



Feature

- Smallest beads suitable for surface mounting
- Perfect shape for automatic mounting, with no directionality.
- Excellent solderability and high heat resistance for either flow or reflow soldering.
- Monolithic inorganic material construction for high reliability.
- Closed magnetic circuit configuration avoids crosstalk and is suitable for high density PCBs.

Application

- High frequency EMI prevention application to computers, printers, VCRs, TVs and mobile phones.

The CIB/CIM Series are used for EMI suppression filter. These beads suppress electro-magnetic wave noise by increased impedance, especially by increased resistance at noise frequency.

CIB Series

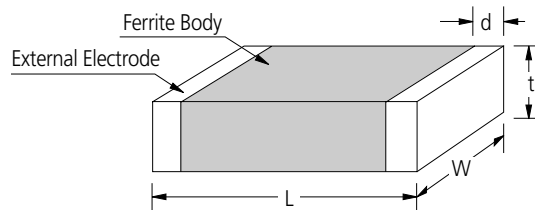
The CIB Series is composed of mono-layer internal conductor that allows low impedance and low DC resistance.

CIM Series

The CIM Series display high impedance because it is composed of a multilayered internal conductor and has excellent attenuation characteristics for wide band frequencies.

Operating Temp	-55~+125°C
Storage Temp	-10~+40°C

Dimensions



Unit: mm

SIZE CODE	L	W	t	d
03	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05
05	1.0±0.05	0.5±0.05	0.5±0.05	0.25±0.1
10	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2
21	2.0±0.2	1.25±0.2	0.9±0.2	0.5+0.2,-0.3
31	3.2±0.2	1.6±0.2	1.1±0.2	0.5+0.2,-0.3
32	3.2±0.2	2.5±0.2	1.3±0.2	0.5±0.3
41	4.5±0.2	1.6±0.2	1.6±0.2/1.2±0.2	0.5±0.3
43	4.5±0.2	3.2±0.2	1.5±0.2	0.5±0.3

Part Numbering

CI **M** **03** **J** **121** **N** **C**
 (1) (2) (3) (4) (5) (6) (7)

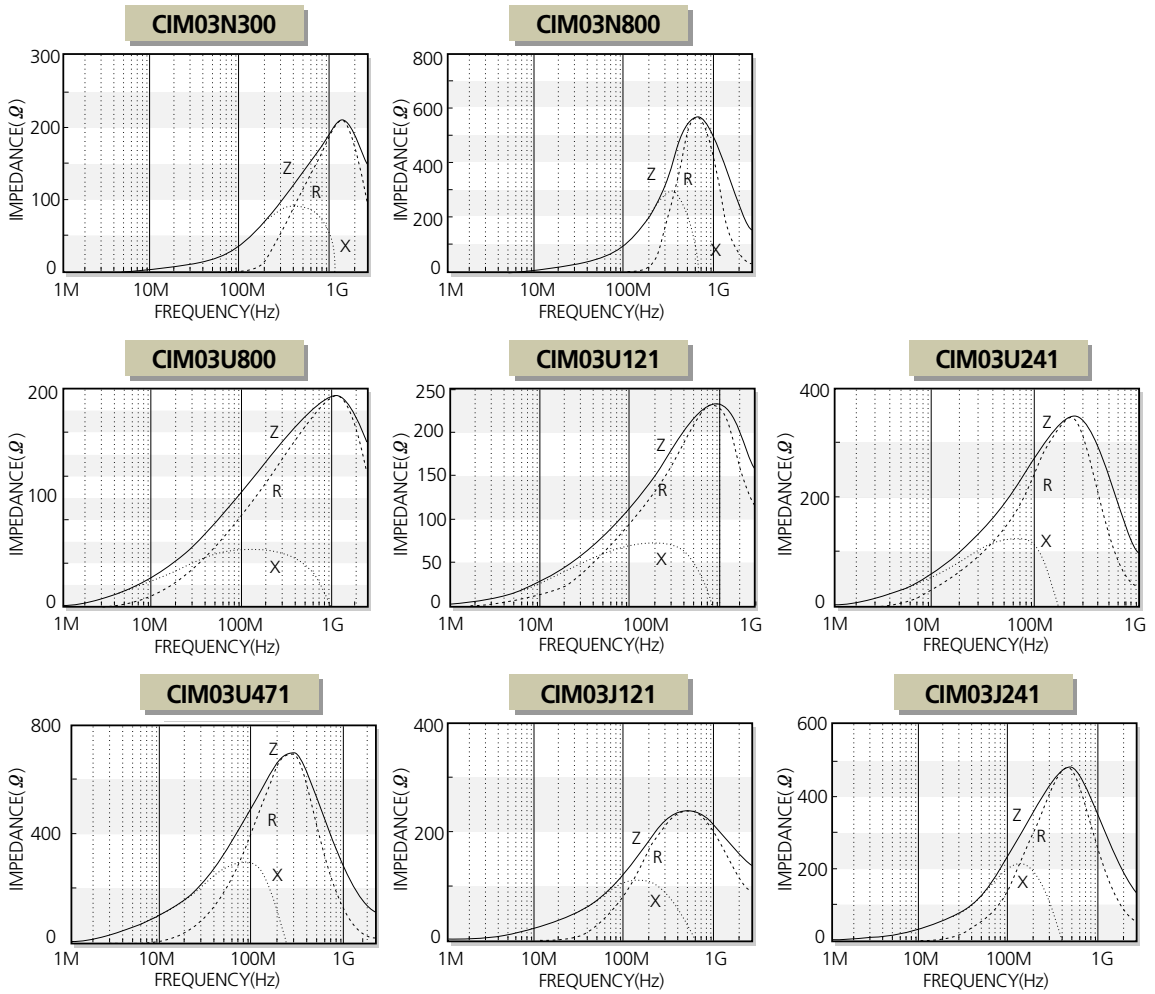
- (1) Chip Beads
- (2) B: Mono-layer type, M: Multi-layer type
- (3) Dimension
- (4) Material Code
- (5) Nominal impedance (110: 11Ω ; 121: 120Ω)
- (6) Thickness option (N: Standard, A: Thinner than standard, B: Thicker than standard)
- (7) Packaging (C: paper tape, E: embossed tape)

CIM 0603(0201) Type

Part No.	Thickness (mm)	Impedance (Ω) $\pm 25\%$ @ 100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIM 03N 300	0.3 \pm 0.03	30	0.8	150
CIM 03N 800	0.3 \pm 0.03	80	1.2	100
CIM 03U 800	0.3 \pm 0.03	80	0.37	200
CIM 03U 121	0.3 \pm 0.03	120	0.8	200
CIM 03U 241	0.3 \pm 0.03	240	0.75	200
CIM 03U 471	0.3 \pm 0.03	470	1.3	100
CIM 03J 121	0.3 \pm 0.03	120	0.8	200
CIM 03J 241	0.3 \pm 0.03	240	1.0	100

