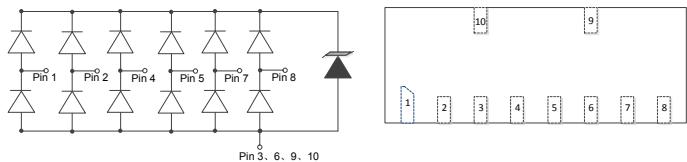
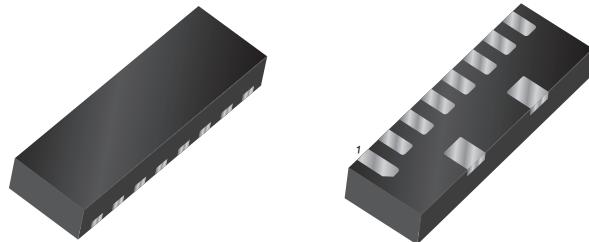


Features

- 30Watts peak pulse power ($t_p = 8/20\mu s$)
- DFN3310-10 Package
- Protect up to 6-lines
- 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 $\pm 8\text{ kV}$ contact $\pm 15\text{ kV}$ air IEC
61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 3A (8/20 μs)



Mechanical Data

- **Case:** DFN3310-10 (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 3.0/3.1,Type C
- HDMI 1.4/2.0,Display Port 1.3
- Unified Display interface
- Digital visual interface
