BWCU_02 Series For USB 2.0, IEEE1394b, LVDS Applications

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

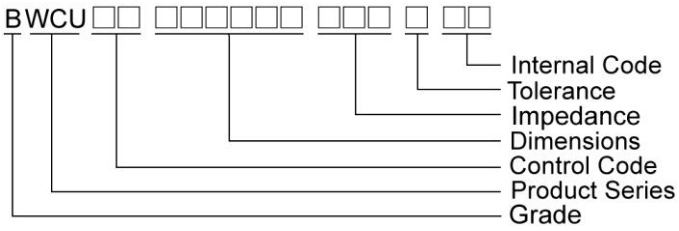
Features

- RoHS Compliant
- Miniature SMD type common mode filter for fully automated assembly
- Wide impedance range (30Ω ~ 2200Ω) for noise suppression
- Excellent solderability

Applications

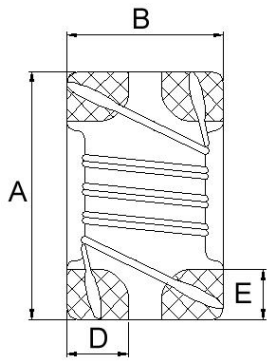
- USB line for personal computers and peripheral
- IEEE 1394 line for personal computers, DVC, STB
- LVDS, panel line for liquid display panels, graph card,etc.

Product Identification

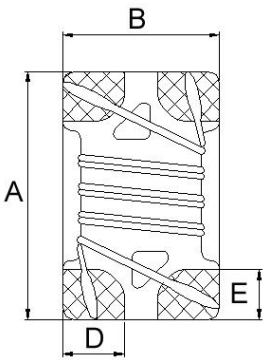


Shape and Dimensions

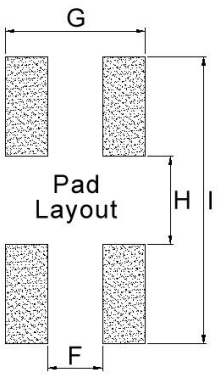
BWCU00160811/ 121008/ 321619



BWCU00201212



Recommended Pattern

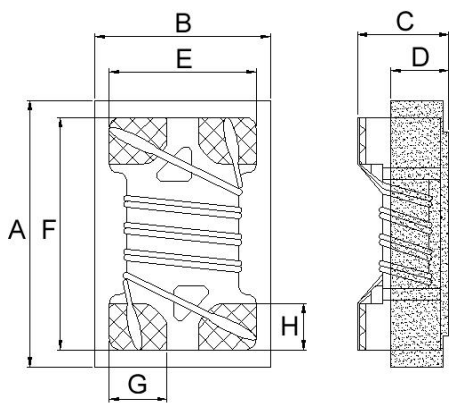


Dimensions in mm

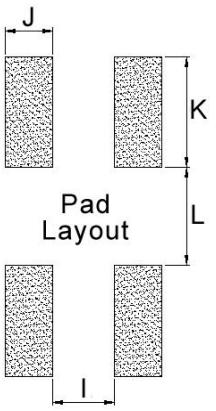
TYPE	A	B	C	D	E	F	G	H	I
BWCU00160811	1.60±0.2	0.80±0.2	1.10±0.2	0.25	0.33	0.25	0.75	0.61	2.29
BWCU00121008	1.25±0.2	1.00±0.2	0.8±0.1	0.32	0.33	0.36	1.00	0.59	1.75
BWCU00201212	2.05±0.2	1.25±0.2	1.20±0.2	0.50	0.50	0.40	1.27	1.1	2.60
BWCU00321619	3.20±0.2	1.60±0.2	1.90±0.2	0.50	0.60	0.40	1.60	1.60	3.70

Shape and Dimensions

BWCU00231512



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D	E	F	G	H	I	J	K	L
BWCU00231512	2.29^{+0}	1.52^{+0}	1.20^{+0}	0.5	1.27	2.03	0.5	0.40	0.5	0.38	0.9	0.8

Electrical Characteristics

Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	Irms (mA) Max	Rated Voltage (Vdc)	Withstamd Voltage (Vdc)	Insulation Resistance (MΩ) Min
BWCU00160811250□02	25	20,25	100	0.077	500	50	125	10
BWCU00160811600□02	60	20,25	100	0.109	500	50	125	10
BWCU00160811900□02	90	20,25	100	0.142	500	50	125	10
BWCU00160811121□02	120	20,25	100	0.160	500	50	125	10
BWCU00160811141□02	140	20,25	100	0.174	500	50	125	10
BWCU00160811221□02	220	20,25	100	0.209	500	50	125	10

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , Y=±25%

- Operating temperature range－40℃～105℃(Including self - temperature rise)
- rms for 20℃ rise from 25℃ ambient
- Measure Equipment：

  Z：Agilent HP4287A+Agilent 16197A

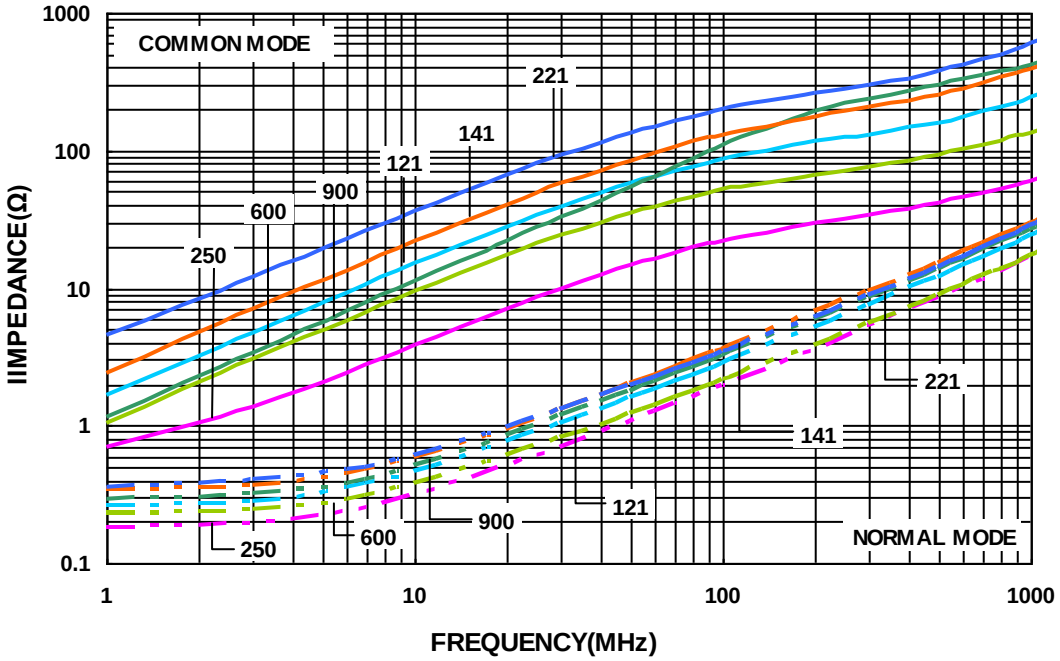
  RDC：HP4338B or Chroma 16502 (Single Wire Test Value)

  Irms：HP4284A+HP42841A/HP4285A+HP42841A

  Insulation Resistance：Agilent HP4339B

Test Instruments：HP4287A Material/Impedance Analyzer

Typical Impedance vs. Frequency



Electrical Characteristics

Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA)	Rated Voltage (Vdc)	Withstamd Voltage (Vdc)	Insulation Resistance (MΩ) Min
BWCU00121008250T02	25	30	100	0.30	400	50	125	100
BWCU00121008600M02	60	20	100	0.40	300	50	125	100
BWCU00121008670M02	67	20	100	0.25	300	50	125	100
BWCU00121008900M02	90	20	100	0.30	250	50	125	100
BWCU00121008121M02	120	20	100	0.40	200	50	125	100
BWCU00121008161M02	160	20	100	0.43	160	50	125	100
BWCU00121008201M02	200	20	100	0.80	120	50	125	100
BWCU00121008331Y02	330	25	100	1.30	100	50	125	100

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , Y=±25% , T=±30%

- Operating temperature range－40℃～105℃(Including self - temperature rise)
- IDC for Inductance drop 10% from its value without current
- Measure Equipment：

  Z：Agilent HP4287A+Agilent 16197A

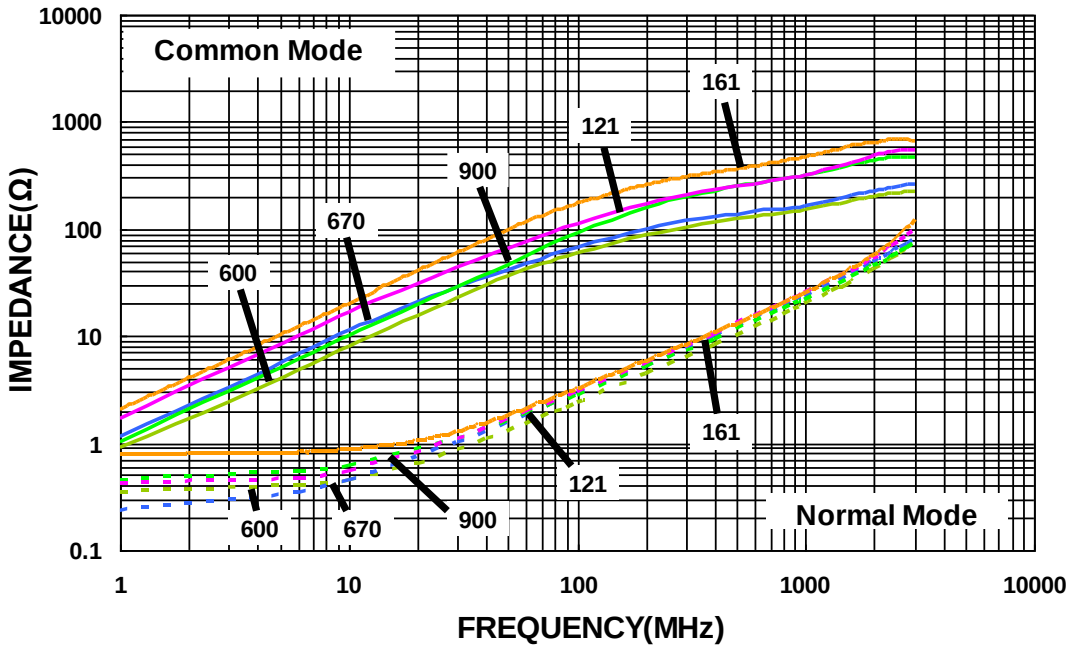
  RDC：Chroma 16502 (Single Wire Test Value)