* Test equipment: Agilent E4991A + 16192A

Electrical Characteristics

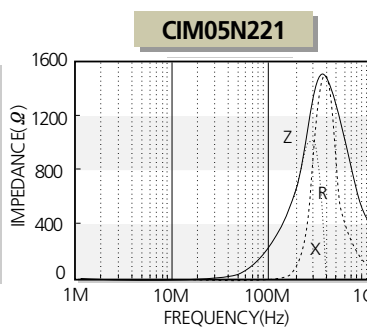
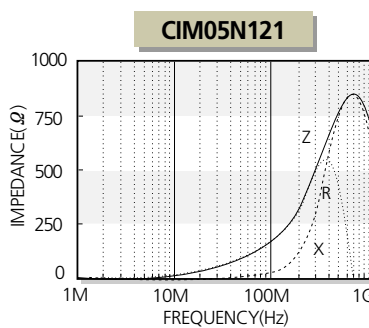
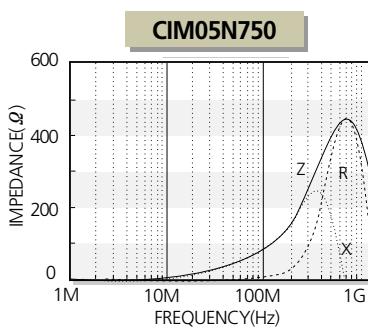
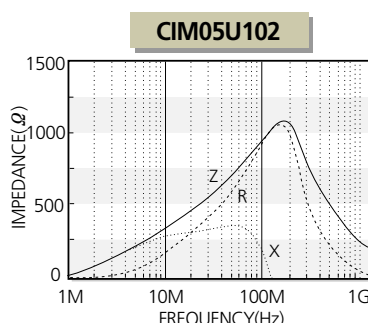
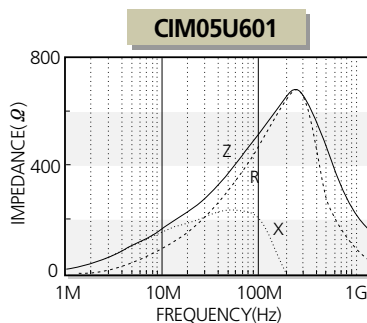
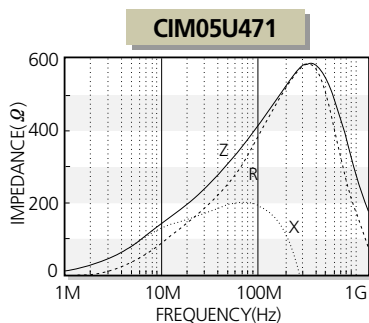
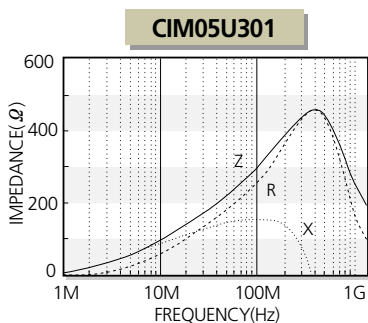
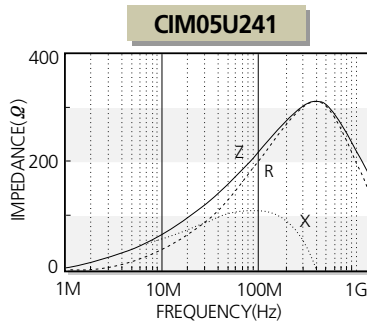
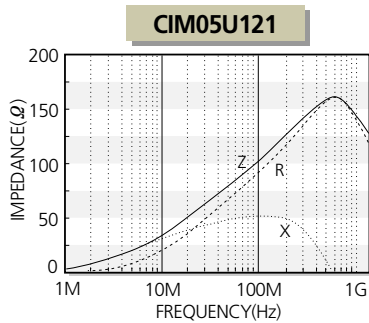
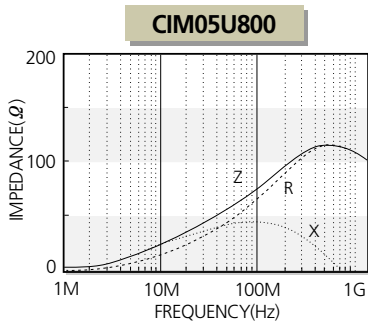
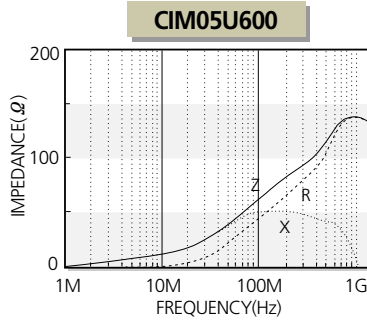
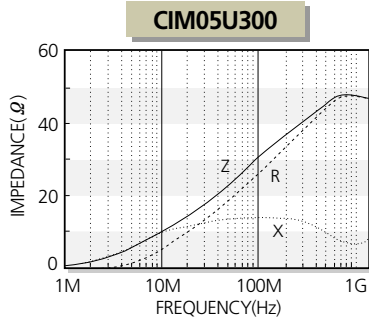
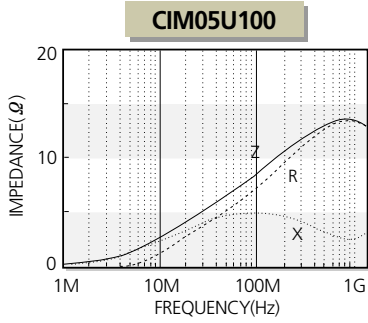


