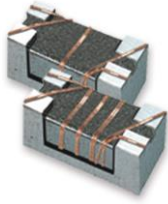


Cautions and Warnings

Please be noted that this spec is only for reference if you have projects designed with the product number listed in. If you are looking for new project design-in, please find BWCU_02 Series specification/datasheet on Chilisin website. Or you may find our sales contact for more information on old part number at your convenience. Appreciated your attention and understanding.

Note: Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

CUW 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.

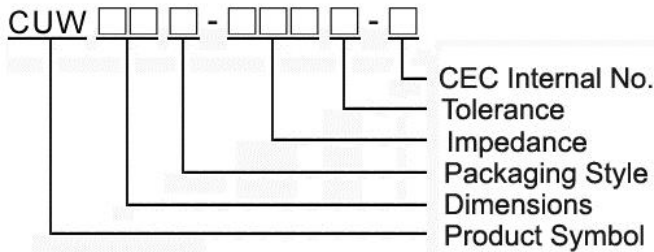
Features

- 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

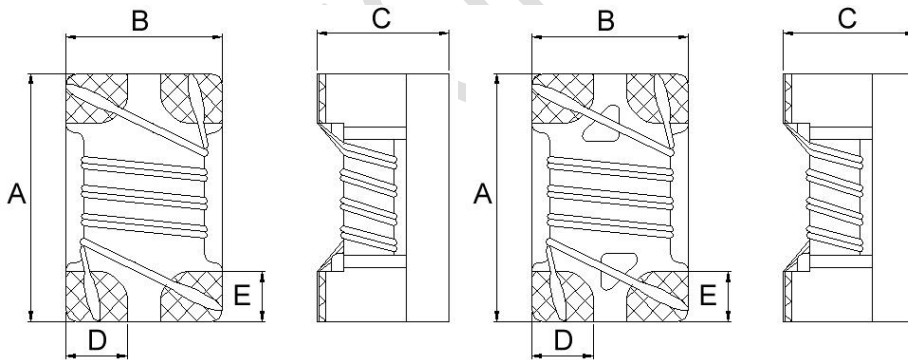


- Packaging: T : Tape and Reel

Shape and Dimensions

CUW10/11/31

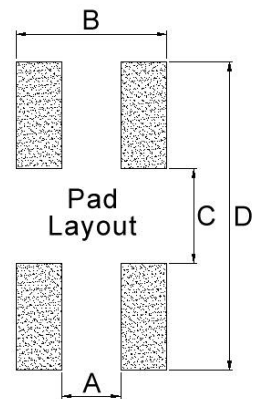
CUW21



Dimensions in mm

TYPE	A	B	C	D	E
CUW10	1.60±0.2	0.80±0.2	1.10±0.2	0.25	0.33
CUW11	1.25±0.2	1.00±0.2	0.8±0.1	0.32	0.33
CUW21	2.05±0.2	1.25±0.2	1.20±0.2	0.50	0.40
CUW31	3.20±0.2	1.60±0.2	1.90±0.2	0.50	0.60

Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
CUW10	0.25	0.75	0.61	2.29
CUW11	0.36	1.00	0.59	1.75
CUW21	0.50	1.27	0.80	2.60
CUW31	0.40	1.60	1.60	3.70

