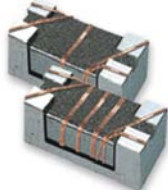


LDWI11T Series **For HDMI, USB 3.0**



A full series of common mode choke is designed for excellent noise attenuation and compact sizing for use in wide range of applications. Both standard series and custom designs are available.

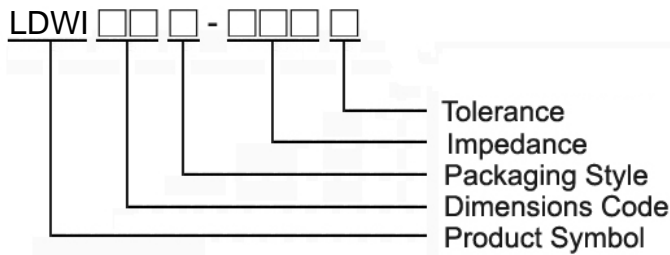
Features

- RoHS Compliant
- Miniature SMD type common mode filter for fully automated assembly
- Excellent solderability

Applications

- HDMI
- USB lines (for personal computers and peripheral), DVC, STB, LVDS, panel line for liquid display panels, etc.

Product Identification

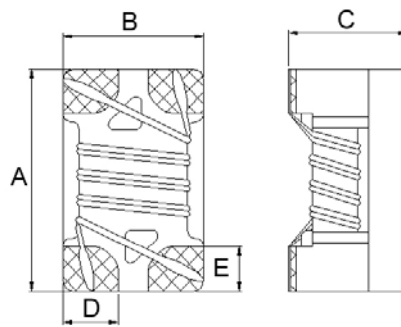
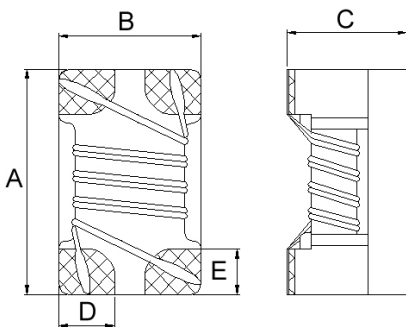


- Packaging: T : Tape and Reel

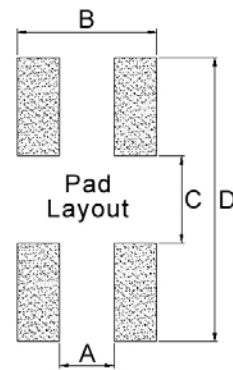
Shape and Dimensions

LDWI11

LDWI21



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D	E
LDWI11	1.25±0.2	1.00±0.2	0.80±0.1	0.32	0.33
LDWI21	2.05±0.2	1.25±0.2	1.20±0.2	0.50	0.40

Dimensions in mm

TYPE	A	B	C	D
LDWI11	0.36	1.00	0.59	1.75
LDWI21	0.50	1.27	0.80	2.60

Electrical Characteristics

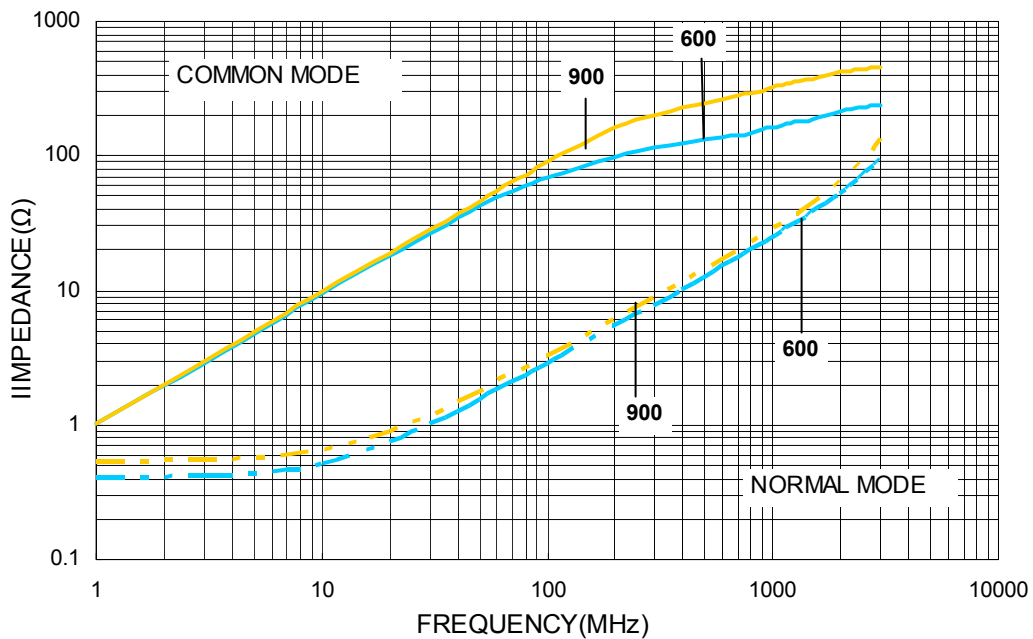
Part Number	Impedance (Ω)	Tolerance ($\pm\%$)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA) Max	Rated Voltage (Vdc)	Insulation Resistance (M Ω) Min
LDWI11T-600Y	60	25	100	0.40	250	20	10
LDWI11T-900Y	90	25	100	0.30	250	20	10

Note: When ordering, please specify tolerance code. Tolerance: Y=±25%

- Operating temperature range - 40°C ~ 105°C(Including self - temperature rise)
- IDC for Inductance drop 10% from its value without current.
- Measure Equipment :
 Z : HP4286A/HP4287A/Agilent E4991A+Agilent16197A
 RDC : CHROMA MILLIOM METER MODE 16502(Single Wire Test Value)
 IDC : HP4284A+HP42841A/HP4285A+HP42841A
 Insulation Resistance : Agilent HP4339B

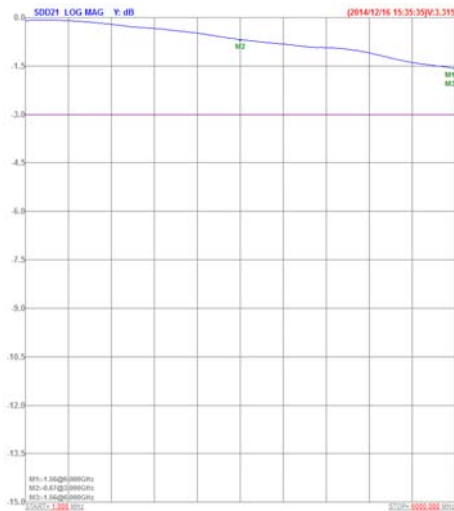
Test Instruments : HP4291A Material/Impedance Analyzer