CIM 1005(0402) Type

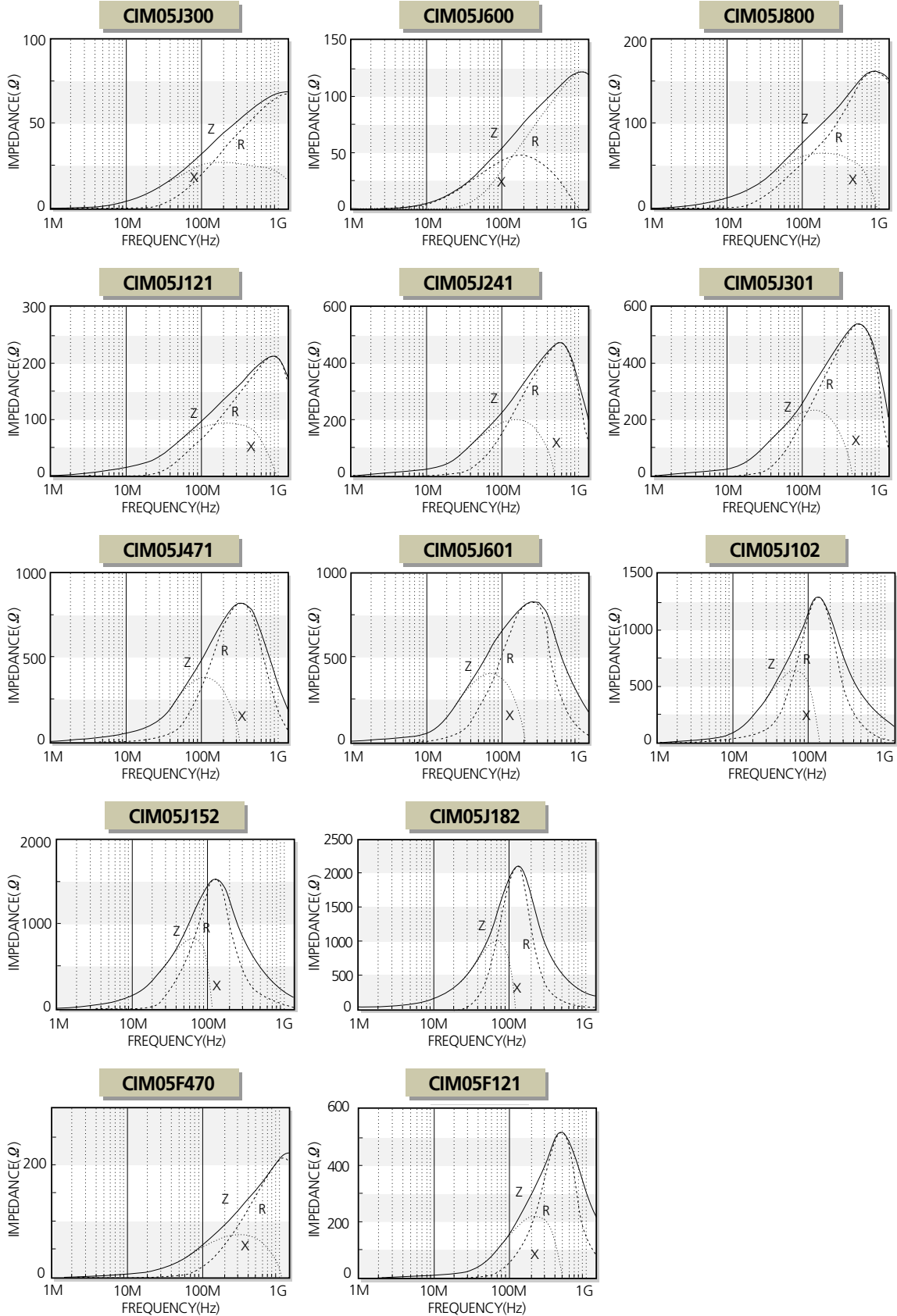
Part No.	Thickness (mm)	Impedance (Ω) $\pm 25\%$ @ 100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIM 05U 100	0.5 \pm 0.05	10	0.05	1200
CIM 05U 300	0.5 \pm 0.05	30	0.10	700
CIM 05U 600	0.5 \pm 0.05	60	0.15	600
CIM 05U 800	0.5 \pm 0.05	80	0.20	600
CIM 05U 121	0.5 \pm 0.05	120	0.25	500
CIM 05U 221	0.5 \pm 0.05	220	0.35	500
CIM 05U 241	0.5 \pm 0.05	240	0.35	400
CIM 05U 301	0.5 \pm 0.05	300	0.45	400
CIM 05U 471	0.5 \pm 0.05	470	0.55	300
CIM 05U 601	0.5 \pm 0.05	600	0.60	300
CIM 05U 102	0.5 \pm 0.05	1000	1.00	200
CIM 05J 300	0.5 \pm 0.05	30	0.20	700
CIM 05J 600	0.5 \pm 0.05	60	0.20	650
CIM 05J 800	0.5 \pm 0.05	80	0.25	600
CIM 05J 121	0.5 \pm 0.05	120	0.30	500
CIM 05J 221	0.5 \pm 0.05	220	0.35	400
CIM 05J 241	0.5 \pm 0.05	240	0.35	400
CIM 05J 301	0.5 \pm 0.05	300	0.45	400
CIM 05J 471	0.5 \pm 0.05	470	0.55	300
CIM 05J 601	0.5 \pm 0.05	600	0.60	300
CIM 05J 102	0.5 \pm 0.05	1000	0.80	250
CIM 05J 152	0.5 \pm 0.05	1500	1.00	250
CIM 05J 182	0.5 \pm 0.05	1800	1.40	100
CIM 05N 750	0.5 \pm 0.05	75	0.35	300
CIM 05N 121	0.5 \pm 0.05	120	0.55	300
CIM 05N 221	0.5 \pm 0.05	220	0.80	200
CIM 05F 050	0.5 \pm 0.05	5	0.08	500
CIM 05F 100	0.5 \pm 0.05	10	0.10	300
CIM 05F 220	0.5 \pm 0.05	22	0.20	300
CIM 05F 470	0.5 \pm 0.05	47	0.35	300
CIM 05F 750	0.5 \pm 0.05	75	0.40	300
CIM 05F 121	0.5 \pm 0.05	120	0.55	300
CIM 05F 221	0.5 \pm 0.05	220	0.80	200