  IDC：HP4284A+HP42841A/HP4285A+HP42841A

  Insulation Resistance：Agilent HP4339B

Test Instruments：HP4287A Material/Impedance Analyzer

Typical Impedance vs. Frequency



Electrical Characteristics

Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA)	Rated Voltage (Vdc)	Withstamd Voltage (Vdc)	Insulation Resistance (MΩ) Min
BWCU00201212300□02	30	20,25	100	0.20	450	50	125	10
BWCU00201212670□02	67	20,25	100	0.25	400	50	125	10
BWCU00201212750□02	75	20,25	100	0.30	360	50	125	10
BWCU00201212900□02	90	20,25	100	0.35	330	50	125	10
BWCU00201212121□02	120	20,25	100	0.30	400	50	125	10
BWCU00201212161□02	160	20,25	100	0.35	350	50	125	10
BWCU00201212181□02	180	20,25	100	0.35	330	50	125	10
BWCU00201212201□02	200	20,25	100	0.35	330	50	125	10
BWCU00201212221□02	220	20,25	100	0.35	310	50	125	10
BWCU00201212261□02	260	20,25	100	0.40	300	50	125	10
BWCU00201212301□02	300	20,25	100	0.40	290	50	125	10
BWCU00201212361□02	360	20,25	100	0.45	280	50	125	10
BWCU00201212371□02	370	20,25	100	0.45	280	50	125	10
BWCU00201212391□02	390	20,25	100	0.45	280	50	125	10
BWCU00201212491□02	490	20,25	100	0.55	170	50	125	10
BWCU00201212501□02	500	20,25	100	0.55	170	50	125	10
BWCU00201212671□02	670	20,25	100	0.60	140	50	125	10
BWCU00201212801□02	800	20,25	100	0.88	300	50	125	10
BWCU00201212901□02	900	20,25	100	0.60	80	50	125	10
BWCU00201212921□02	920	20,25	100	0.75	80	50	125	10
BWCU00201212102□02	1000	20,25	100	0.8	150	50	125	10
BWCU00201212202□02	2000	20,25	100	2.2	150	50	125	10

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / Y=±25%

- Operating temperature range－40℃～105℃(Including self - temperature rise)
- IDC for Inductance drop 10% from its value without current
- Measure Equipment：

  Z：Agilent HP4287A+Agilent 16197A

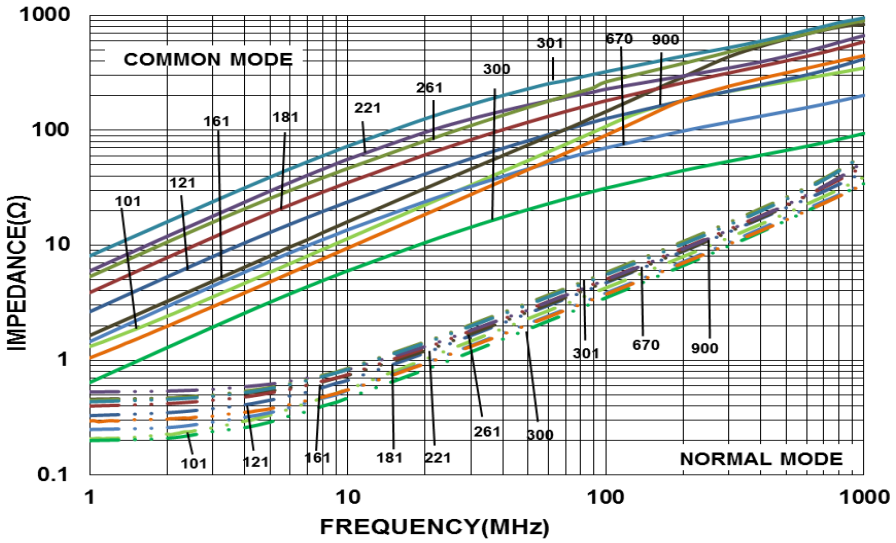
  RDC：Chroma 16502 (Single Wire Test Value)

  IDC：HP4284A+HP42841A/HP4285A+HP42841A

  Insulation Resistance：Agilent HP4339B

Test Instruments：HP4291A Material/Impedance Analyzer

Typical Impedance vs. Frequency



Electrical Characteristics

Electrical Characteristics

Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA)	Rated Voltage (Vdc)	Withstamd Voltage (Vdc)	Insulation Resistance (MΩ) Min
BWCU00321619900□02	90	20,25	100	0.3	370	50	125	10
BWCU00321619121□02	120	20,25	100	0.3	370	50	125	10
BWCU00321619161□02	160	20,25	100	0.4	340	50	125	10
BWCU00321619171□02	170	20,25	100	0.4	330	50	125	10
BWCU00321619221□02	220	20,25	100	0.4	320	50	125	10
BWCU00321619261□02	260	20,25	100	0.5	310	50	125	10
BWCU00321619401□02	400	20,25	100	0.5	300	50	125	10
BWCU00321619401□02	400	20,25	100	0.5	300	50	125	10
BWCU00321619601□02	600	20,25	100	0.8	260	50	125	10
BWCU00321619102□02	1000	20,25	100	1.0	230	50	125	10
BWCU00321619222□02	2200	20,25	100	1.2	200	50	125	10

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / Y=±25%

- Operating temperature range－40℃～105℃(Including self - temperature rise)
- IDC for Inductance drop 10% from its value without current
- Measure Equipment：

  Z：Agilent HP4287A+Agilent 16197A

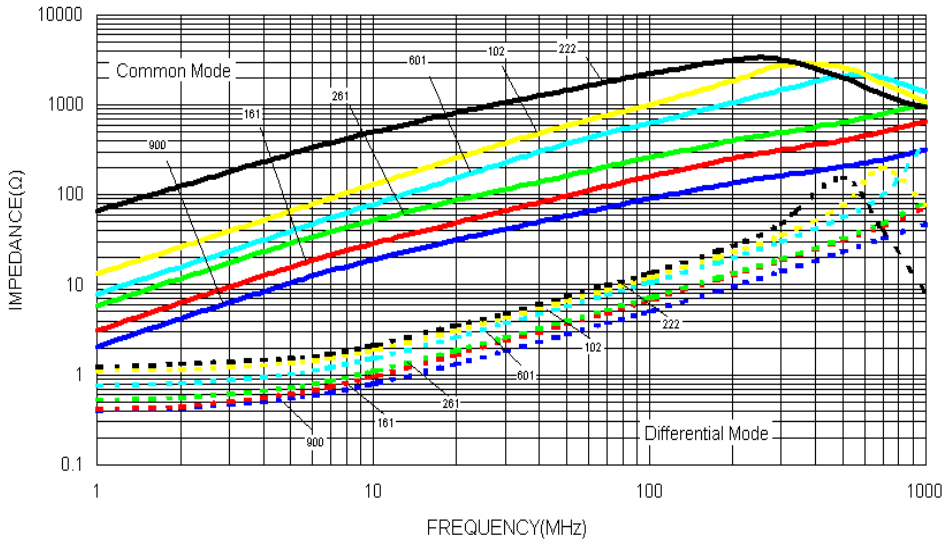
  RDC：Chroma 16502 (Single Wire Test Value)

  IDC：HP4284A+HP42841A/HP4285A+HP42841A

  Insulation Resistance：Agilent HP4339B

Test Instruments：HP4291A Material/Impedance Analyzer

Typical Impedance vs. Frequency



Electrical Characteristics

Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA)	Rated Voltage (Vdc)	Withstamd Voltage (Vdc)	Insulation Resistance (MΩ) Min
BWCU00231512300M02	30	20	100	0.20	1300	50	125	10
BWCU00231512420M02	42	20	100	0.20	1300	50	125	10
BWCU00231512670M02	67	20	100	0.25	1200	50	125	10
BWCU00231512900M02	90	20	100	0.27	1000	50	125	10
BWCU00231512121M02	120	20	100	0.30	900	50	125	10
BWCU00231512181M02	180	20	100	0.40	700	50	125	10
BWCU00231512261M02	260	20	100	0.60	700	50	125	10

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range－40℃～105℃(Including self - temperature rise)
- IDC for Inductance drop 10% from its value without current.
- Measure Equipment：