- Microcontroller Input Protection

Absolute Maximum Ratings

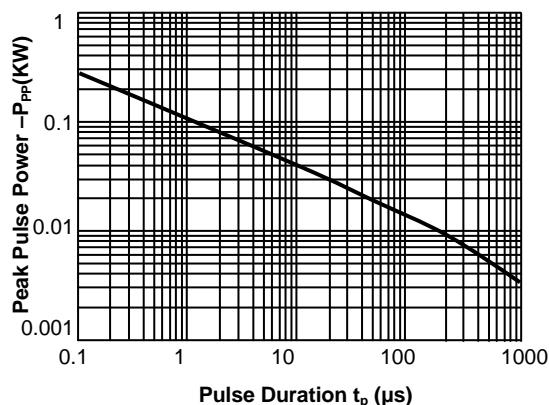
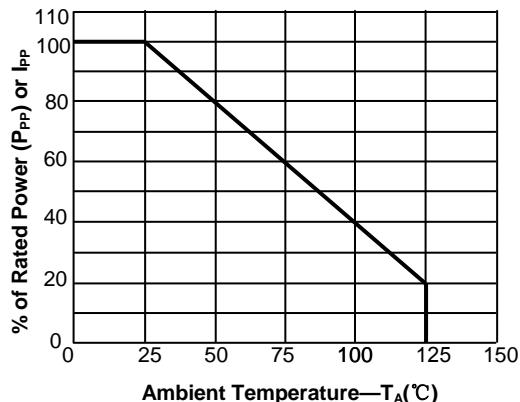
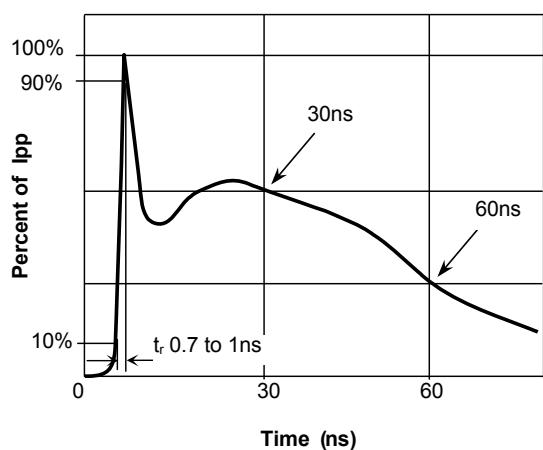
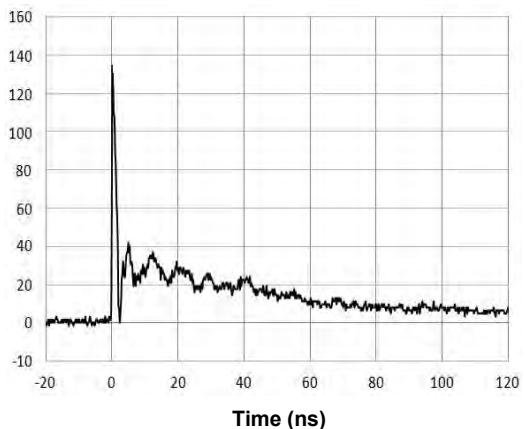
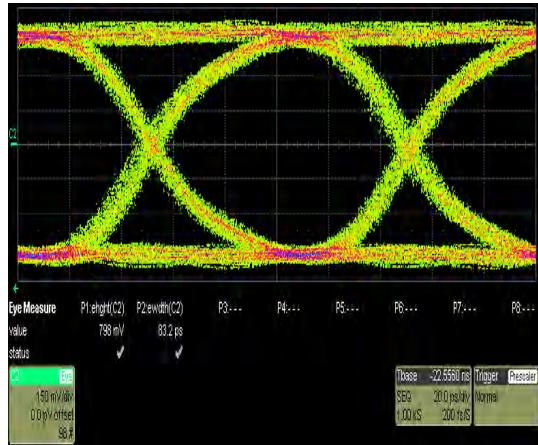
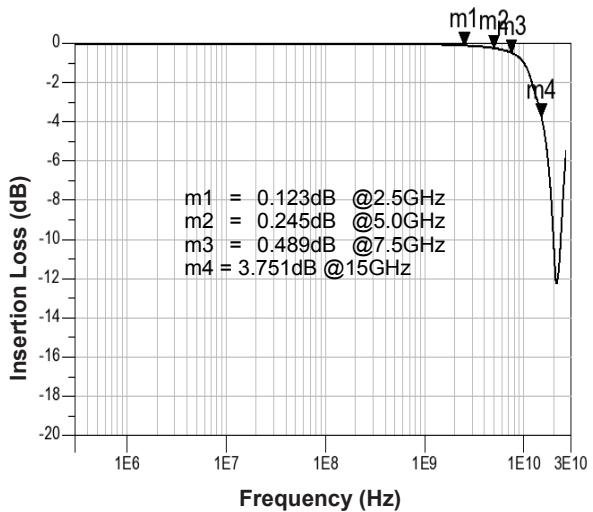
Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	30	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	8/15	kV
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	3	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