※ Test equipment: Agilent E4991A + 16192A

Electrical Characteristics



Electrical Characteristics



CIB/CIM
Series



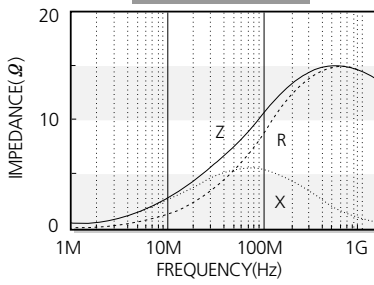
CIB/CIM 1608(0603) Type

Part No.	Thickness (mm)	Impedance (Ω) $\pm 25\%$ @ 100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIB 10P 100	0.8 \pm 0.15	10	0.05	1000
CIB 10P 220	0.8 \pm 0.15	22	0.05	1500
CIB 10P 260	0.8 \pm 0.15	26	0.08	1000
CIB 10J 300	0.8 \pm 0.15	30	0.08	1000
CIB 10P 300	0.8 \pm 0.15	30	0.08	1000
CIB 10P 330	0.8 \pm 0.15	33	0.08	1000
CIM 10U 800	0.8 \pm 0.15	80	0.15	600
CIM 10U 121	0.8 \pm 0.15	120	0.15	500
CIM 10U 221	0.8 \pm 0.15	220	0.30	400
CIM 10U 241	0.8 \pm 0.15	240	0.30	400
CIM 10U 301	0.8 \pm 0.15	300	0.3	400
CIM 10U 471	0.8 \pm 0.15	470	0.35	300
CIM 10U 601	0.8 \pm 0.15	600	0.45	300
CIM 10U 102	0.8 \pm 0.15	1000	0.60	250
CIM 10U 202	0.8 \pm 0.15	2000(at 70MHz)	1.20	200
CIB 10J 300	0.8 \pm 0.15	30	0.08	1000
CIM 10J 400	0.8 \pm 0.15	40	0.12	600
CIM 10J 470	0.8 \pm 0.15	47	0.12	600
CIM 10J 600	0.8 \pm 0.15	60	0.12	600
CIM 10J 750	0.8 \pm 0.15	75	0.12	550
CIM 10J 800	0.8 \pm 0.15	80	0.20	550
CIM 10J 121	0.8 \pm 0.15	120	0.20	500
CIM 10J 151	0.8 \pm 0.15	150	0.20	400
CIM 10J 221	0.8 \pm 0.15	220	0.30	400
CIM 10J 241	0.8 \pm 0.15	240	0.30	400
CIM 10J 301	0.8 \pm 0.15	300	0.35	400
CIM 10J 331	0.8 \pm 0.15	330	0.35	400
CIM 10J 471	0.8 \pm 0.15	470	0.35	300
CIM 10J 601	0.8 \pm 0.15	600	0.45	300
CIM 10J 751	0.8 \pm 0.15	750	0.55	300
CIM 10J 102	0.8 \pm 0.15	1000	0.70	250
CIM 10J 152	0.8 \pm 0.15	1500	1.00	250
CIM 10J 252	0.8 \pm 0.15	2500	1.50	200
CIM 10K 152	0.8 \pm 0.15	1500	0.80	250
CIM 10K 202	0.8 \pm 0.15	2000	1.00	200
CIM 10K 252	0.8 \pm 0.15	2500	1.20	200
CIM 10N 700	0.8 \pm 0.15	70	0.30	500
CIM 10N 121	0.8 \pm 0.15	120	0.45	400
CIM 10N 241	0.8 \pm 0.15	240	0.60	300
CIM 10 F 470	0.8 \pm 0.15	47	0.25	550
CIM 10 F 600	0.8 \pm 0.15	60	0.25	550
CIM 10 F 121	0.8 \pm 0.15	120	0.30	500
CIM 10 F 331	0.8 \pm 0.15	330	0.58	400
CIM 10 F 471	0.8 \pm 0.15	470	0.85	300

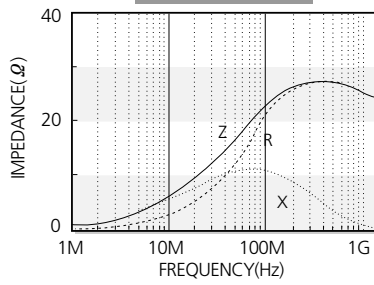
*Test equipment: Agilent E4991A + 16192A

Electrical Characteristics

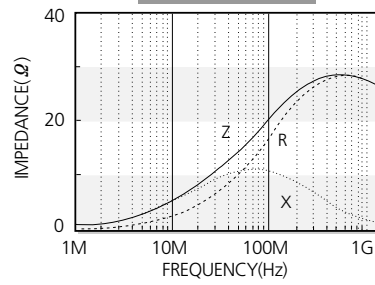
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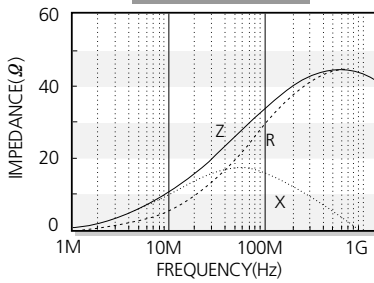
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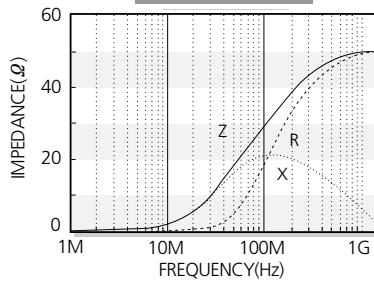
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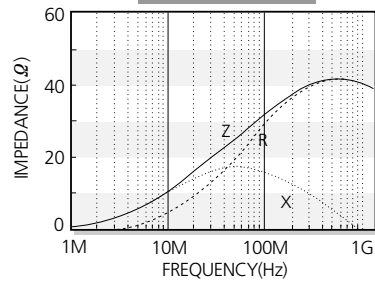
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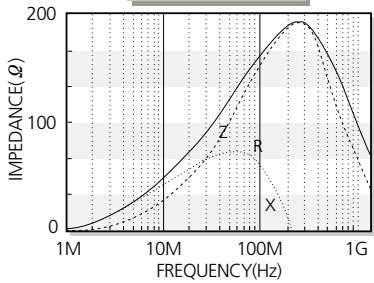
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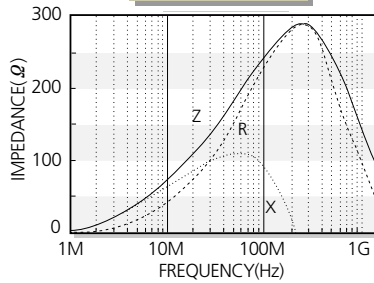
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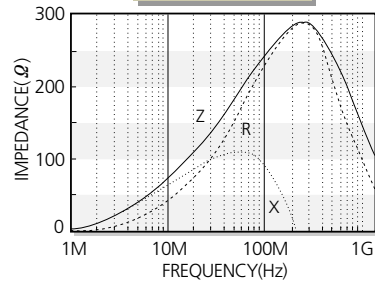
CIM10U121