SMD Common Mode Choke - CUW Series

Electrical Characteristics

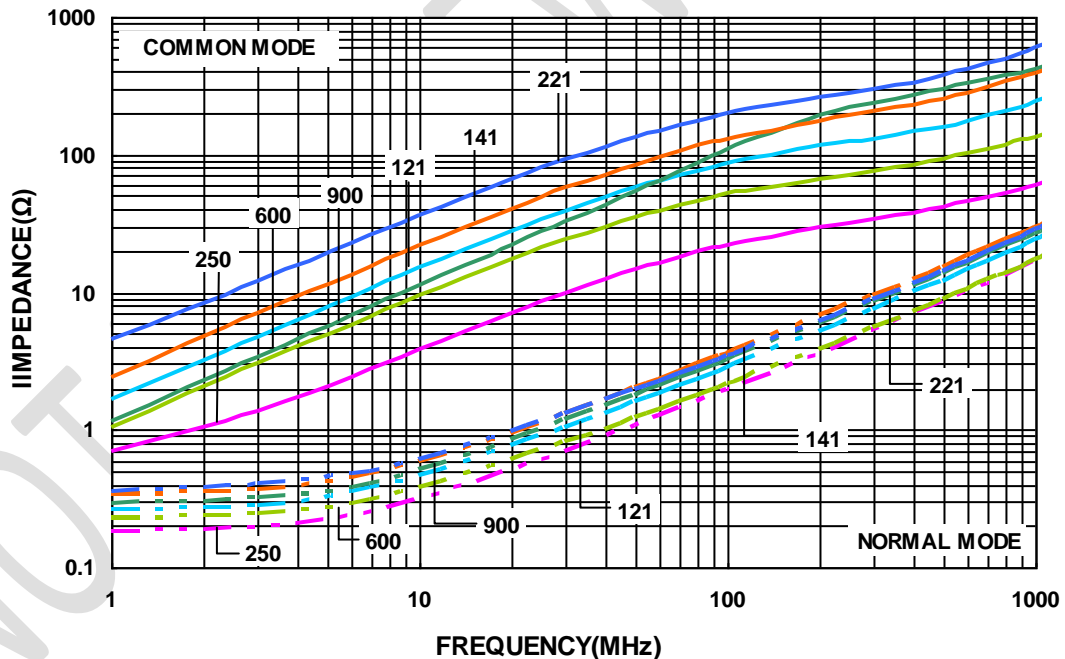
Part Number	Impedance (Ω)	Tolerance ($\pm\%$)	Test Frequency (MHz)	RDC (Ω) Max	I _{rms} (mA) Max	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance (M Ω) Min
CUW10T-250M-N	25	20,25	100	0.077	500	50	125	10
CUW10T-600M-N	60	20,25	100	0.109	500	50	125	10
CUW10T-900M-N	90	20,25	100	0.142	500	50	125	10
CUW10T-121M-N	120	20,25	100	0.160	500	50	125	10
CUW10T-141M-N	140	20,25	100	0.174	500	50	125	10
CUW10T-221M-N	220	20,25	100	0.209	500	50	125	10

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

- Operating temperature range - 40°C ~ 105°C(Including self - temperature rise)
- rms for 20°C rise from 25°C ambient
- Measure Equipment :
 Z : Agilent HP4287A+Agilent 16197A
 RDC : HP4338B or Chroma 16502 (Single Wire Test Value)
 I_{rms} : HP4284A+HP42841A/HP4285A+HP42841A
 Insulation Resistance : Agilent HP4339B

Test Instruments : HP4287A Material/Impedance Analyzer

Typical Impedance vs. Frequency



SMD Common Mode Choke - CUW Series

Electrical Characteristics

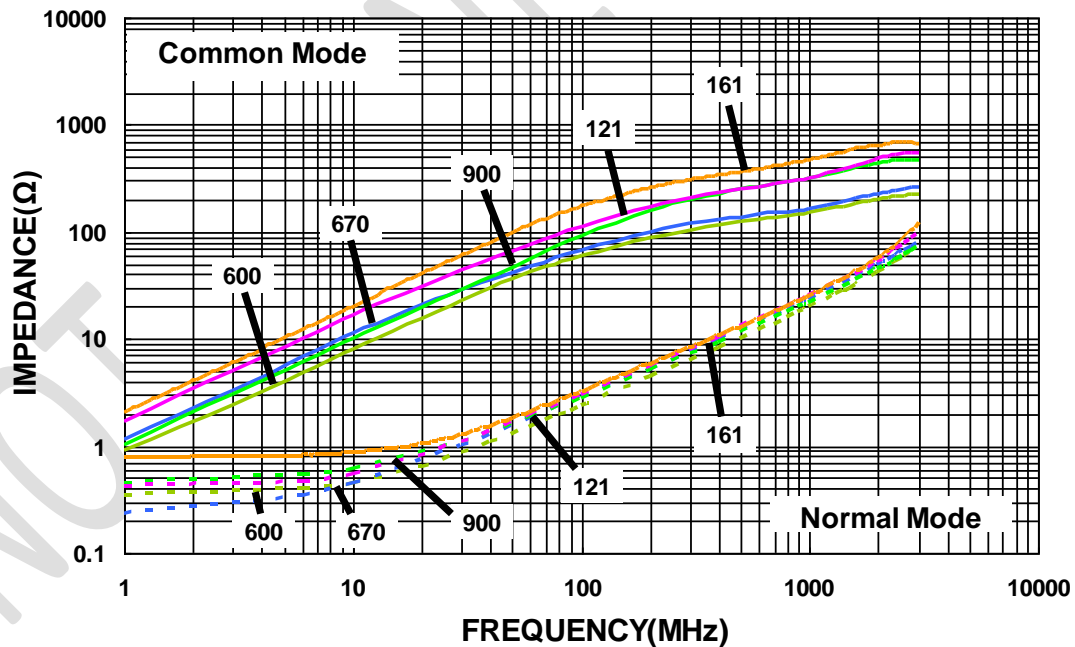
Part Number	Impedance (Ω)	Tolerance ($\pm\%$)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA)	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance ($M\Omega$) Min
CUW11T-250T-N	25	30	100	0.30	400	50	125	100
CUW11T-600M-N	60	20	100	0.40	300	50	125	100
CUW11T-670M-N	67	20	100	0.25	300	50	125	100
CUW11T-900M-N	90	20	100	0.30	250	50	125	100
CUW11T-121M-N	120	20	100	0.40	200	50	125	100
CUW11T-161M-N	160	20	100	0.43	160	50	125	100
CUW11T-201M-N	200	20	100	0.80	120	50	125	100
CUW11T-331Y-N	330	25	100	1.30	100	50	125	100