Typical Impedance vs. Frequency

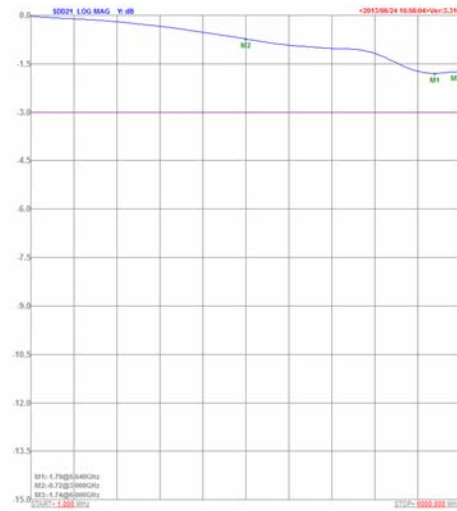


LDWI11T-600Y

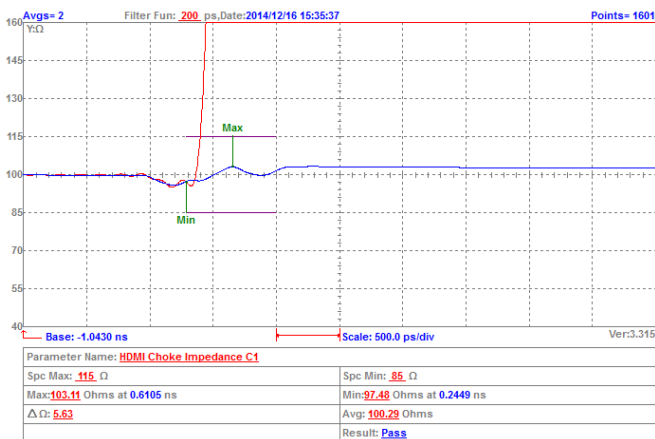
Insertion Loss For HDMI2.0 Testing:



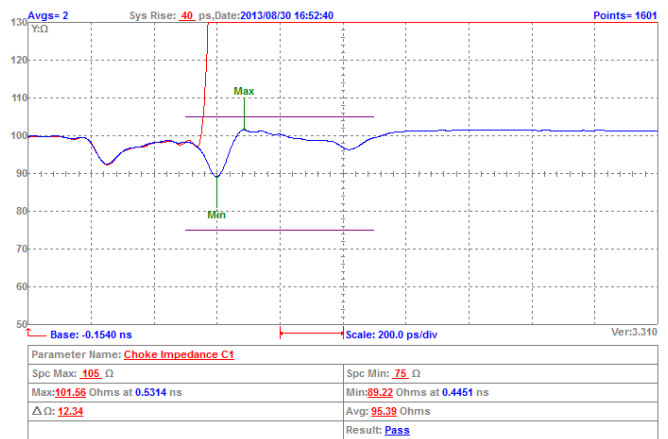
Insertion Loss For USB3.0 Testing:



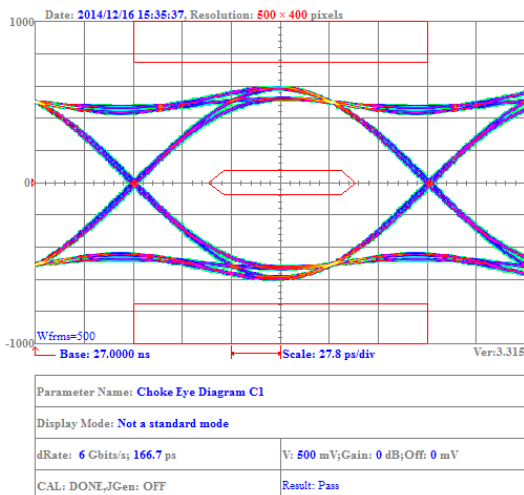
TDR For HDMI2.0 Testing:



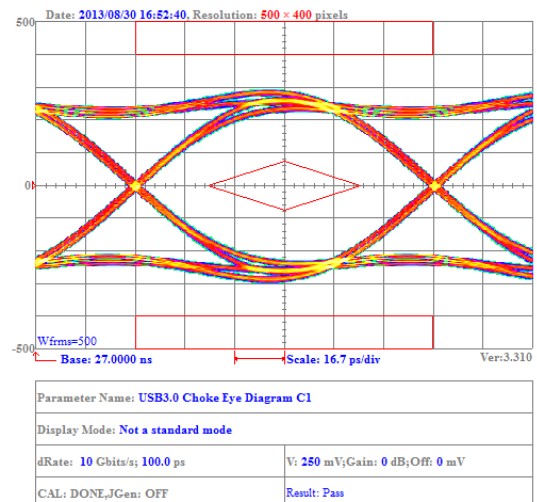
TDR For USB3.0 Testing:



Eye Diagram For HDMI2.0 Testing:

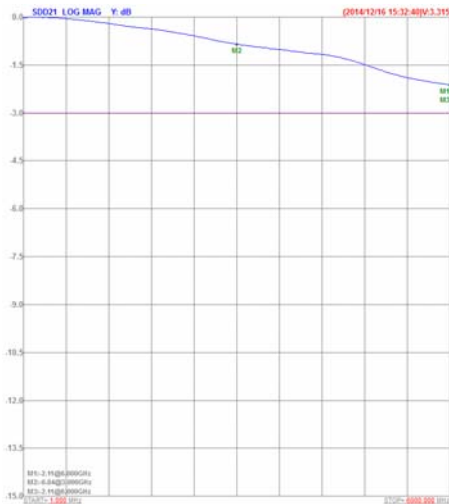


Eye Diagram For USB3.0 Testing:

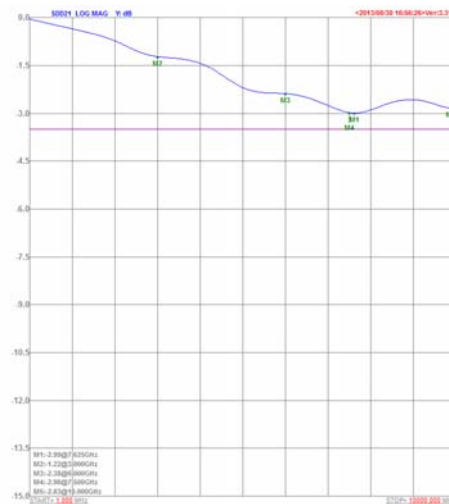


LDWI11T-900Y

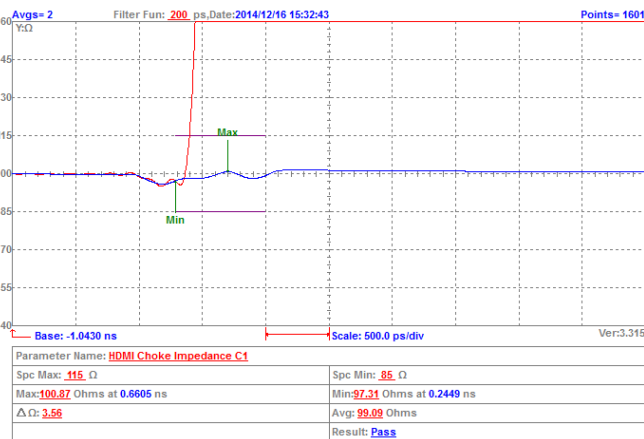
Insertion Loss For HDMI2.0 Testing:



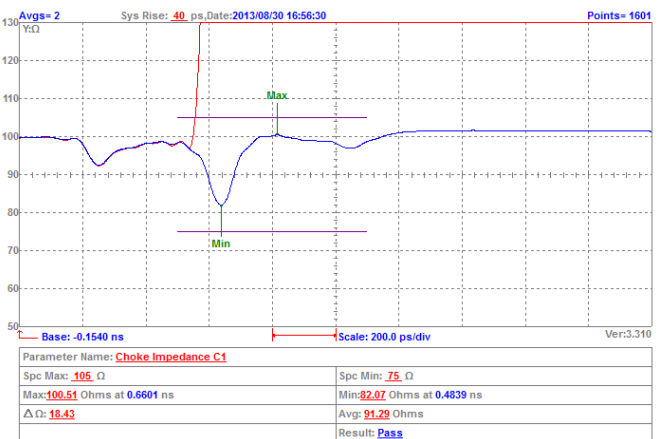
Insertion Loss For USB3.0 Testing:



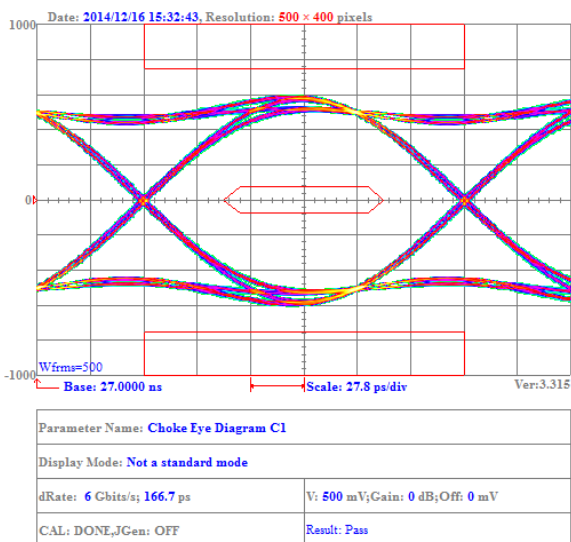
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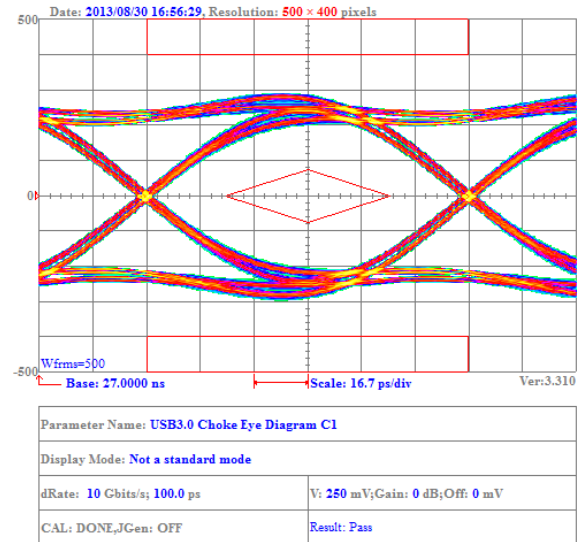
TDR For USB3.0 Testing:



Eye Diagram For HDMI2.0 Testing:



Eye Diagram For USB3.0 Testing:



Electrical Characteristics

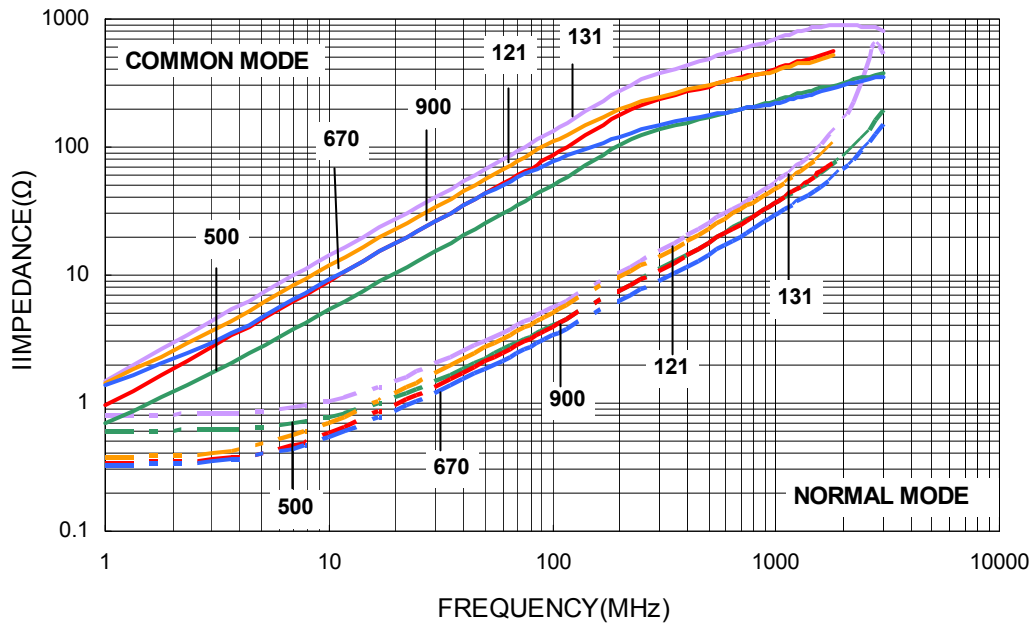
Part Number	Impedance (Ω)	Tolerance ($\pm\%$)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA) Max	Rated Voltage (Vdc)	Insulation Resistance (M Ω) Min
LDWI21T-500Y	50	25	100	0.20	500	50	10
LDWI21T-670Y	67	25	100	0.30	500	50	10
LDWI21T-900Y	90	25	100	0.30	500	50	10
LDWI21T-121Y	120	25	100	0.35	330	50	10
LDWI21T-131Y	130	25	100	0.40	300	50	10