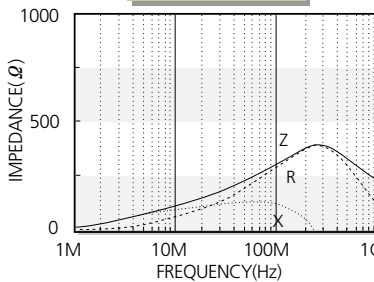
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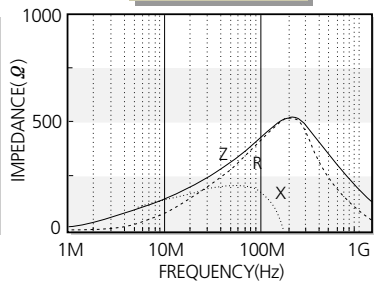
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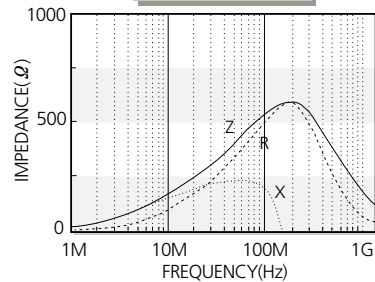
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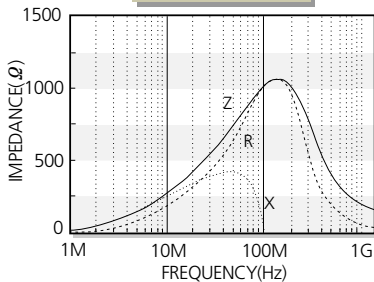
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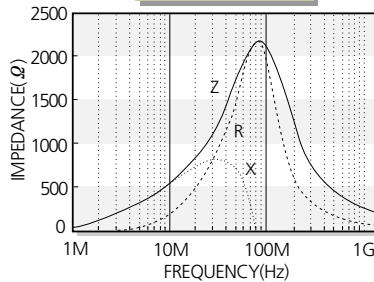
CIM10U601



