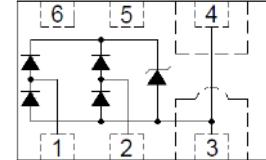
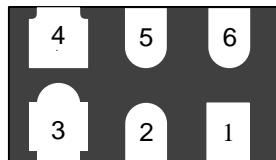


Features

- 100Watts peak pulse power ($T_p = 8/20\mu s$)
- DFN1610-6 package
- R2R + Zener technology
- Low clamping voltage
- Low leakage current
- Ultra low capacitance (0.2pF typical I/O to I/O)
- ESD Protection for high-speed data lines to:
IEC 61000-4-2 ±20KV contact ±25KV air
IEC 61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 5A (8/20μs)



Mechanical Data

- **Case:** DFN1610-6 (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

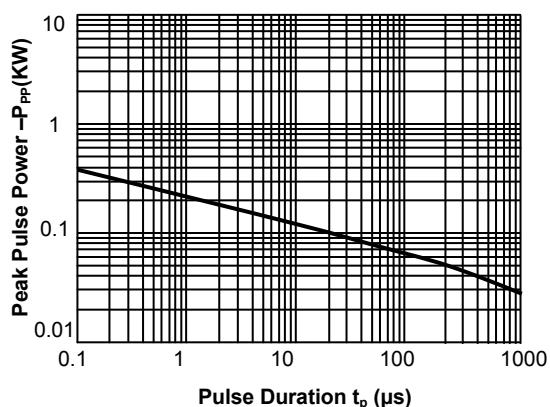
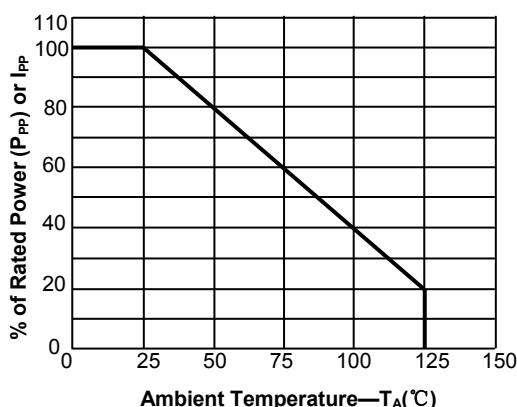
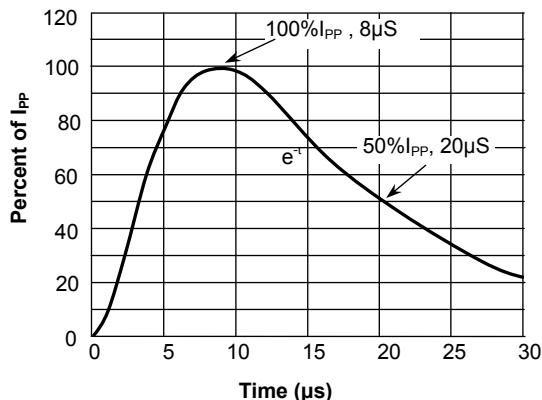
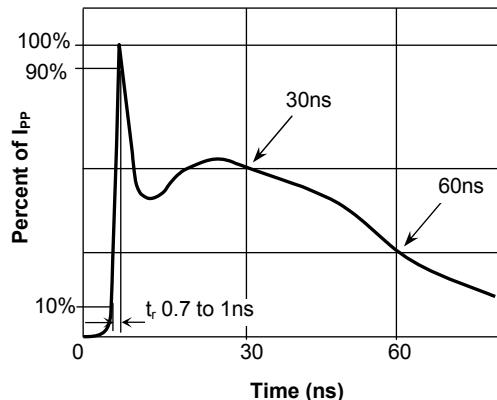
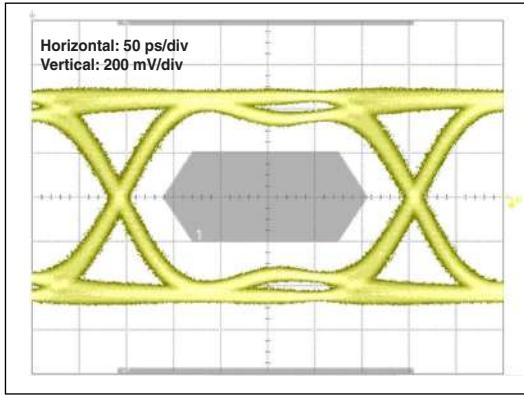
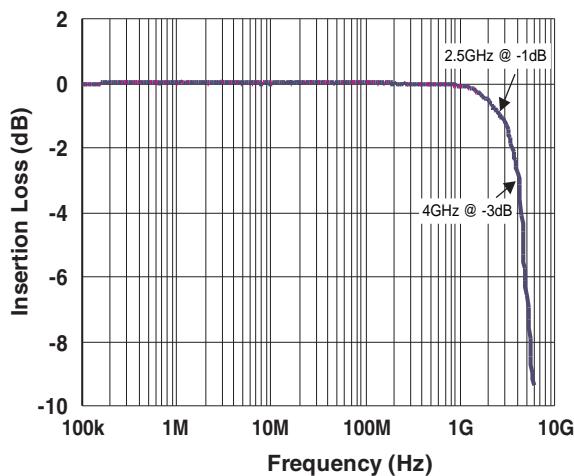
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	100	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	20/25	kV
Peak Pulse Current ($T_p = 8/20\mu s$)	I_{PP}	5.0	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

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}	$I_T=1mA$	5.6	6.8		V
Reverse Leakage Current	I_R	$V_R=5V$		0.01	1	µA
Clamping Voltage(SURGE)	V_C	$I_{PP}=6A, T_p=8/20\mu s$		15	20	V
Clamping Voltage(ESD)	V_C	$V_{ESD} = +8kV$		15		V
Junction Capacitance	C_J	$V_R=0V, f=1MHz, I/O to I/O$		0.2	0.4	pF
	C_J	$V_R=0V, f=1MHz, I/O to GND$		0.4	0.8	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 Pulse Waveform-8/20μs

Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

Fig.5 Eye Diagram - HDMI mask at 3.4Gbps per channel (with CESD1610LC5VU)

Fig.6 Insertion Loss S21 - I/O to GND


Package Dimensions

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
D	1.55	1.65	0.061	0.065
E	0.95	1.05	0.037	0.041
L	0.33	0.43	0.013	0.017
b	0.15	0.25	0.006	0.010
b1	0.35	0.45	0.014	0.018
b2	0.25	0.35	0.010	0.014
e	0.50BSC		0.020BSC	
e1	1.00BSC		0.039BSC	
A	0.45	0.55	0.018	0.022
A1	0.15REF		0.006REF	
A2	0.00	0.05	0.000	0.002

PAD Dimensions

DIM	INCHES	MILLIMETERS
C	0.024	0.60
G	0.004	0.10
P	0.020	0.50
P1	0.039	1.00
X	0.012	0.30
Y	0.020	0.50
Y1	0.043	1.10

Package Information

Symbol	Typical(mm)
A0	1.15
B0	1.65
D	1.55
P0	4.00
P1	4.00
P2	2.00
E	1.75
F	3.50
W	8.00

Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
YEU16C60505AV	DFN1610-6	Tape and reel	3000pcs / reel	EIA STD RS-481