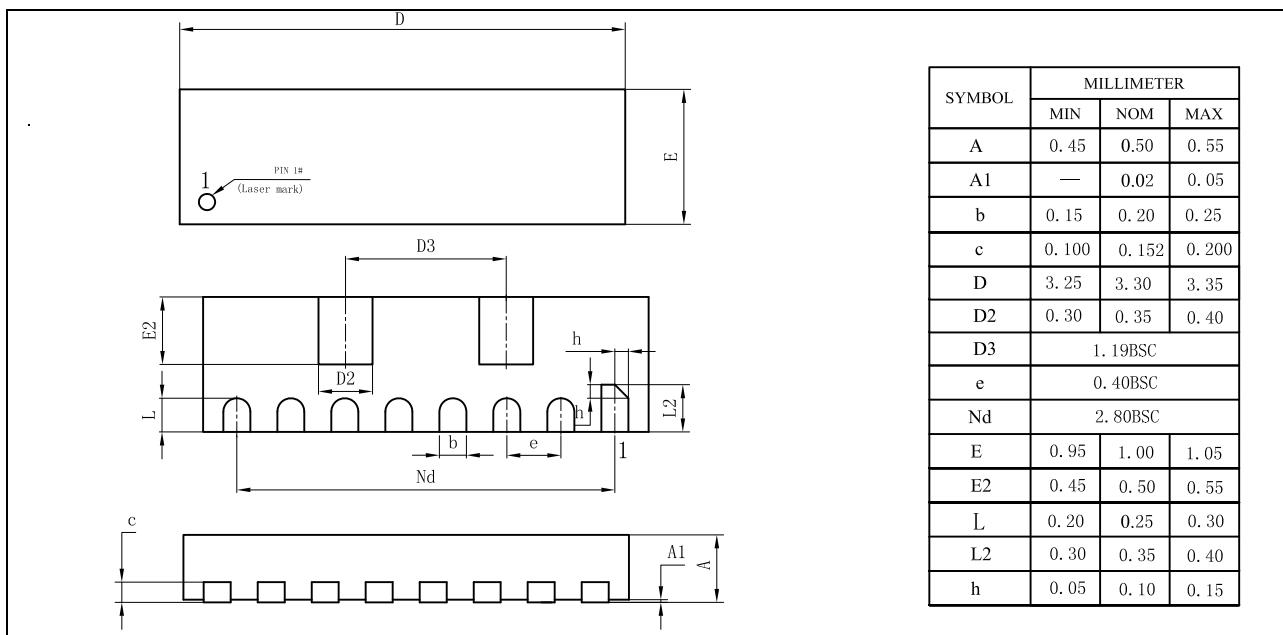
Electrical Characteristics

($T_A = 25$ °C unless otherwise specified)

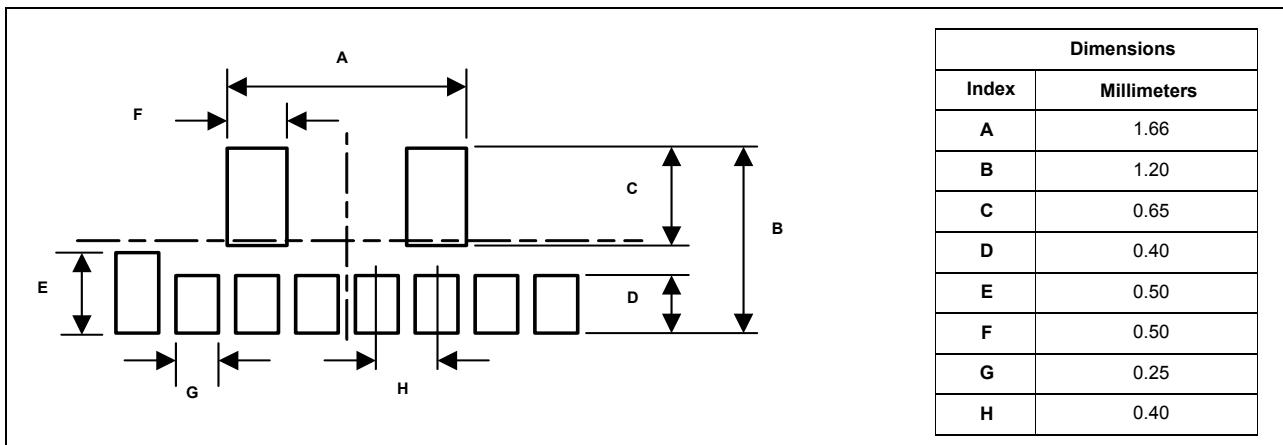
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6	7.2	9.5	V
Reverse Leakage Current	I_R	$V_R=5\text{V}$		0.1	0.5	uA
Clamping Voltage(SURGE)	V_C	$I_{PP}=3\text{A}, T_p=8/20\mu s$		10		V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}, \text{I/O to I/O}$		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)
Fig.1 Peak Pulse Power Rating Curve**Fig.2 Pulse Derating Curve****Fig.3 IEC61000-4-2 Waveform****Fig.4 IEC61000-4-2 +8kV Contact ESD Clamping Waveform****Fig.5 Eye Diagram - USB3.1 at 10Gbps per channel****Fig.6 Insertion Loss S21 - I/O to I/O**

Package Dimensions



PAD Dimensions



Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
YEU33CA0503AV	L5U	DFN3310-10	Tape and reel	3000pcs / reel	EIA STD RS-481