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

- Operating temperature range - 40°C ~ 105°C(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



SMD Common Mode Choke - CUW Series

Electrical Characteristics

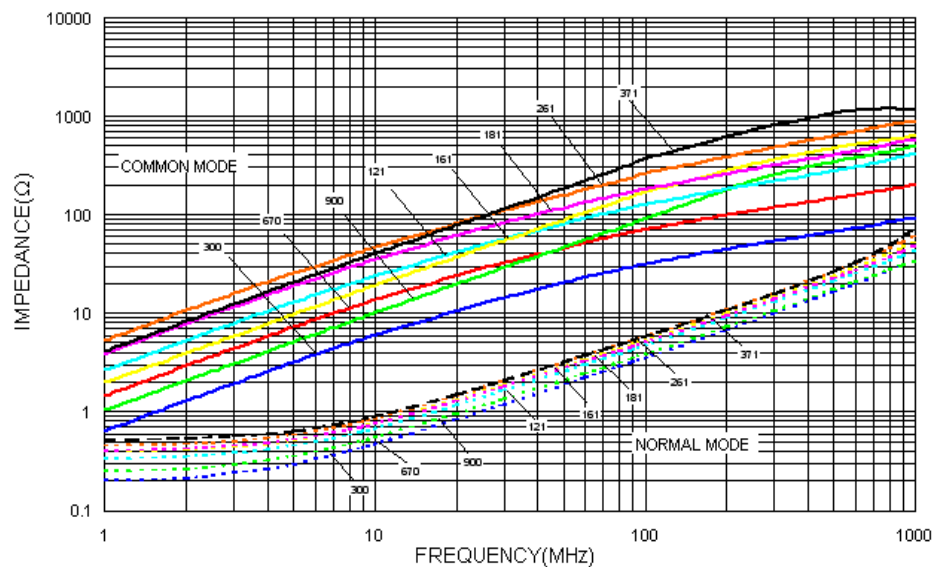
Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA)	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance (MΩ) Min
CUW21T-300M-N	30	20	100	0.20	450	50	125	10
CUW21T-670M-N	67	20	100	0.25	400	50	125	10
CUW21T-750M-N	75	20	100	0.30	360	50	125	10
CUW21T-900M-N	90	20	100	0.35	330	50	125	10
CUW21T-121M-N	120	20	100	0.30	400	50	125	10
CUW21T-161M-N	160	20	100	0.35	350	50	125	10
CUW21T-181M-N	180	20	100	0.35	330	50	125	10
CUW21T-201M-N	200	20	100	0.35	330	50	125	10
CUW21T-221M-N	220	20	100	0.35	310	50	125	10
CUW21T-261M-N	260	20	100	0.40	300	50	125	10
CUW21T-301M-N	300	20	100	0.40	290	50	125	10
CUW21T-361M-N	360	20	100	0.45	280	50	125	10
CUW21T-371M-N	370	20	100	0.45	280	50	125	10
CUW21T-501M-N	500	20	100	0.55	170	50	125	10
CUW21T-671M-N	670	20	100	0.60	140	50	125	10
CUW21T-901M-N	900	20	100	0.60	80	50	125	10

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

- Operating temperature range - 40°C ~ 105°C(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