  Z：Agilent HP4291A

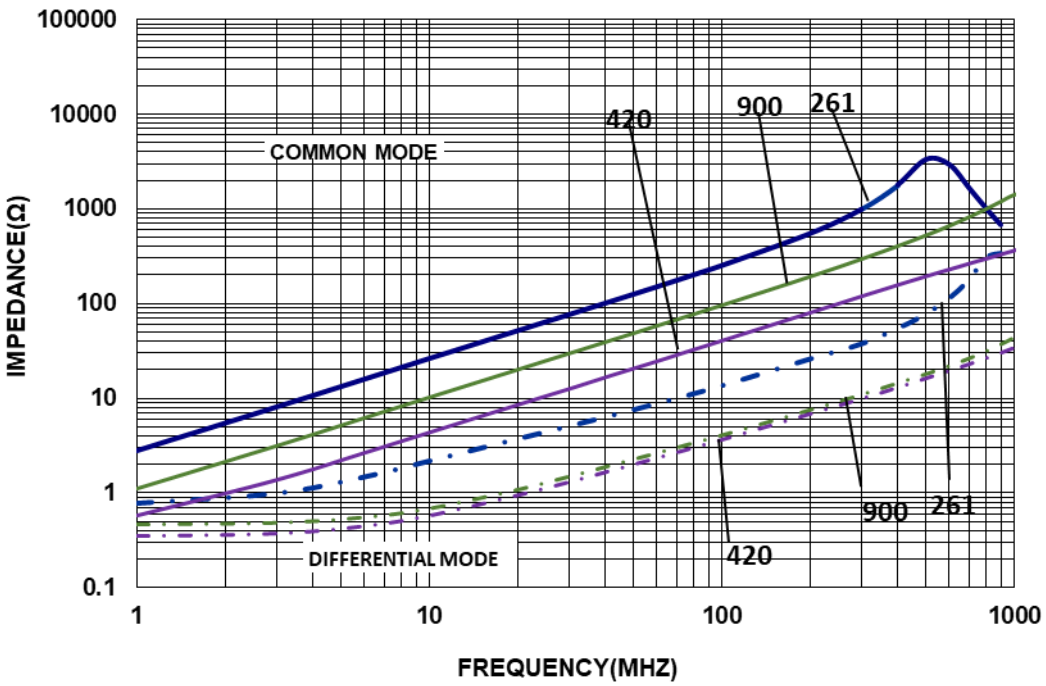
  RDC：HP4338B or Chroma 16502 (Single Wire Test Value)

  IDC：HP4284A+HP42841A/HP4285A+HP42841A

  Insulation Resistance：Agilent HP4339B

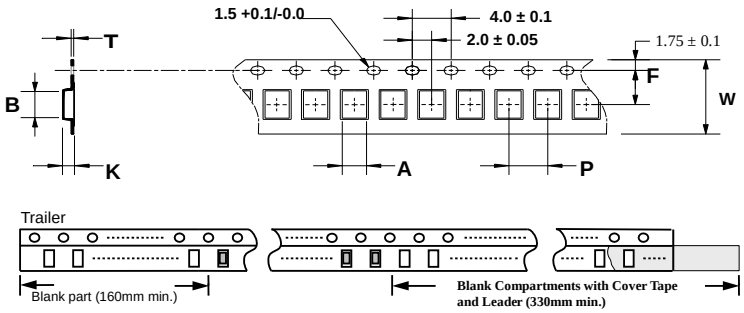
Test Instruments：HP4291A Material/Impedance Analyzer

Typical Impedance vs. Frequency

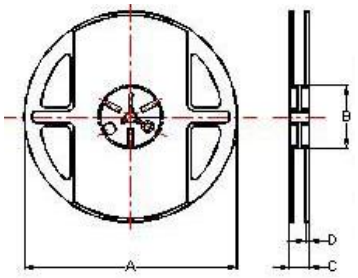


Packaging Specifications

Tape Dimensions



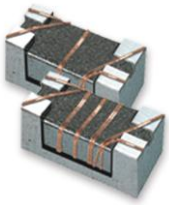
Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity
	A	B	T	W	P	F	K	A	B	C	D	PCS / Reel
BWCU00160811	0.95	1.70	0.24	8	4	3.5	1.15	178	60	12	1.5	2000
BWCU00121008	1.15	1.45	0.24	8	4	3.5	1.00	178	60	12	1.5	2000
BWCU00201212	1.50	2.25	0.24	8	4	3.5	1.35	178	60	12	1.5	2000
BWCU00231512	1.60	2.42	0.26	8	4	3.5	1.14	178	60	12	1.5	2000
BWCU00321619	1.76	3.47	0.22	8	4	3.5	2.05	178	60	12	1.5	2000

BWCU_03 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.

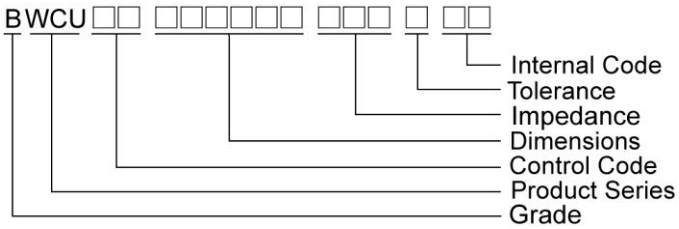
Features

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

Applications

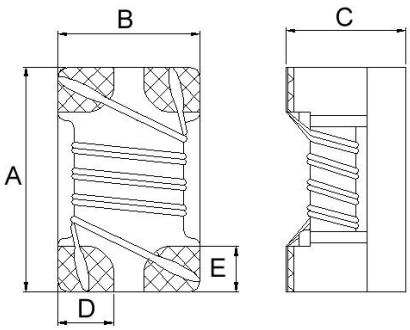
- HDMI
- USB lines (for personal computers and peripheral), DVC, STB, LVDS, panel line for liquid display panels, etc.

Product Identification

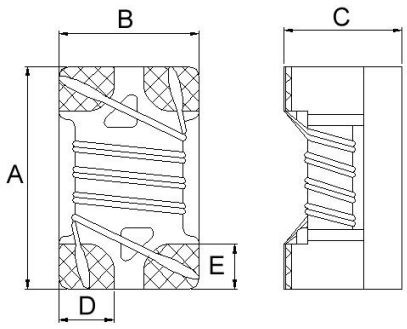


Shape and Dimensions

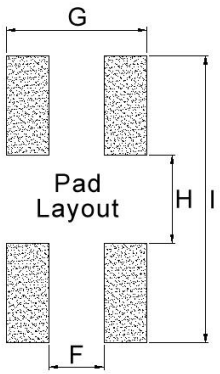
BWCU00121008



BWCU00201212



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D	E	F	G	H	I
BWCU00121008	1.25±0.2	1.00±0.2	0.80±0.1	0.32	0.33	0.36	1.00	0.59	1.75
BWCU00201212	2.05±0.2	1.25±0.2	1.20±0.2	0.50	0.40	0.50	1.27	1.1	2.60

Electrical Characteristics

Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA) Max	Rated Voltage (Vdc)	Withstamd Voltage (Vdc)	Insulation Resistance (MΩ) Min
BWCU00121008150□03	15	20,25	100	0.18	420	50	125	100
BWCU00121008220□03	22	20,25	100	0.20	400	50	125	100
BWCU00121008350□03	35	20,25	100	0.23	350	50	125	100
BWCU00121008400□03	40	20,25	100	0.25	350	50	125	100
BWCU00121008450□03	45	20,25	100	0.27	300	50	125	100
BWCU00121008600□03	60	20,25	100	0.40	250	50	125	100
BWCU00121008800□03	80	20,25	100	0.30	250	50	125	100
BWCU00121008900□03	90	20,25	100	0.30	250	50	125	100

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / Y=±25%

- Operating temperature range－40℃～105℃(Including self - temperature rise)
- IDC for Inductance drop 10% from its value without current.
- Measure Equipment：

  Z：HP4286A/HP4287A/Agilent E4991A+Agilent16197A

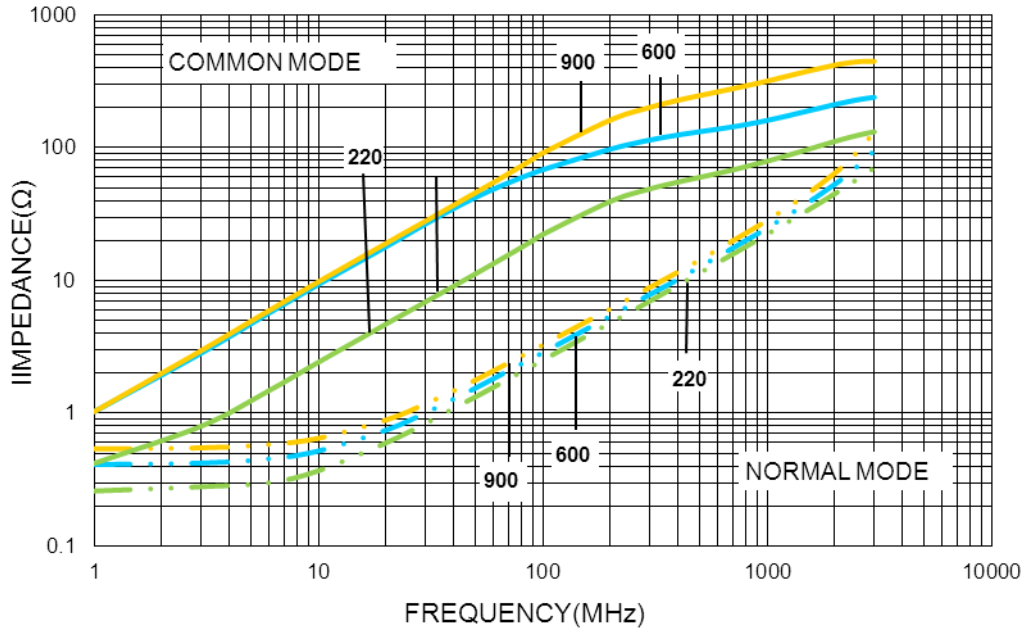
  RDC：Chroma 16502 (Single Wire Test Value)

  IDC：HP4284A+HP42841A/HP4285A+HP42841A

  Insulation Resistance：Agilent HP4339B

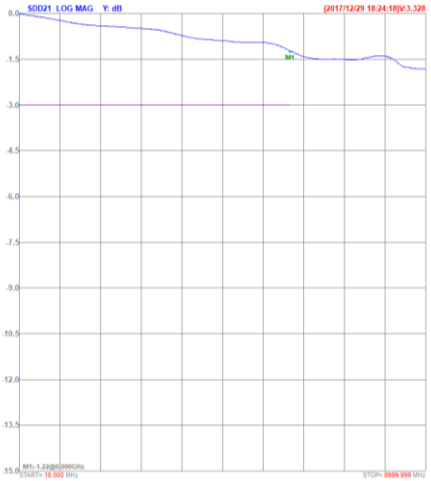
Test Instruments：HP4291A Material/Impedance Analyzer