CIM10U102

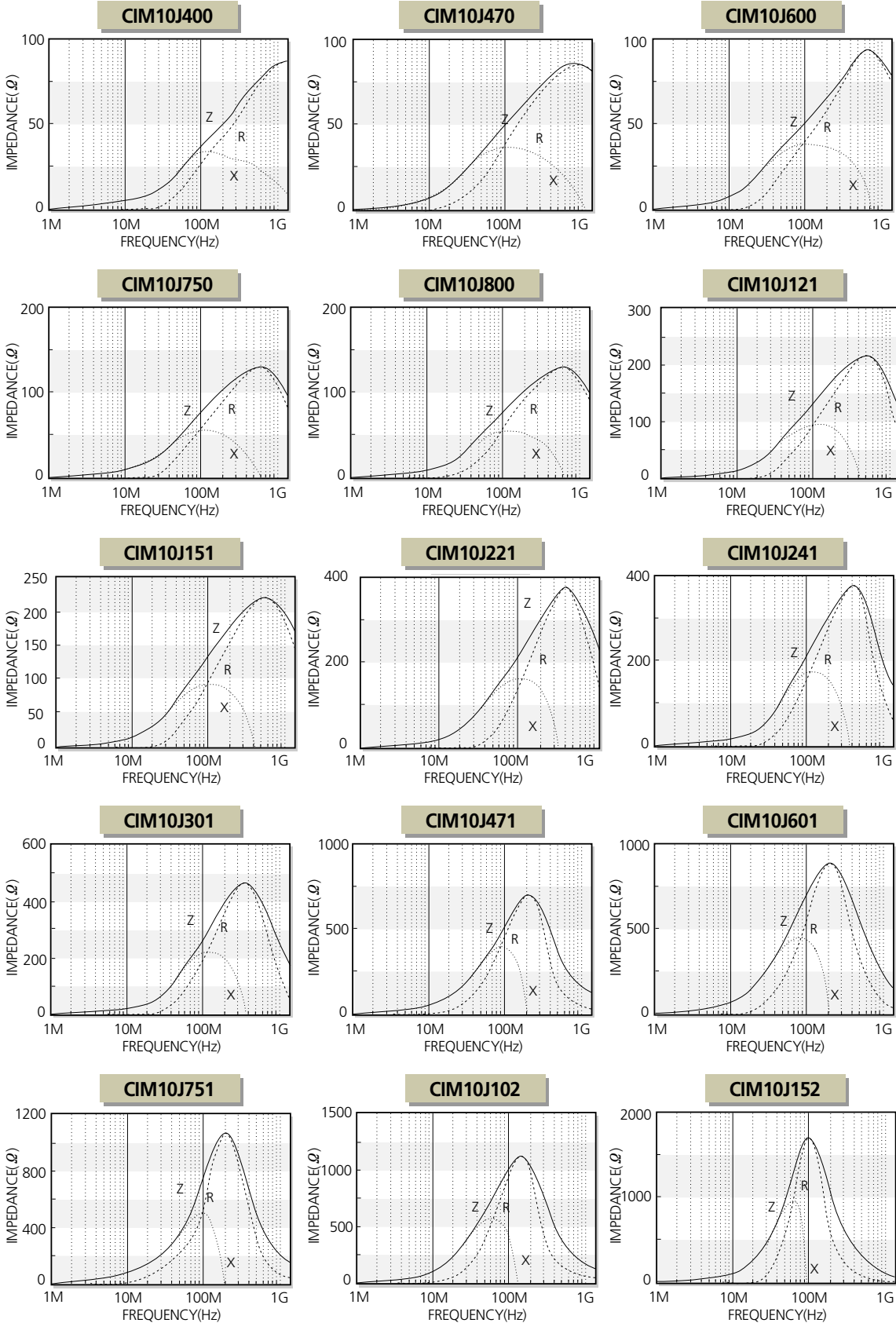


CIM10U202



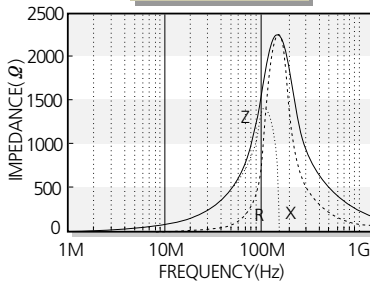
CIB/CIM Series

Electrical Characteristics

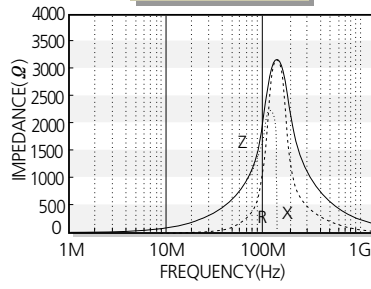


Electrical Characteristics

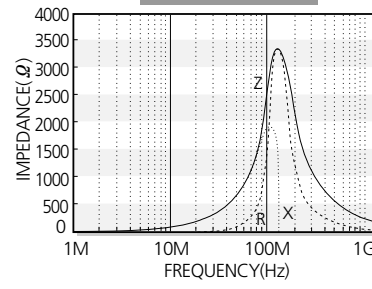
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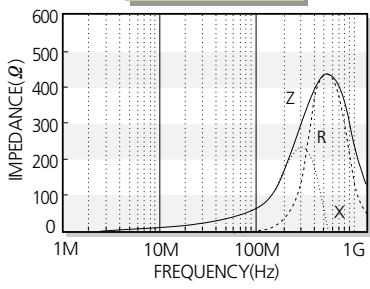
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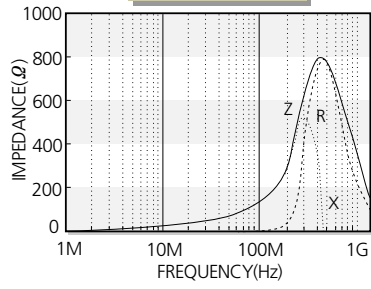
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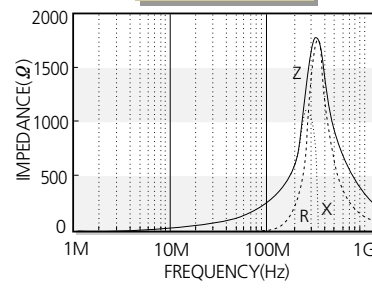
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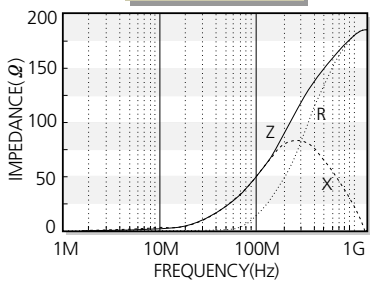
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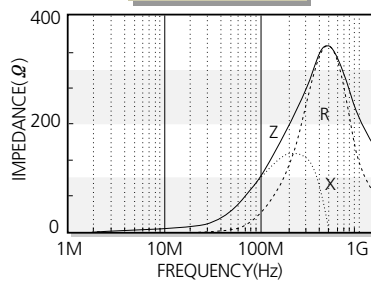
CIM10N241



CIM10F600



CIM10F121



CIB/CIM
Series

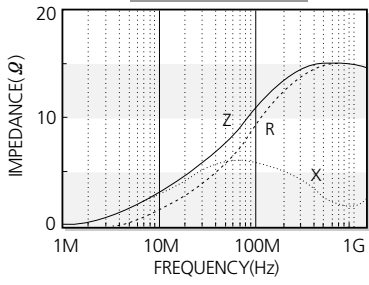
CIB/CIM 2012(0805) Type

Part No.	Thickness (mm)	Impedance (Ω) $\pm 25\%$ @ 100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIB 21P 110	0.9 \pm 0.2	11	0.05	2000
CIB 21P 150	0.9 \pm 0.2	15	0.05	2000
CIB 21P 260	0.9 \pm 0.2	26	0.05	2000
CIB 21P 330	0.9 \pm 0.2	33	0.05	1500
CIB 21P 470	0.9 \pm 0.2	47	0.05	1500
CIM 21U 800	0.9 \pm 0.2	80	0.10	900
CIM 21U 101	0.9 \pm 0.2	100	0.10	500
CIM 21U 121	0.9 \pm 0.2	120	0.10	500
CIM 21U 151	0.9 \pm 0.2	150	0.15	400
CIM 21U 241	0.9 \pm 0.2	240	0.15	400
CIM 21U 301	0.9 \pm 0.2	300	0.15	400
CIM 21U 471	0.9 \pm 0.2	470	0.25	400
CIM 21U 601	0.9 \pm 0.2	600	0.30	400
CIM 21U 102	0.9 \pm 0.2	1000(at 70MHz)	0.45	400
CIM 21U 202	0.9 \pm 0.2	2000(at 70MHz)	0.70	300
CIB 21J 260	0.9 \pm 0.2	26	0.05	2000
CIB 21J 400	0.9 \pm 0.2	40	0.05	2000
CIM 21J 600	0.9 \pm 0.2	60	0.08	900
CIM 21J 800	0.9 \pm 0.2	80	0.08	900
CIM 21J 121	0.9 \pm 0.2	120	0.15	600
CIM 21J 151	0.9 \pm 0.2	150	0.15	500
CIM 21J 221	0.9 \pm 0.2	220	0.20	400
CIM 21J 241	0.9 \pm 0.2	240	0.20	400
CIM 21J 301	0.9 \pm 0.2	300	0.25	400
CIM 21J 471	0.9 \pm 0.2	470	0.25	400
CIM 21J 601	0.9 \pm 0.2	600	0.25	400
CIM 21J 102	0.9 \pm 0.2	1000	0.40	400
CIM 21J 152	0.9 \pm 0.2	1500(at 70MHz)	0.55	300
CIM 21J 182	0.9 \pm 0.2	1800(at 70MHz)	0.45	300
CIM 21J 202	0.9 \pm 0.2	2000(at 70MHz)	0.70	300
CIM 21J 222	0.9 \pm 0.2	2200(at 70MHz)	0.70	300
CIM 21J 252	0.9 \pm 0.2	2500(at 70MHz)	0.70	300
CIM 21K 152	0.9 \pm 0.2	1500	0.45	300
CIM 21K 252	0.9 \pm 0.2	2500	0.80	250
CIM 21N 700	0.9 \pm 0.2	70	0.20	600
CIM 21N 121	0.9 \pm 0.2	120	0.25	500
CIM 21N 241	0.9 \pm 0.2	240	0.3	400

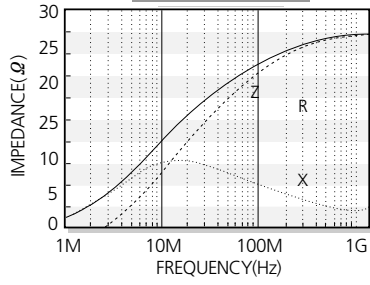
※Test equipment: Agilent E4991A + 16192A