SMD Common Mode Choke – CUW Series

Electrical Characteristics

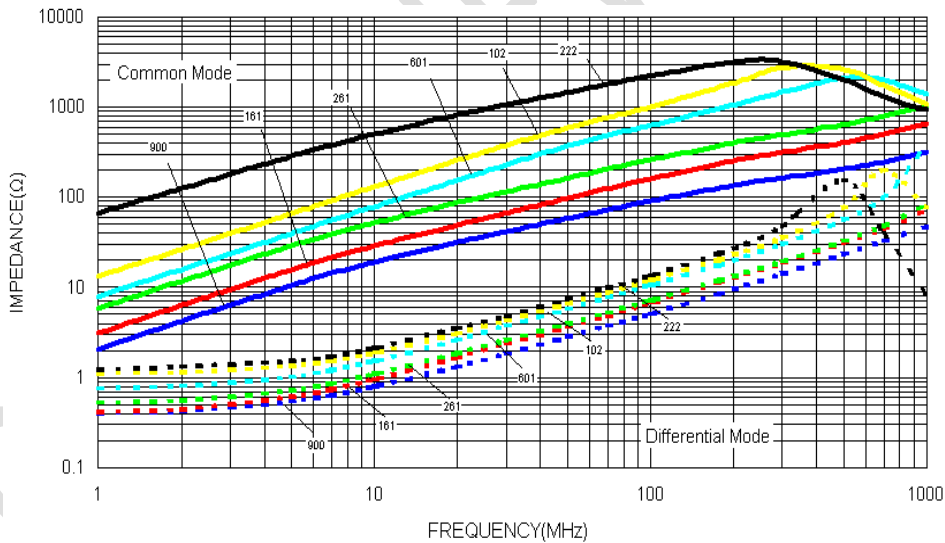
Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA)	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance (MΩ) Min
CUW31T-900M-N	90	20	100	0.3	370	50	125	10
CUW31T-121M-N	120	20	100	0.3	370	50	125	10
CUW31T-161M-N	160	20	100	0.4	340	50	125	10
CUW31T-221M-N	220	20	100	0.4	320	50	125	10
CUW31T-261M-N	260	20	100	0.5	310	50	125	10
CUW31T-601M-N	600	20	100	0.8	260	50	125	10
CUW31T-102M-N	1000	20	100	1.0	230	50	125	10
CUW31T-222M-N	2200	20	100	1.2	200	50	125	10

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

- Operating temperature range - 40°C ~ 105°C(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

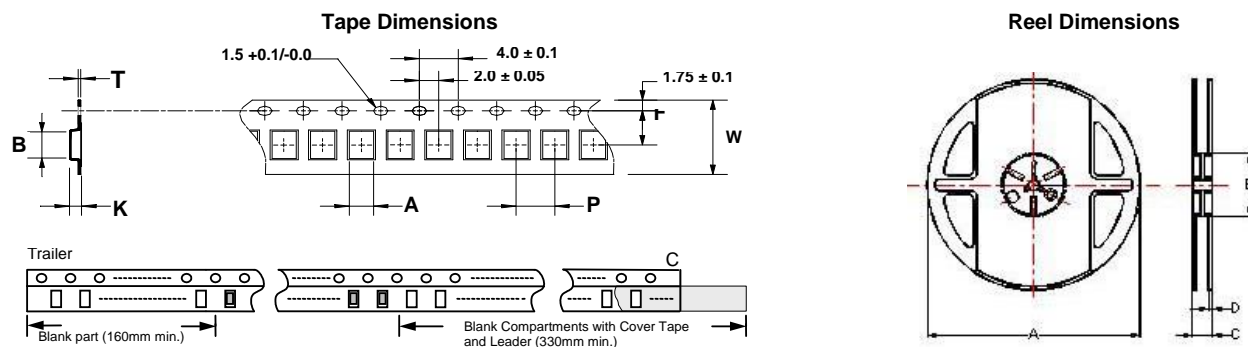
Test Instruments : HP4291A Material/Impedance Analyzer

Typical Impedance vs. Frequency



SMD Common Mode Choke – CUW Series

Packaging Specifications



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
	A	B	T	W	P	F	K	A	B	C	D	
CUW10	0.95	1.70	0.24	8	4	3.5	1.15	178	60	12	1.5	2000
CUW11	1.15	1.45	0.24	8	4	3.5	1.00	178	60	12	1.5	2000
CUW21	1.50	2.25	0.24	8	4	3.5	1.35	178	60	12	1.5	2000
CUW31	1.76	3.47	0.22	8	4	3.5	2.05	178	60	12	1.5	2000