Note: When ordering, please specify tolerance code. Tolerance: Y= $\pm 25\%$

- Operating temperature range - 40°C ~ 105°C(Including self - temperature rise)
- IDC for Inductance drop 10% from its value without current.
- Measure Equipment :
 - Z : HP4286A/HP4287A/Agilent E4991A+Agilent16197A
 - RDC : CHROMA MILLIOM METER MODE 16502(Single Wire Test Value)
 - IDC : HP4284A+HP42841A/HP4285A+HP42841A
 - Insulation Resistance : Agilent HP4339B

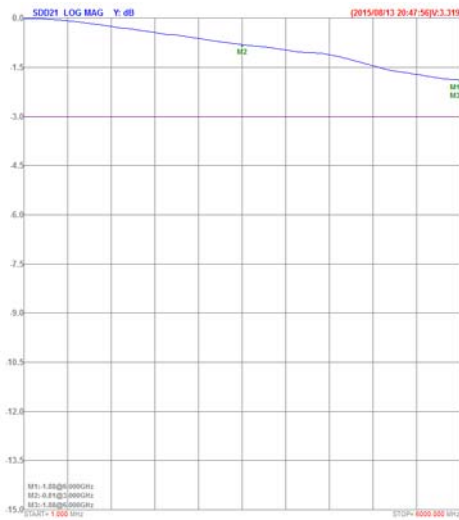
Test Instruments : HP4291A Material/Impedance Analyzer

Typical Impedance vs. Frequency

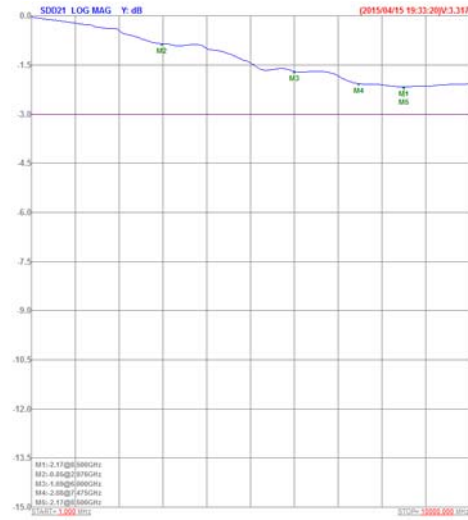


LDWI21T-500Y

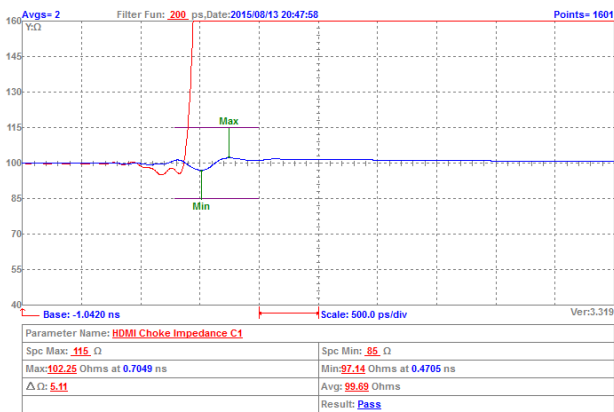
Insertion Loss For HDMI2.0 Testing:



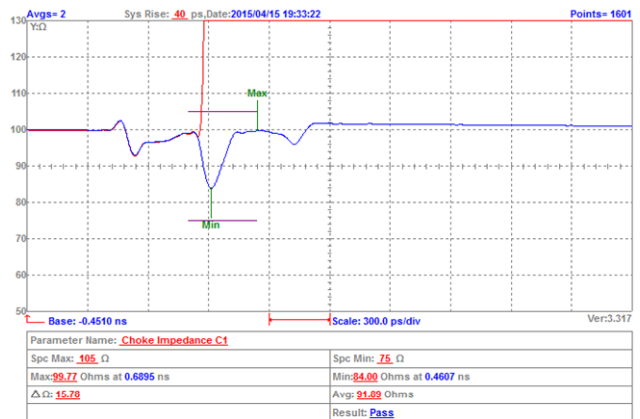
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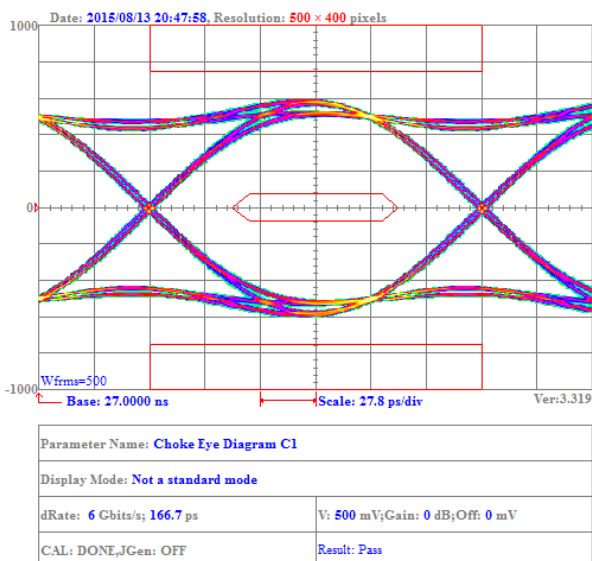
TDR For HDMI2.0 Testing:



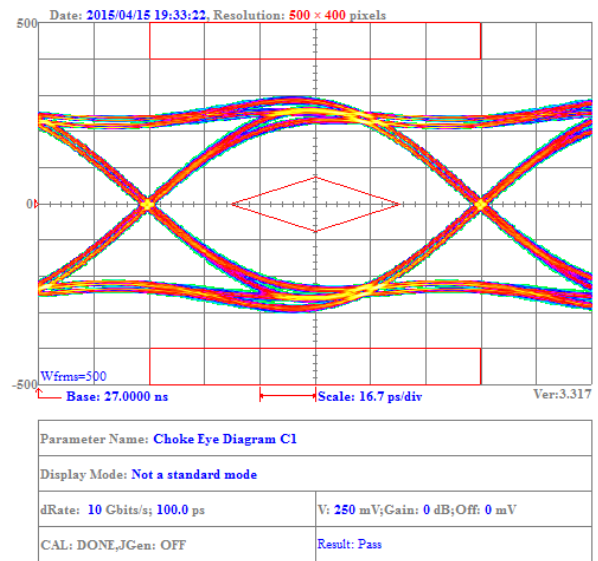
TDR For USB3.0 Testing:



Eye Diagram For HDMI2.0 Testing:

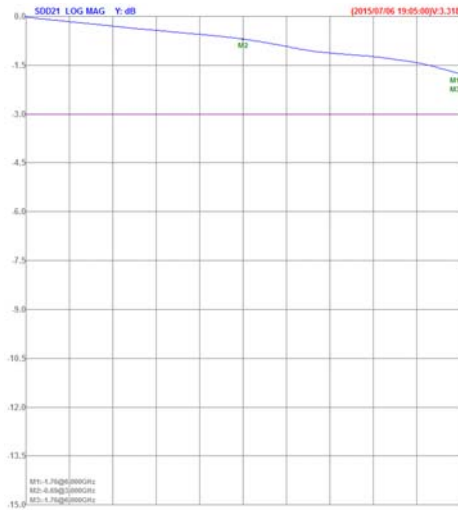


Eye Diagram For USB3.0 Testing:

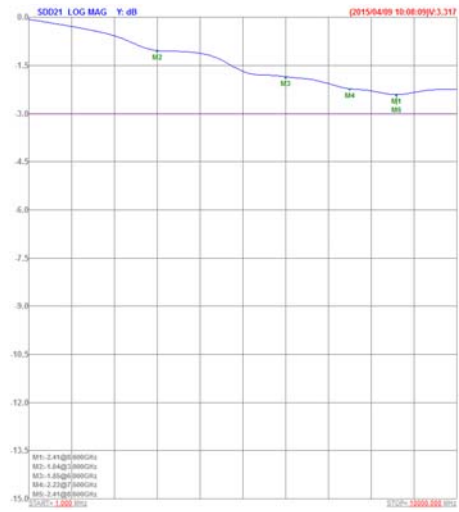


LDWI21T-870Y

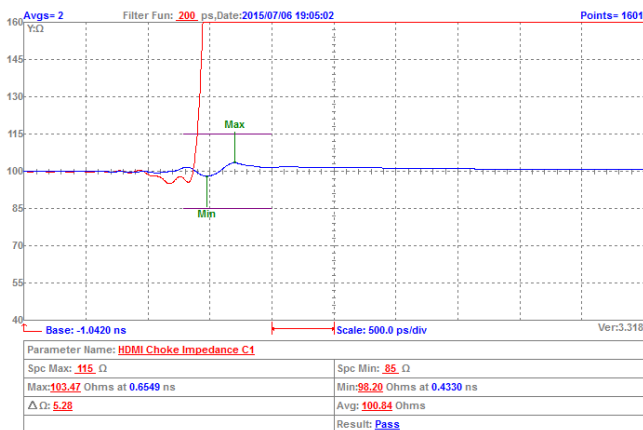
Insertion Loss For HDMI2.0 Testing:



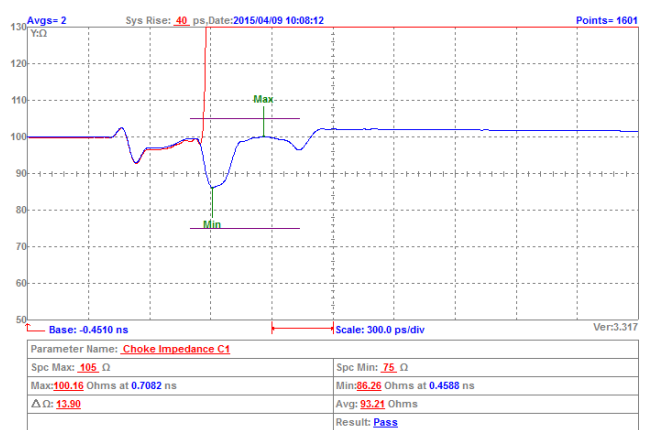
Insertion Loss For USB3.0 Testing:



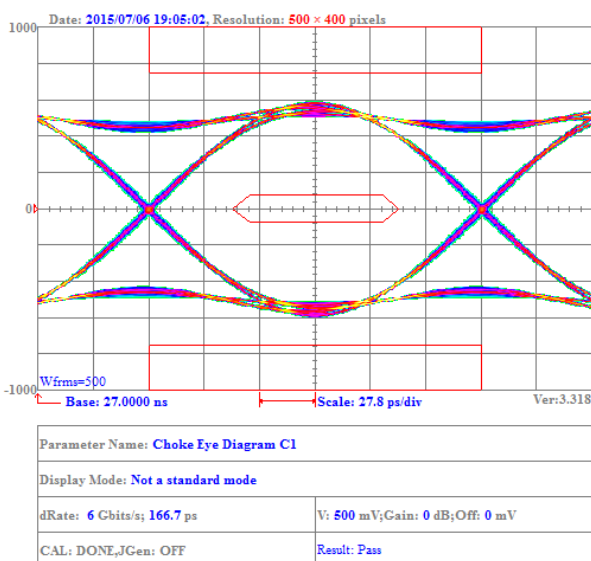
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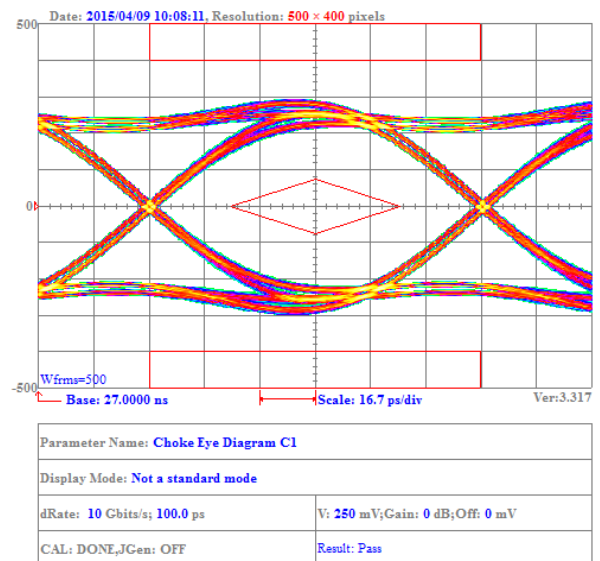
TDR For USB3.0 Testing:



Eye Diagram For HDMI2.0 Testing:



Eye Diagram For USB3.0 Testing:

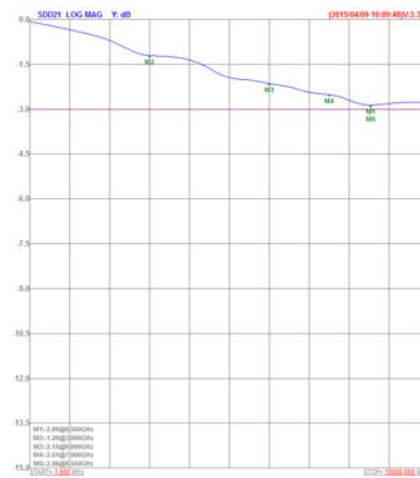


LDWI21T-900Y

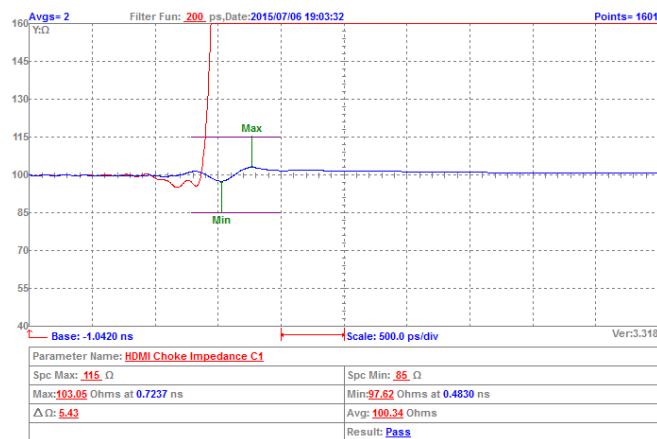
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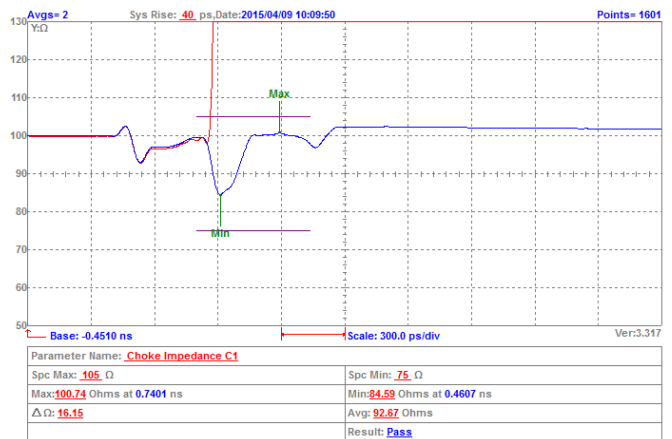
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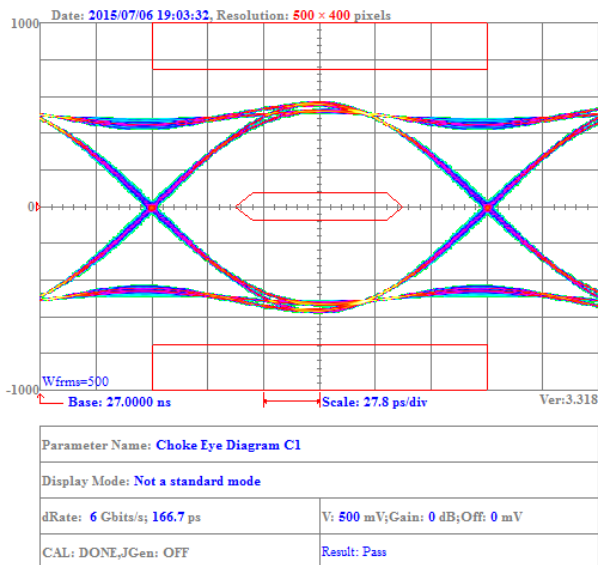
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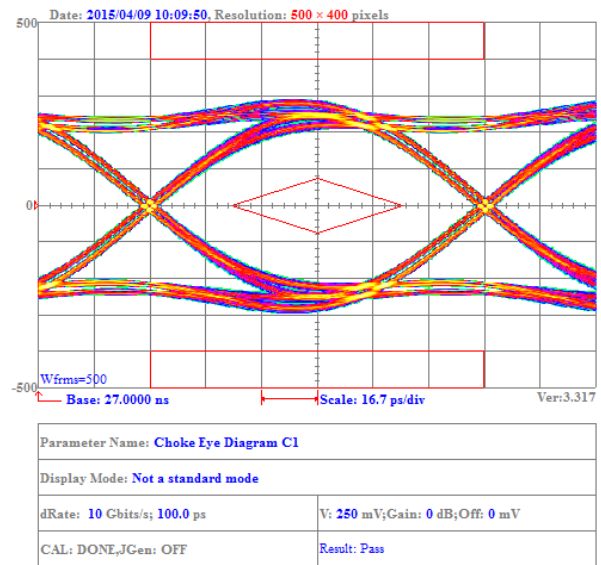
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Eye Diagram For HDMI2.0 Testing:

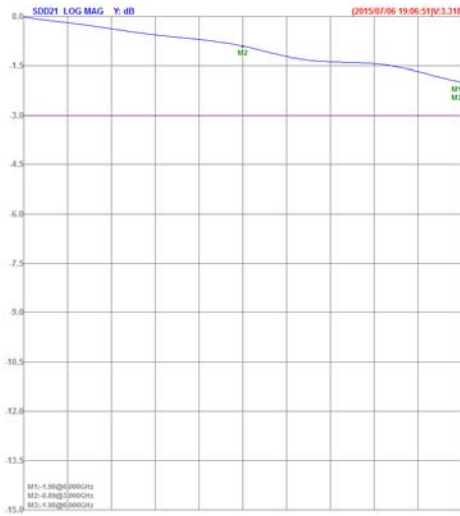


Eye Diagram For USB3.0 Testing:

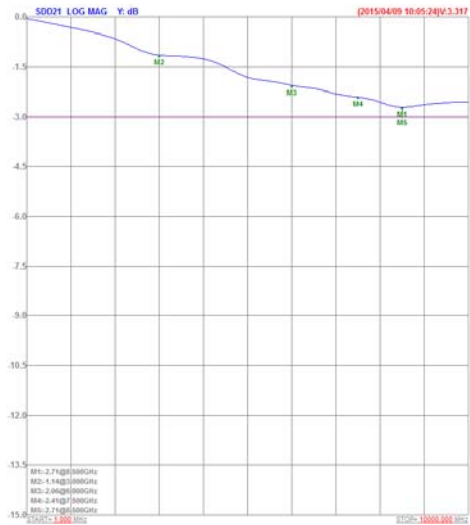


LDWI21T-121Y

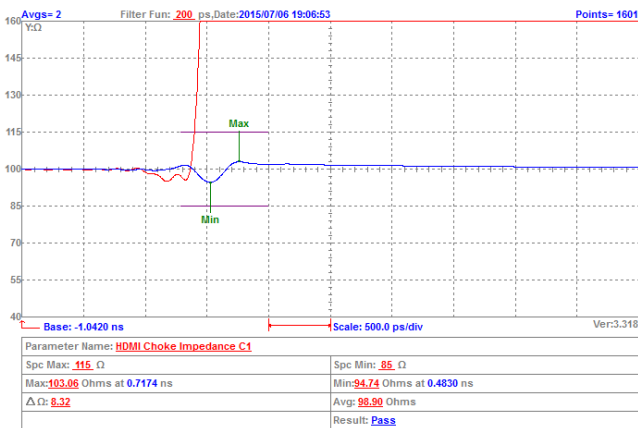
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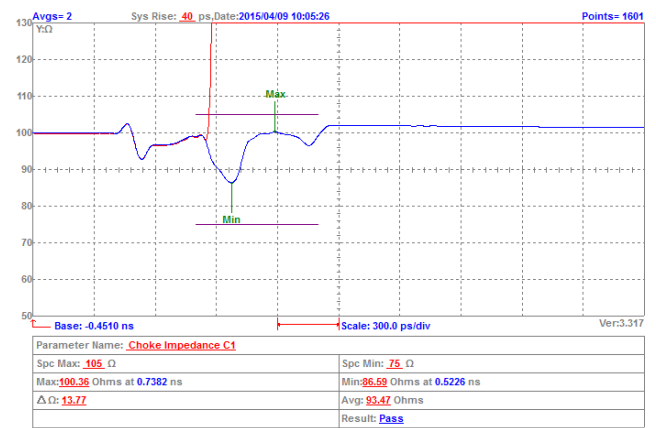
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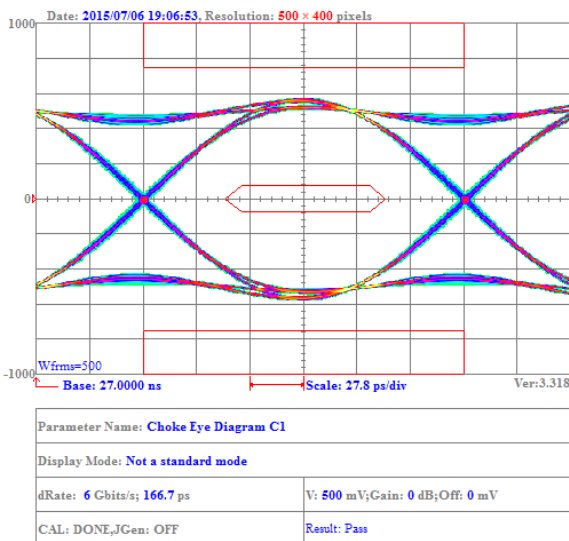
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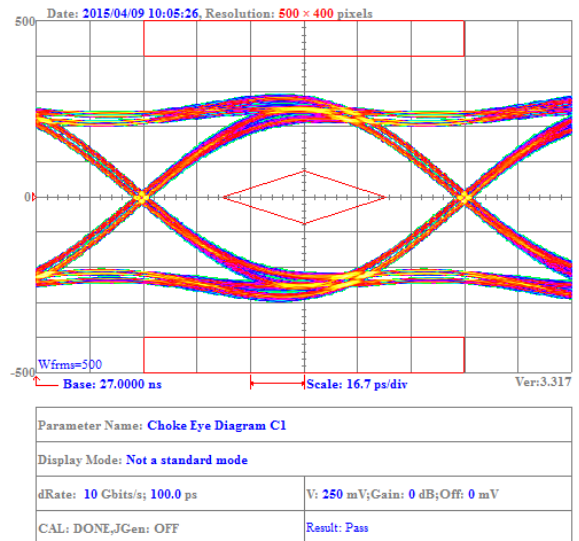
TDR For USB3.0 Testing:



Eye Diagram For HDMI2.0 Testing:

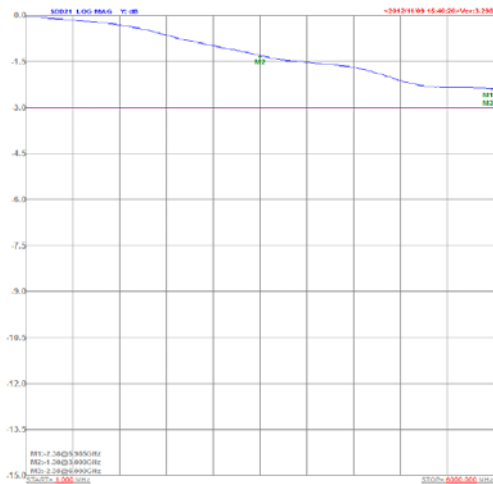


Eye Diagram For USB3.0 Testing:

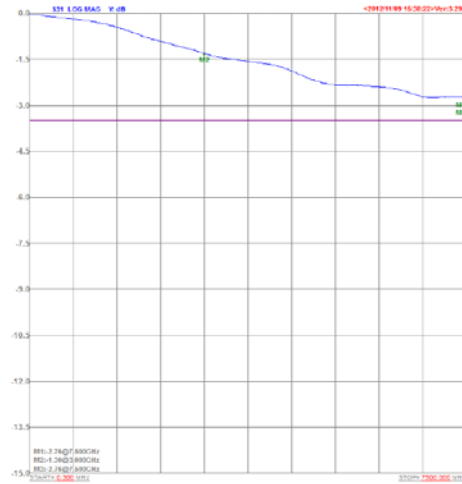


LDWI21T-131Y

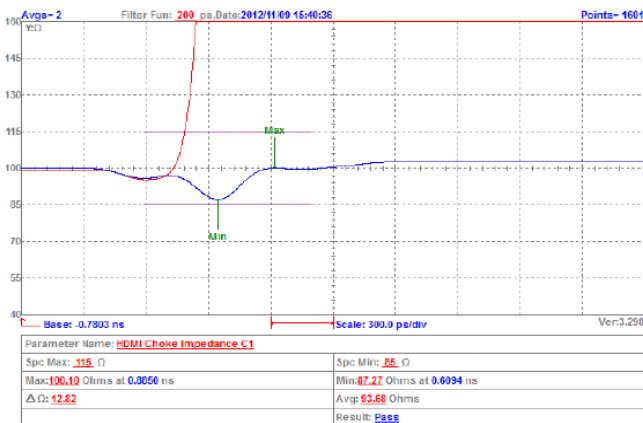
Insertion Loss For HDMI Testing:



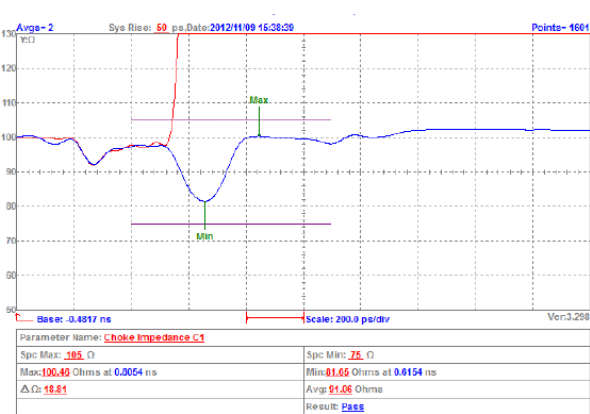
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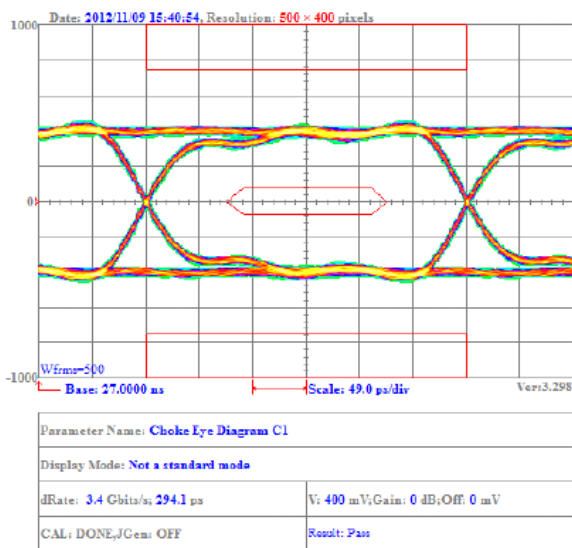
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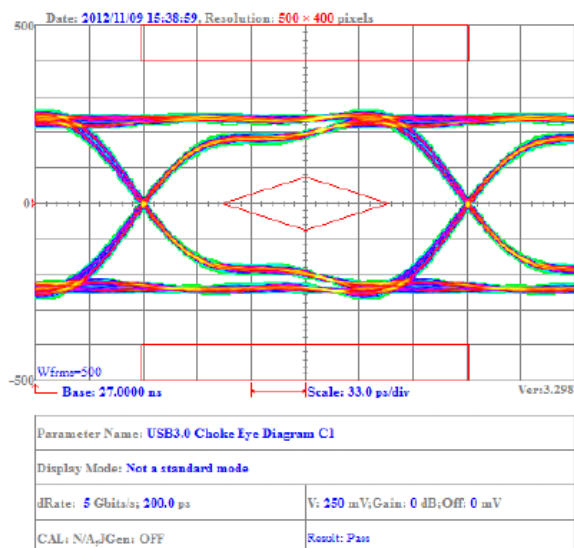
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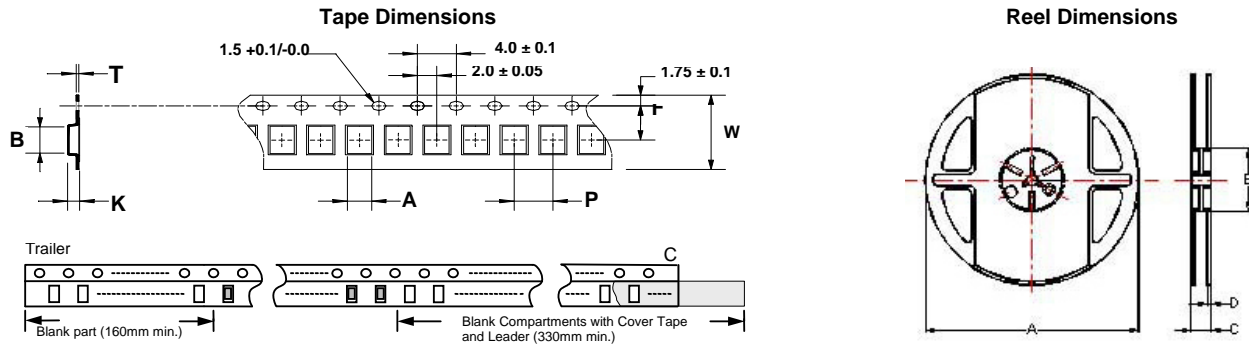
Eye Diagram For HDMI Testing:



Eye Diagram For USB3.0 Testing:



Packaging Specifications



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
	A	B	T	W	P	F	K	A	B	C	D	
LDWI11	1.15	1.45	0.25	8	4	3.5	1.00	178	60	12	1.5	2000
LDWI21	1.50	2.25	0.24	8	4	3.5	1.35	178	60	12	1.5	2000