Electrical Characteristics

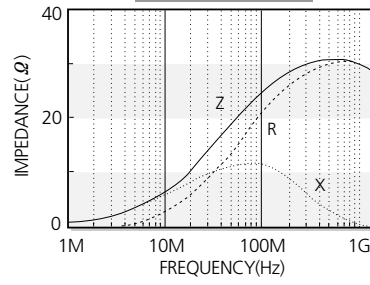
CIB21P110



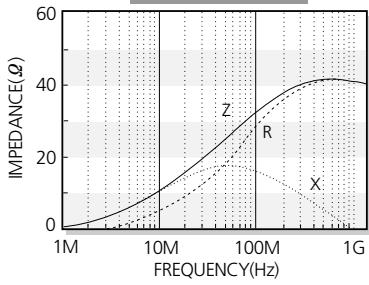
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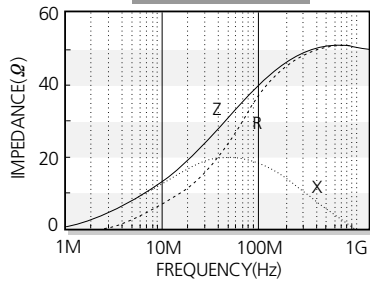
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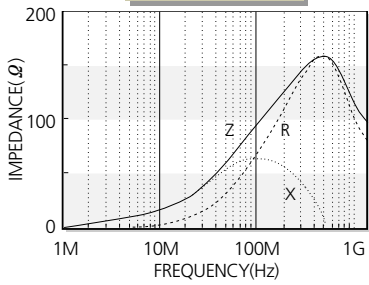
CIB21P330



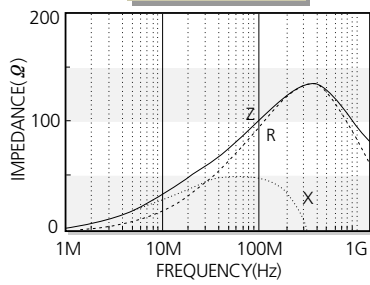
CIB21P470



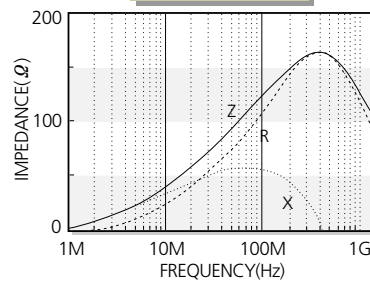
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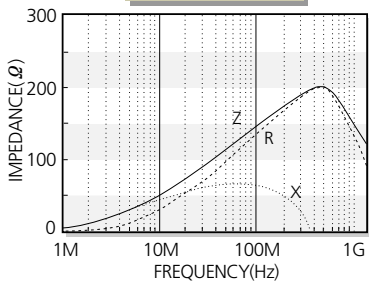
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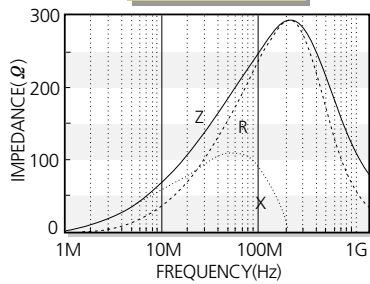
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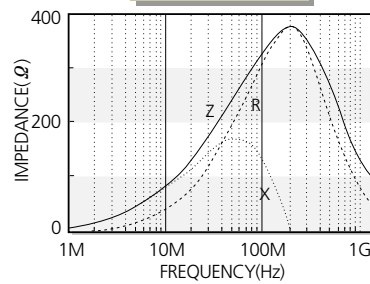
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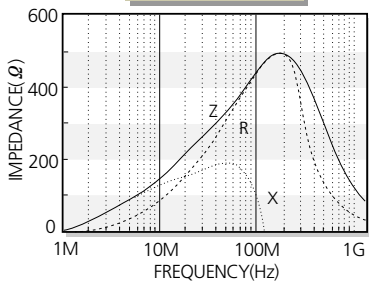
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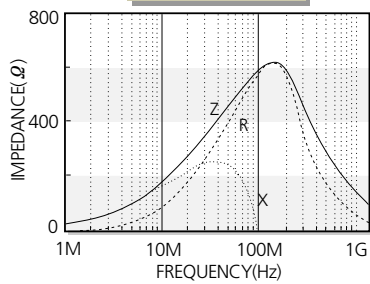
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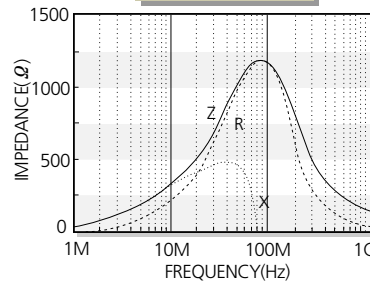
CIM21U471



CIM21U601



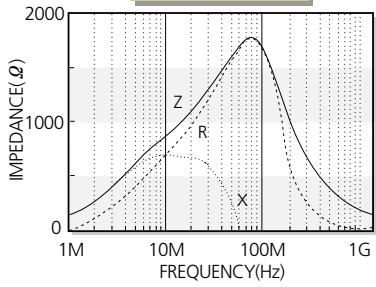
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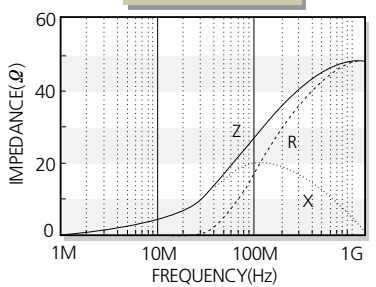
CIB/CIM
Series