Typical Impedance vs. Frequency

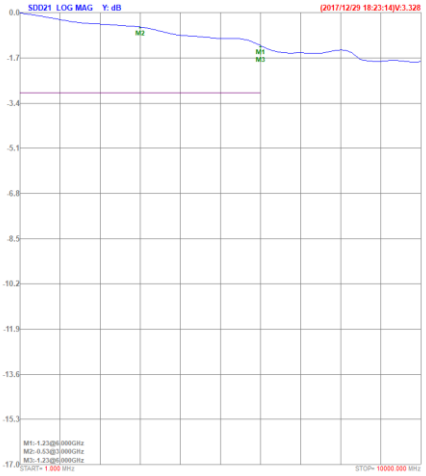


BWCU00121008220Y03

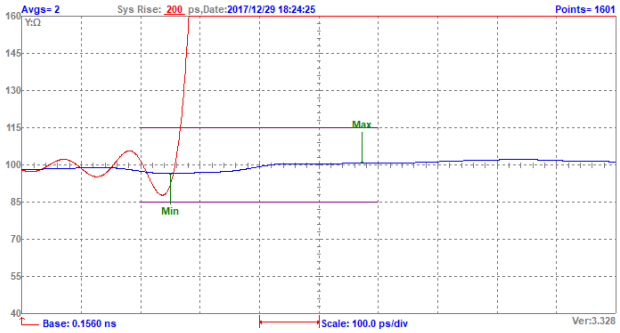
Insertion Loss For HDMI2.0 Testing:



Insertion Loss For USB3.0 Testing:

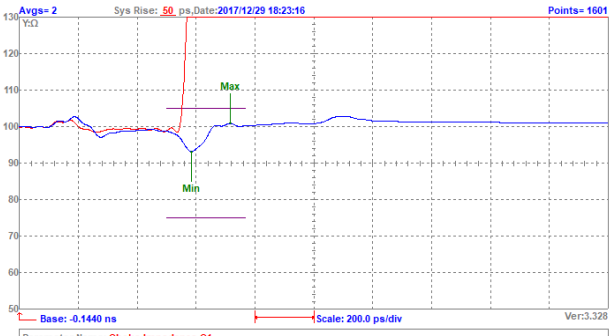


TDR For HDMI2.0 Testing:



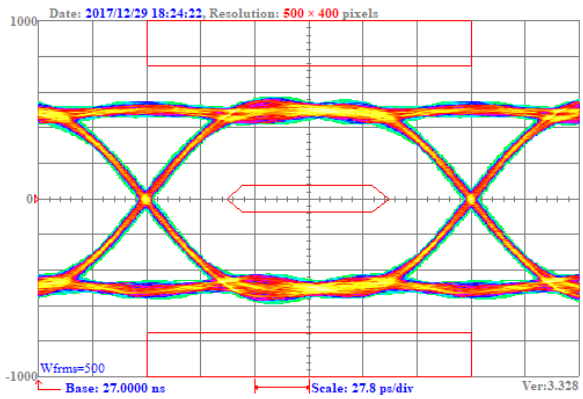
Parameter Name: HDMI2.0 Choke Impedance c1	
Spc Max: 115 Ω	Spc Min: 85 Ω
Max:100.81 Ohms at 0.7289 ns	Min:96.57 Ohms at 0.4058 ns
ΔΩ: 4.24	Avg: 98.69 Ohms
	Result: Pass

TDR For USB3.0 Testing:



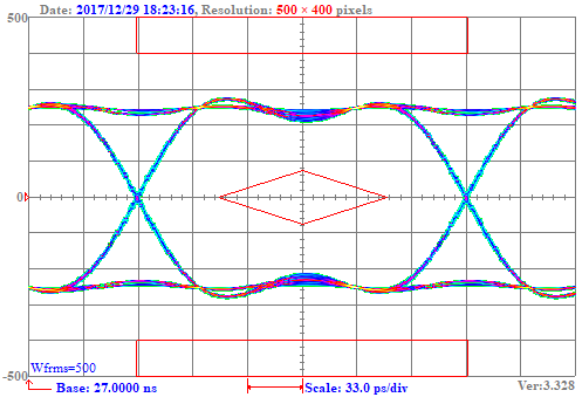
Parameter Name: Choke Impedance C1	
Spc Max: 105 Ω	Spc Min: 75 Ω
Max:100.93 Ohms at 0.5713 ns	Min:93.26 Ohms at 0.4400 ns
ΔΩ: 7.67	Avg: 97.10 Ohms
	Result: Pass

Eye Diagram For HDMI2.0 Testing:



Parameter Name: HDMI2.0 Choke Eye Diagram with 25ps c1	
Display Mode: Not a standard mode	
dRate: 6 Gbits/s; 166.7 ps	V: 500 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

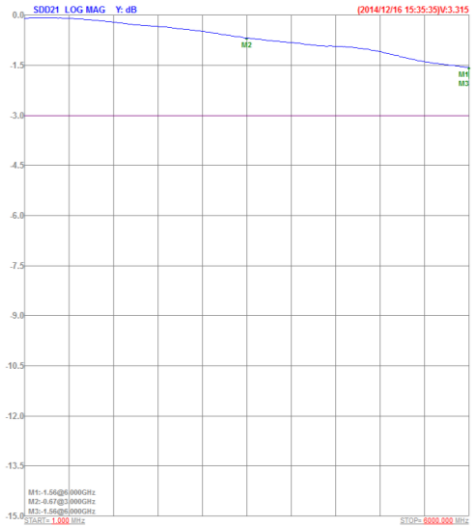
Eye Diagram For USB3.0 Testing:



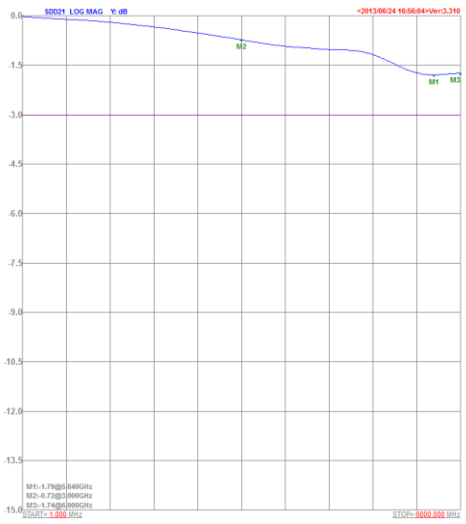
Parameter Name: USB3.0 Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 5 Gbits/s; 200.0 ps	V: 250 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

BWCU00121008600Y03

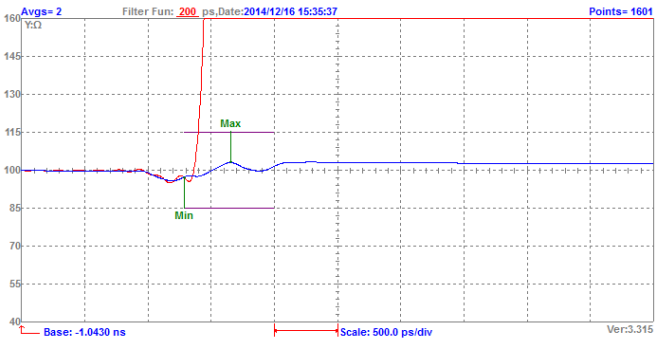
Insertion Loss For HDMI2.0 Testing:



Insertion Loss For USB3.0 Testing:

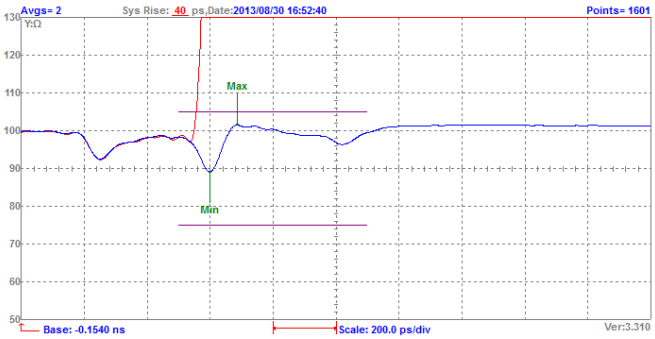


TDR For HDMI2.0 Testing:



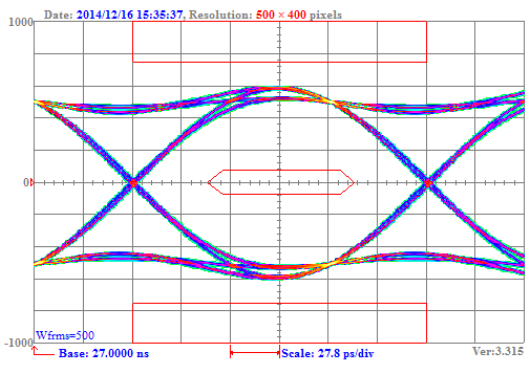
Parameter Name: HDMI Choke Impedance C1	
Spc Max: 115 Ω	Spc Min: 85 Ω
Max:103.11 Ohms at 0.6105 ns	Min:97.48 Ohms at 0.2449 ns
ΔΩ: 5.63	Avg: 100.29 Ohms
	Result: Pass

TDR For USB3.0 Testing:



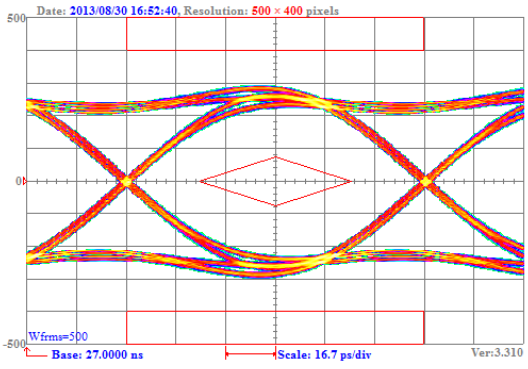
Parameter Name: Choke Impedance C1	
Spc Max: 105 Ω	Spc Min: 75 Ω
Max:101.56 Ohms at 0.5314 ns	Min:89.22 Ohms at 0.4451 ns
ΔΩ: 12.34	Avg: 95.39 Ohms
	Result: Pass

Eye Diagram For HDMI2.0 Testing:



Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 6 Gbits/s; 166.7 ps	V: 500 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

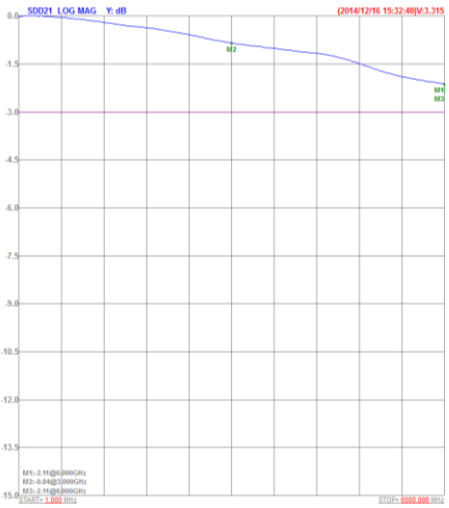
Eye Diagram For USB3.0 Testing:



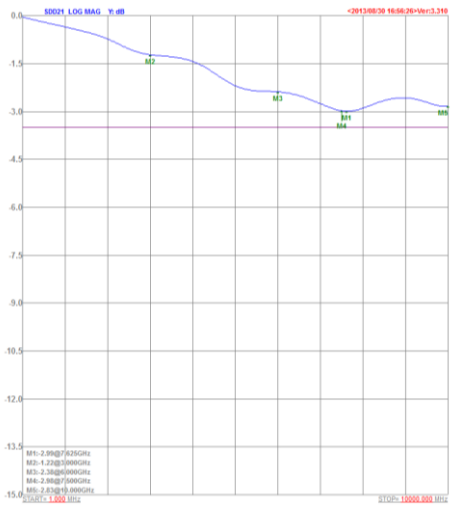
Parameter Name: USB3.0 Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 10 Gbits/s; 100.0 ps	V: 250 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

BWCU00121008900Y03

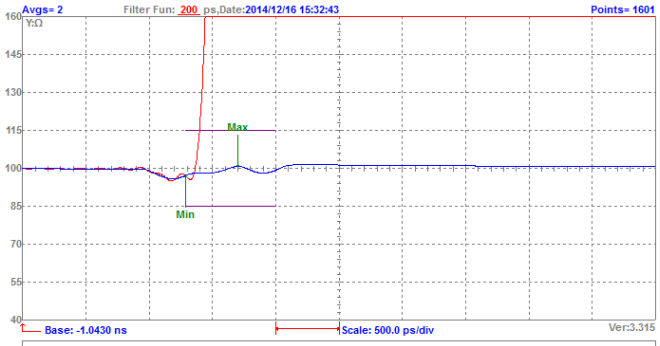
Insertion Loss For HDMI2.0 Testing:



Insertion Loss For USB3.0 Testing:

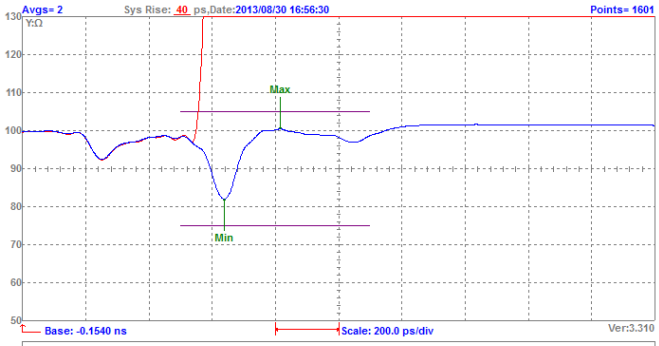


TDR For HDMI2.0 Testing:



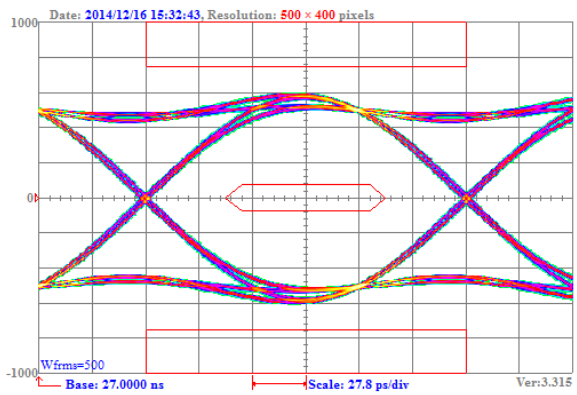
Parameter Name: HDMI Choke Impedance C1	
Spc Max: 115 Ω	Spc Min: 85 Ω
Max:100.87 Ohms at 0.6605 ns	Min:97.31 Ohms at 0.2449 ns
ΔΩ: 3.56	Avg: 99.09 Ohms
	Result: Pass

TDR For USB3.0 Testing:



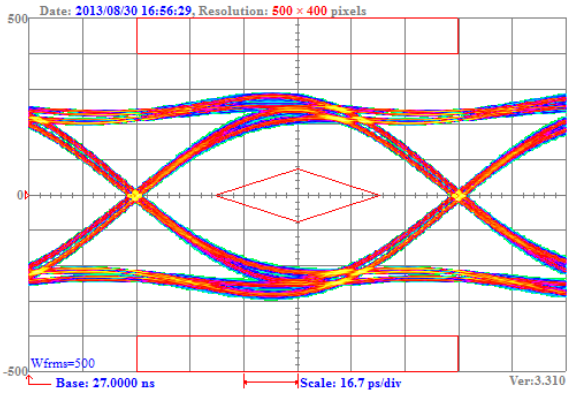
Parameter Name: Choke Impedance C1	
Spc Max: 105 Ω	Spc Min: 75 Ω
Max:100.51 Ohms at 0.6601 ns	Min:82.07 Ohms at 0.4839 ns
ΔΩ: 18.43	Avg: 91.29 Ohms
	Result: Pass

Eye Diagram For HDMI2.0 Testing:



Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 6 Gbits/s; 166.7 ps	V: 500 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

Eye Diagram For USB3.0 Testing:



Parameter Name: USB3.0 Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 10 Gbits/s; 100.0 ps	V: 250 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

Electrical Characteristics

Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA) Max	Rated Voltage (Vdc)	Withstamd Voltage (Vdc)	Insulation Resistance (MΩ) Min
BWCU00201212500Y03	50	25	100	0.20	500	50	125	10
BWCU00201212670Y03	67	25	100	0.30	500	50	125	10
BWCU00201212900□03	90	20,25	100	0.30	500	50	125	10
BWCU00201212121Y03	120	25	100	0.35	330	50	125	10
BWCU00201212131Y03	130	25	100	0.40	300	50	125	10

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

- Operating temperature range－40℃～105℃(Including self - temperature rise)
- IDC for Inductance drop 10% from its value without current.
- Measure Equipment：

  Z：HP4286A/HP4287A/Agilent E4991A+Agilent16197A

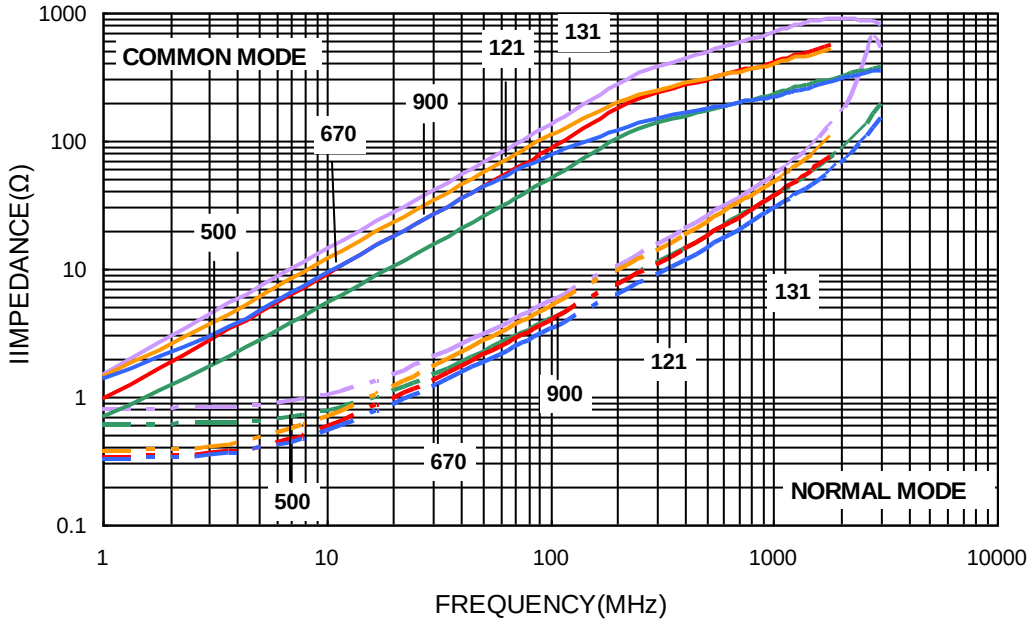
  RDC：Chroma 16502 (Single Wire Test Value)

