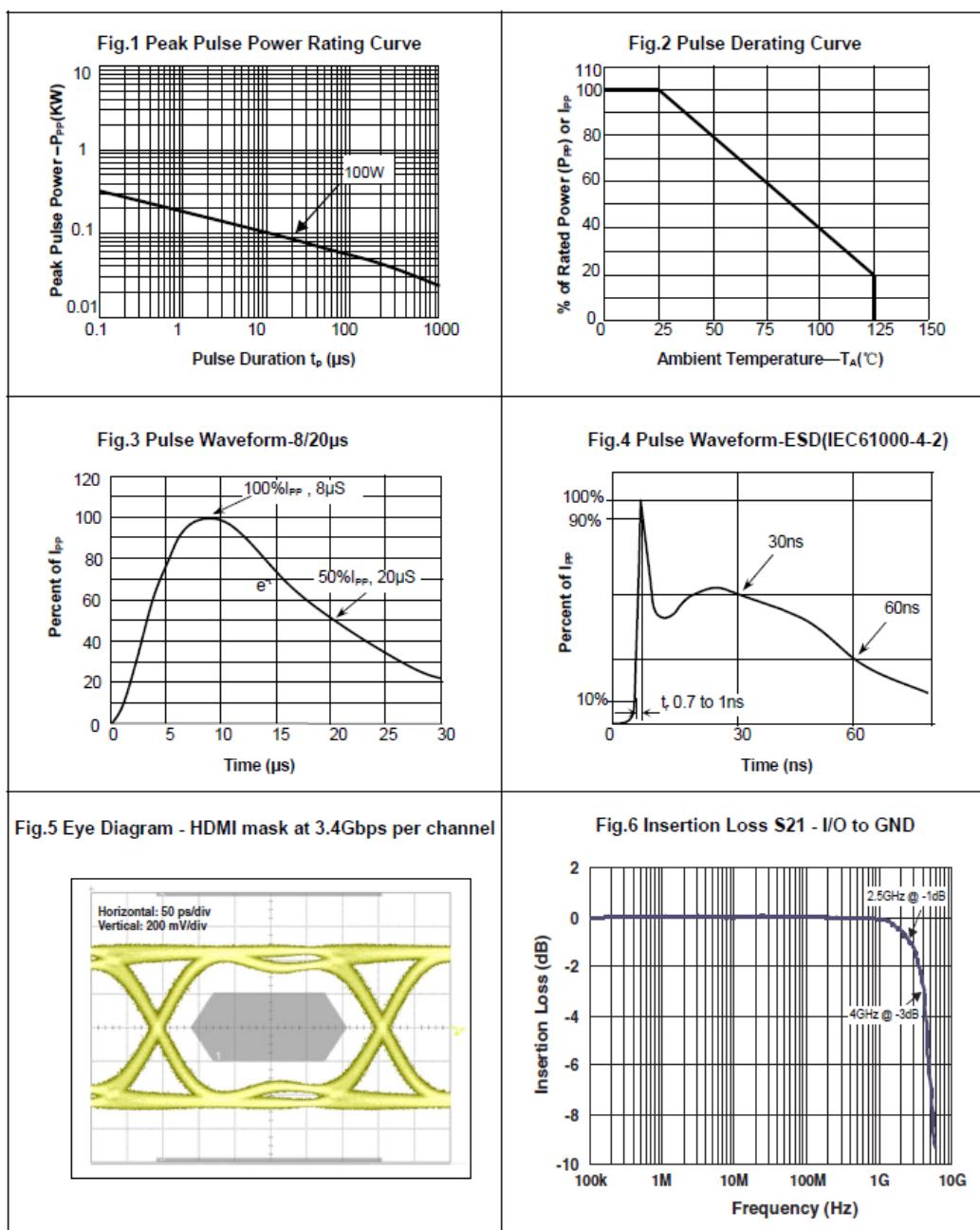
Package : SOT23-6 → Working voltage : 5V

Order code	Package	Marking	Base quantity	Packaging specification
CEST236LC5VUS	SOT23-6	05	3000pcs / reel	EIA STD RS-481

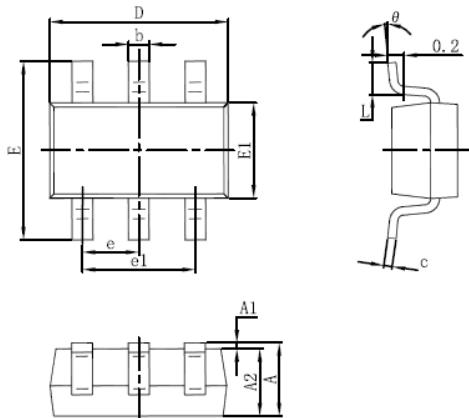
Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	6	6.8	8.5	V
Reverse Leakage Current	I_R	$V_R = 5\text{V}$		0.01	1	μA
Clamping Voltage(SURGE)	V_C	$I_{PP} = 6\text{A} \cdot T_P = 8/20\mu\text{s}$		14	16	V
Clamping Voltage(ESD)	V_C	$V_{ESD} = +8\text{kV}$		15		V
Junction Capacitance	C_J	$V_R = 0\text{V}, f = 1\text{MHz}, \text{I/O to I/O}$		0.2		pF
	C_J	$V_R = 0\text{V}, f = 1\text{MHz}, \text{I/O to GND}$		0.4		pF

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



Package Dimensions



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