  IDC：HP4284A+HP42841A/HP4285A+HP42841A

  Insulation Resistance：Agilent HP4339B

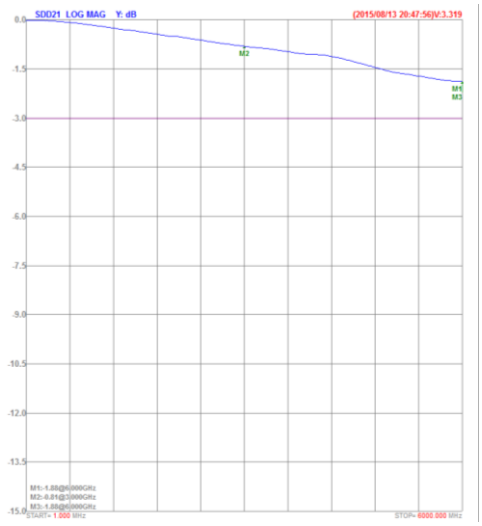
Test Instruments：HP4291A Material/Impedance Analyzer

Typical Impedance vs. Frequency

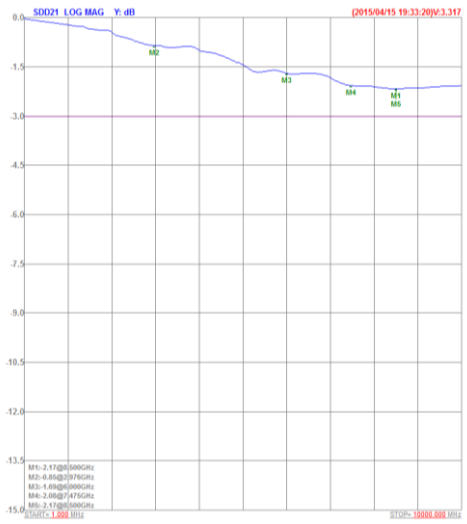


BWCU00201212500Y03

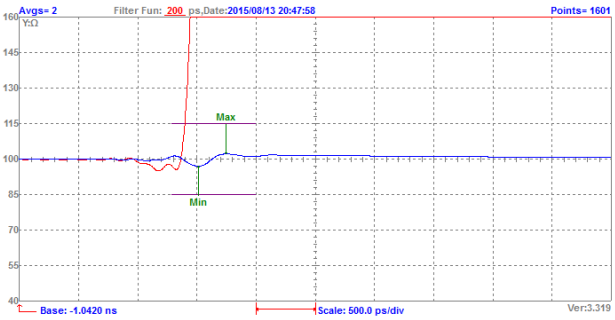
Insertion Loss For HDMI2.0 Testing:



Insertion Loss For USB3.0 Testing:

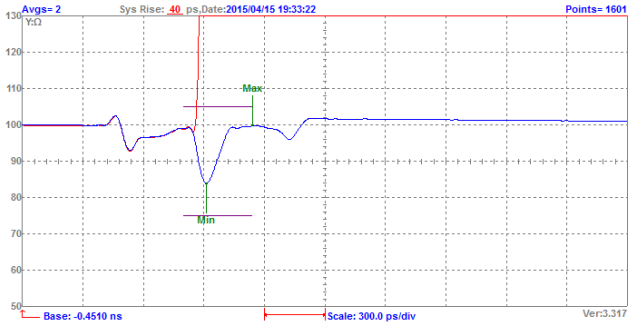


TDR For HDMI2.0 Testing:



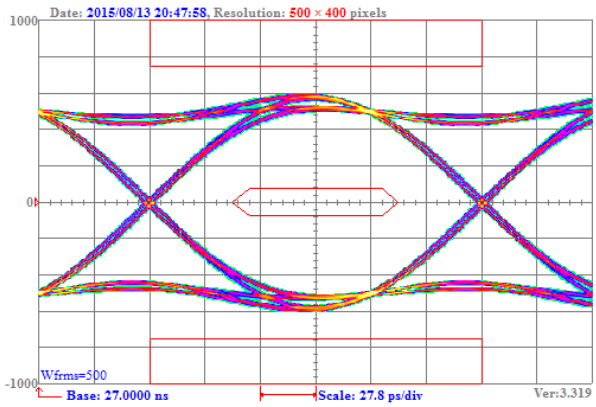
Parameter Name: HDMI Choke Impedance C1	
Spc Max: 115 Ω	Spc Min: 85 Ω
Max:102.25 Ohms at 0.7049 ns	Min:97.14 Ohms at 0.4705 ns
ΔΩ: 5.11	Avg: 99.69 Ohms
	Result: Pass

TDR For USB3.0 Testing:



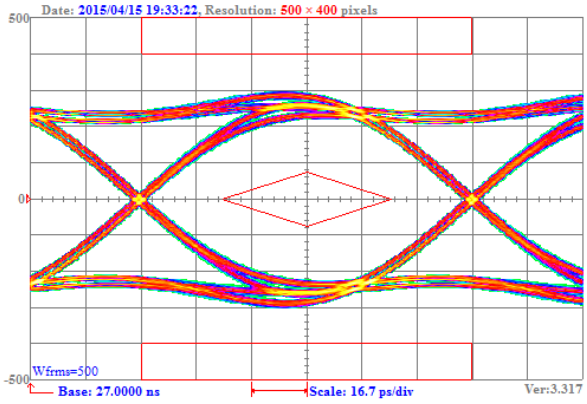
Parameter Name: Choke Impedance C1	
Spc Max: 105 Ω	Spc Min: 75 Ω
Max:99.77 Ohms at 0.6895 ns	Min:84.00 Ohms at 0.4607 ns
ΔΩ: 15.78	Avg: 91.89 Ohms
	Result: Pass

Eye Diagram For HDMI2.0 Testing:



Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 6 Gbits/s; 166.7 ps	V: 500 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

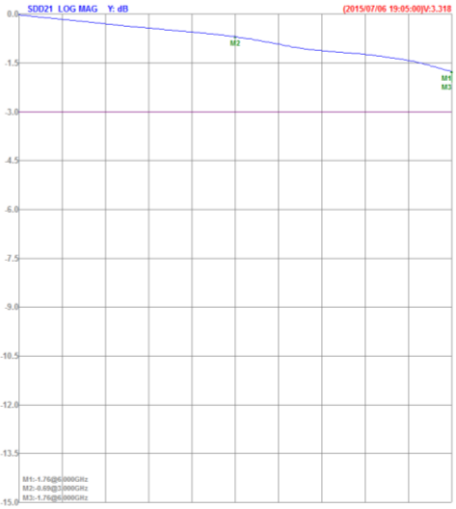
Eye Diagram For USB3.0 Testing:



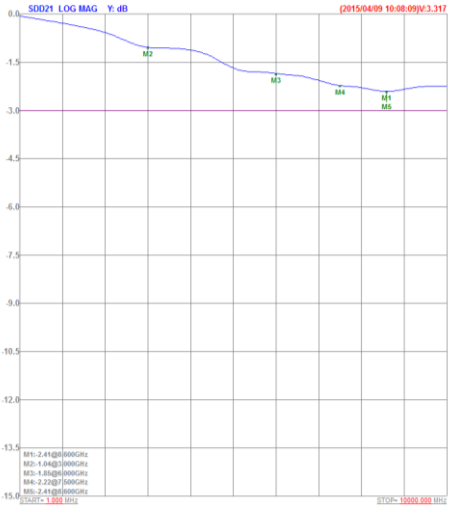
Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 10 Gbits/s; 100.0 ps	V: 250 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

BWCU00201212670Y03

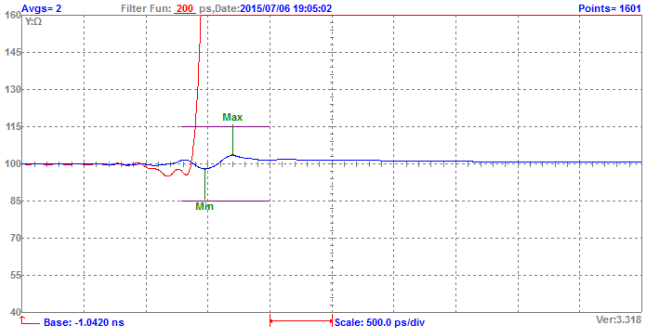
Insertion Loss For HDMI2.0 Testing:



Insertion Loss For USB3.0 Testing:

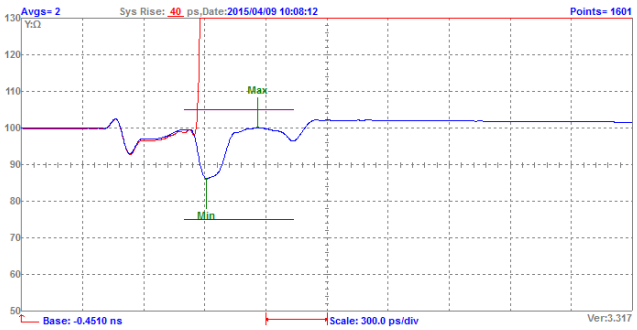


TDR For HDMI2.0 Testing:



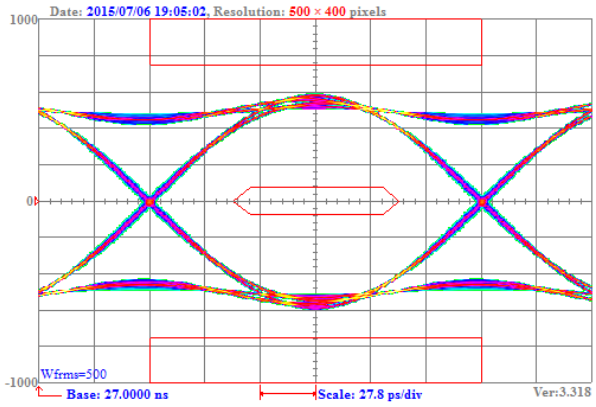
Parameter Name: HDMI Choke Impedance C1	
Spc Max: 115 Ω	Spc Min: 85 Ω
Max:103.47 Ohms at 0.6549 ns	Min:98.20 Ohms at 0.4330 ns
ΔΩ: 5.28	Avg: 100.84 Ohms
	Result: Pass

TDR For USB3.0 Testing:



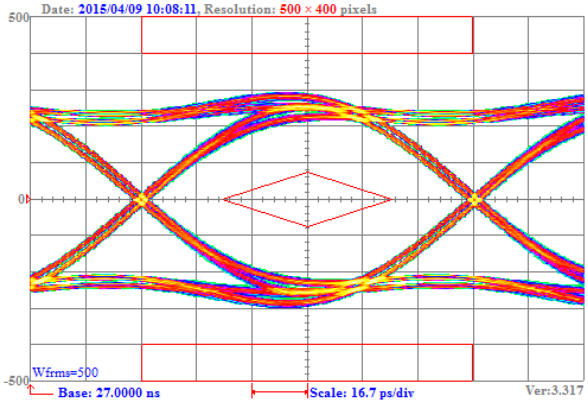
Parameter Name: Choke Impedance C1	
Spc Max: 105 Ω	Spc Min: 75 Ω
Max:100.16 Ohms at 0.7082 ns	Min:86.26 Ohms at 0.4588 ns
ΔΩ: 13.90	Avg: 93.21 Ohms
	Result: Pass

Eye Diagram For HDMI2.0 Testing:



Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 6 Gbits/s; 166.7 ps	V: 500 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

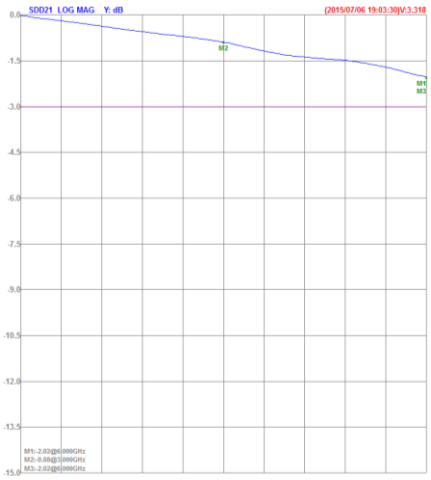
Eye Diagram For USB3.0 Testing:



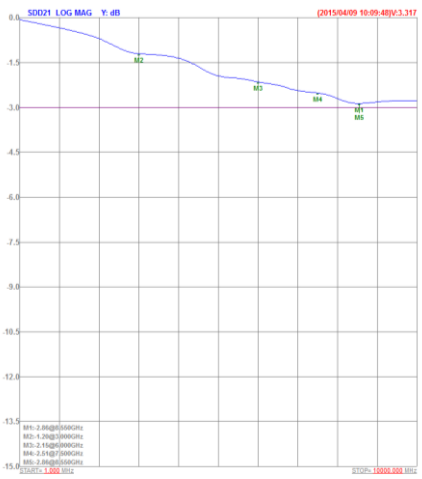
Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 10 Gbits/s; 100.0 ps	V: 250 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

BWCU00201212900Y03

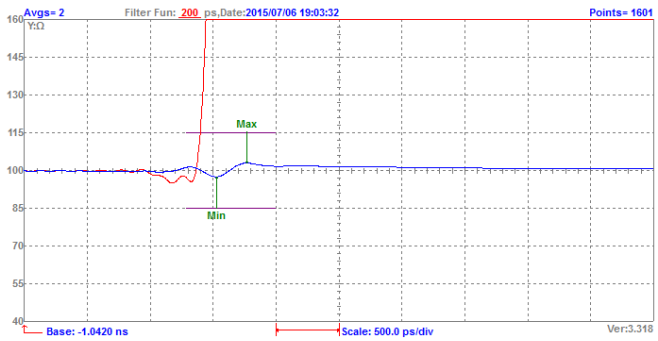
Insertion Loss For HDMI2.0 Testing:



Insertion Loss For USB3.0 Testing:

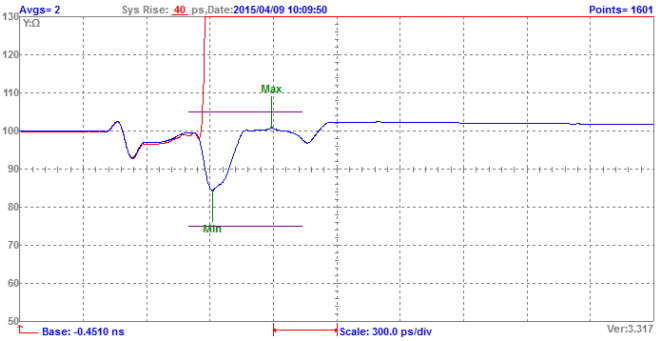


TDR For HDMI2.0 Testing:



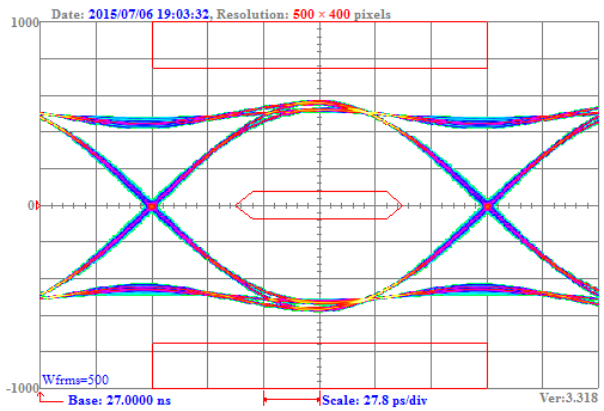
Parameter Name: HDMI Choke Impedance C1	
Spc Max: 115 Ω	Spc Min: 85 Ω
Max:103.05 Ohms at 0.7237 ns	Min:97.62 Ohms at 0.4830 ns
ΔΩ: 5.43	Avg: 100.34 Ohms
	Result: Pass

TDR For USB3.0 Testing:



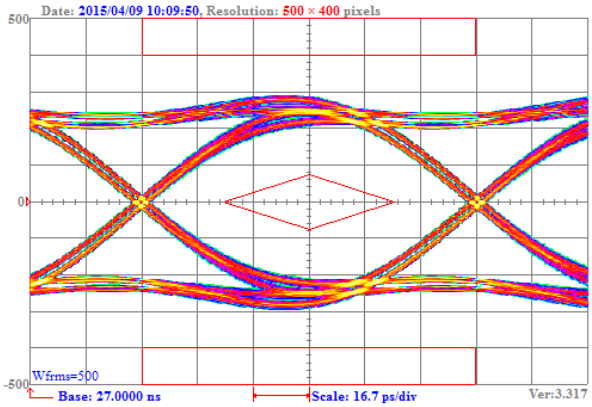
Parameter Name: Choke Impedance C1	
Spc Max: 105 Ω	Spc Min: 75 Ω
Max:100.74 Ohms at 0.7401 ns	Min:84.59 Ohms at 0.4607 ns
ΔΩ: 16.15	Avg: 92.67 Ohms
	Result: Pass

Eye Diagram For HDMI2.0 Testing:



Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 6 Gbits/s; 166.7 ps	V: 500 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

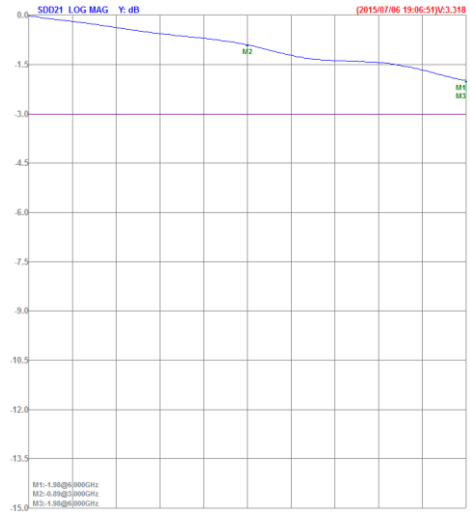
Eye Diagram For USB3.0 Testing:



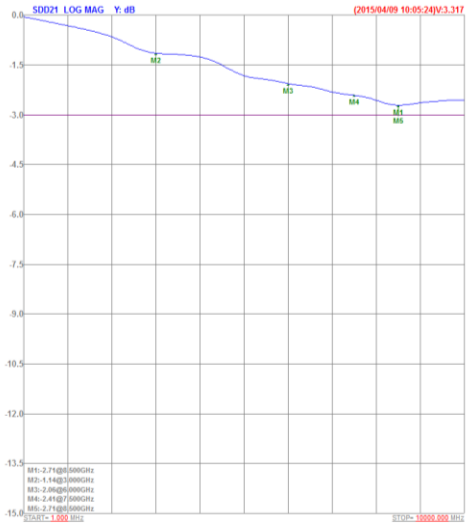
Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 10 Gbits/s; 100.0 ps	V: 250 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

BWCU00201212121Y03

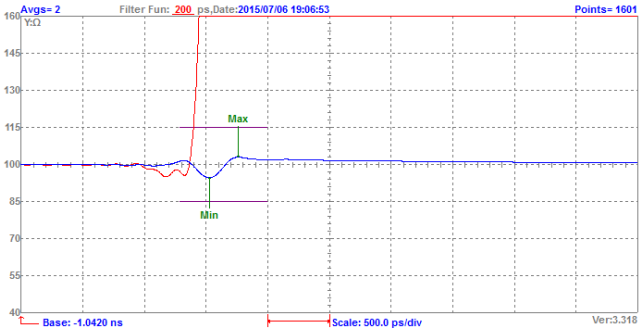
Insertion Loss For HDMI2.0 Testing:



Insertion Loss For USB3.0 Testing:

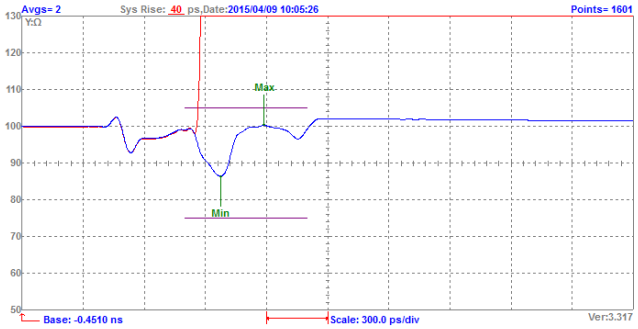


TDR For HDMI2.0 Testing:



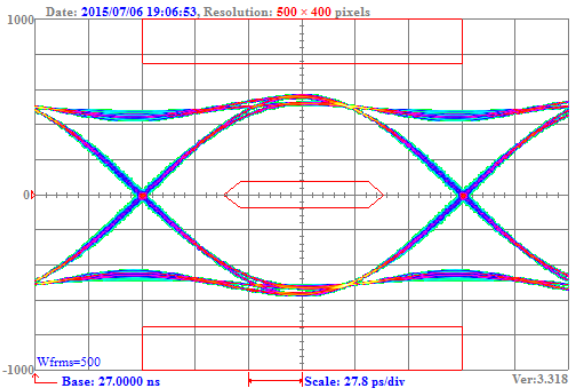
Parameter Name: HDMI Choke Impedance C1	
Spc Max: 115 Ω	Spc Min: 85 Ω
Max:103.06 Ohms at 0.7174 ns	Min:94.74 Ohms at 0.4830 ns
ΔΩ: 8.32	Avg: 98.90 Ohms
	Result: Pass

TDR For USB3.0 Testing:



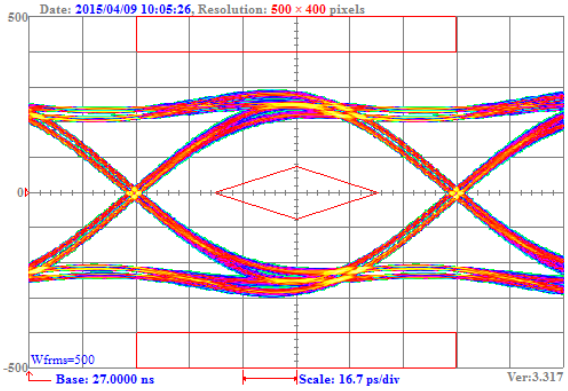
Parameter Name: Choke Impedance C1	
Spc Max: 105 Ω	Spc Min: 75 Ω
Max:100.36 Ohms at 0.7382 ns	Min:86.59 Ohms at 0.5226 ns
ΔΩ: 13.77	Avg: 93.47 Ohms
	Result: Pass

Eye Diagram For HDMI2.0 Testing:



Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 6 Gbits/s; 166.7 ps	V: 500 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

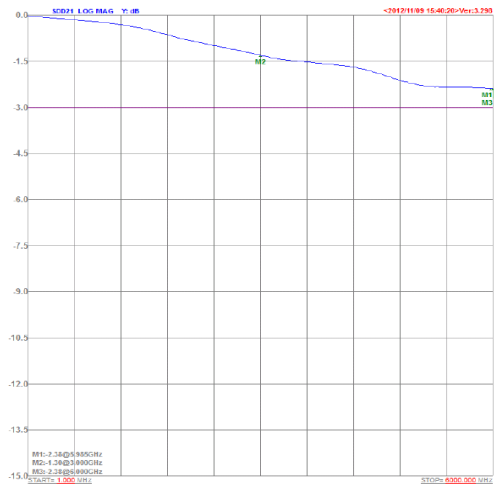
Eye Diagram For USB3.0 Testing:



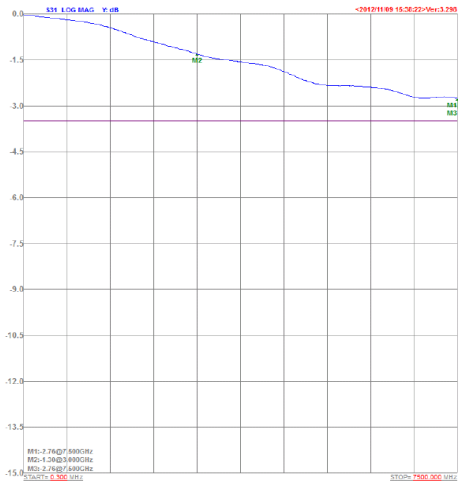
Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 10 Gbits/s; 100.0 ps	V: 250 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

BWCU00201212131Y03

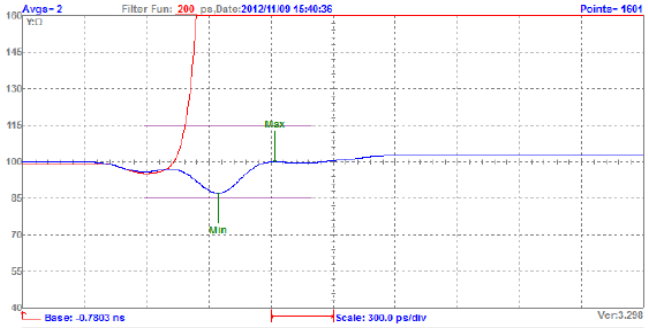
Insertion Loss For HDMI Testing:



Insertion Loss For USB3.0 Testing:

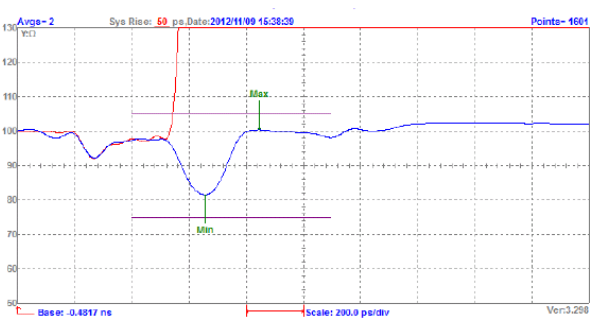


TDR For HDMI Testing:



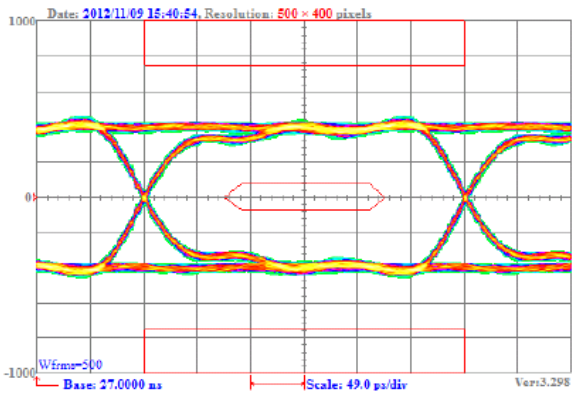
Parameter Name: HDMI Choke Impedance C1	
Spc Max: 115 Ω	Spc Min: 85 Ω
Max:100.10 Ohms at 0.3650 ns	Min:87.27 Ohms at 0.6094 ns
ΔΩ: 12.82	Avg: 93.68 Ohms
	Result: Pass

TDR For USB3.0 Testing:



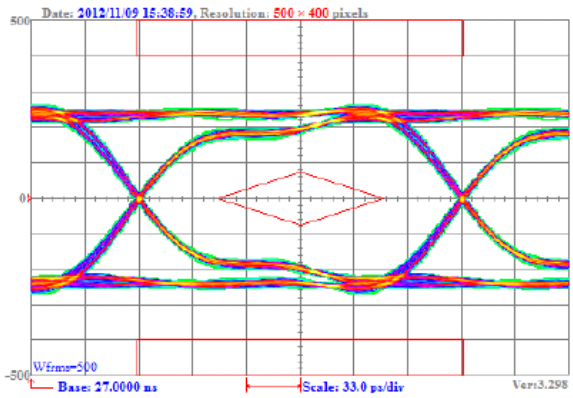
Parameter Name: Choke Impedance C1	
Spc Max: 105 Ω	Spc Min: 75 Ω
Max:100.40 Ohms at 0.0054 ns	Min:81.65 Ohms at 0.0154 ns
ΔΩ: 18.81	Avg: 91.06 Ohms
	Result: Pass

Eye Diagram For HDMI Testing:



Parameter Name: Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 3.4 Gbits/s; 294.1 ps	V: 400 mV;Gain: 0 dB;Off: 0 mV
CAL: DONE,JGen: OFF	Result: Pass

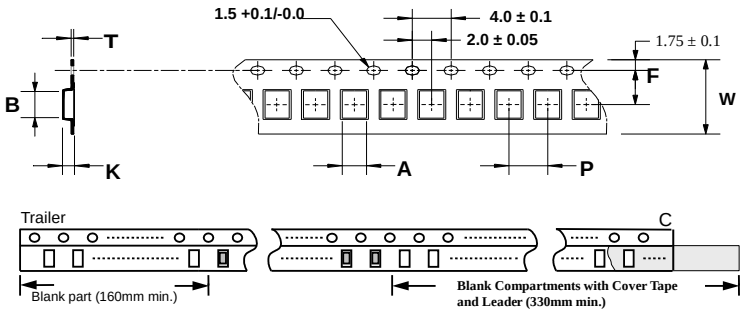
Eye Diagram For USB3.0 Testing:



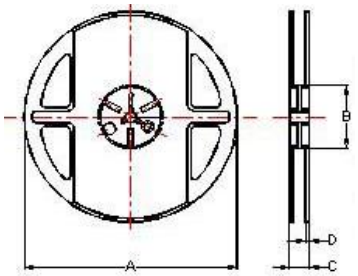
Parameter Name: USB3.0 Choke Eye Diagram C1	
Display Mode: Not a standard mode	
dRate: 5 Gbits/s; 200.0 ps	V: 250 mV;Gain: 0 dB;Off: 0 mV
CAL: N/A,JGen: OFF	Result: Pass

Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity
	A	B	T	W	P	F	K	A	B	C	D	PCS / Reel
BWCU00121008	1.15	1.45	0.25	8	4	3.5	1.00	178	60	12	1.5	2000
BWCU00201212	1.50	2.25	0.24	8	4	3.5	1.35	178	60	12	1.5	2000