Electrical Characteristics

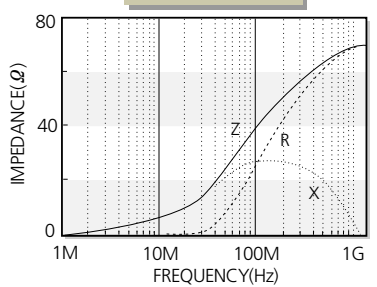
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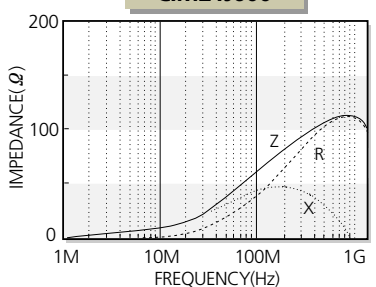
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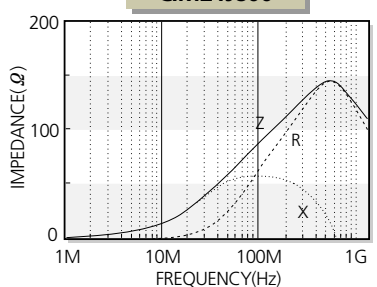
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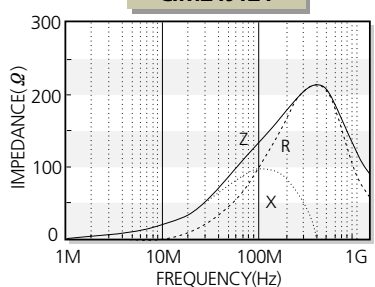
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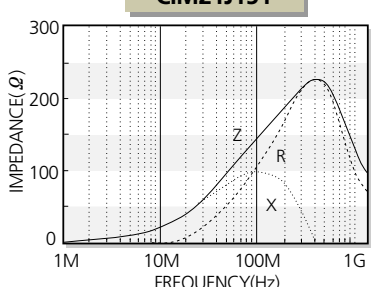
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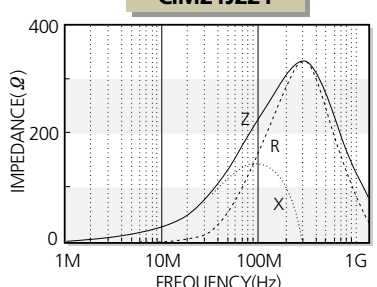
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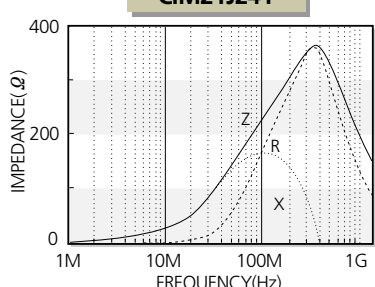
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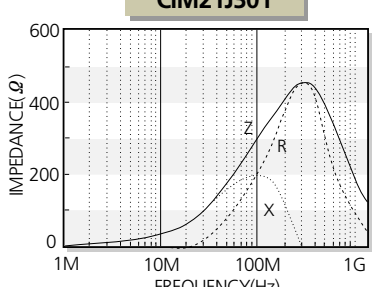
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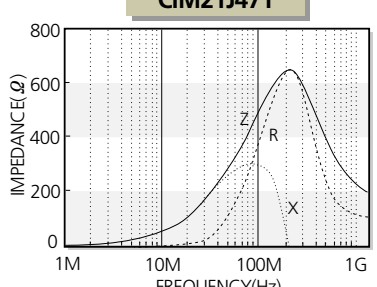
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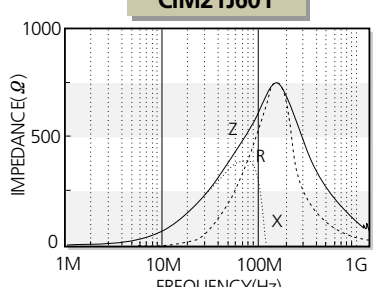
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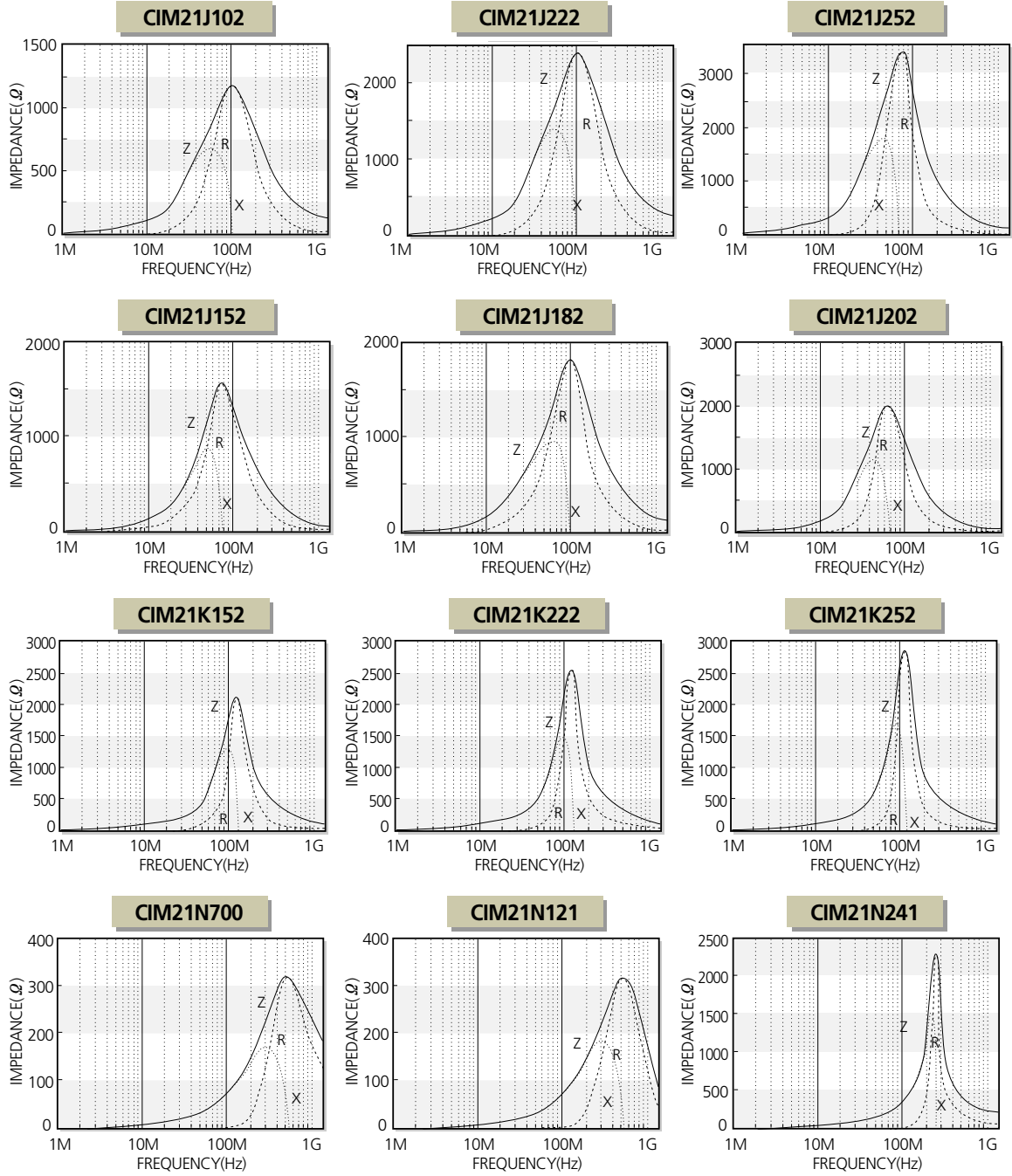
CIM21J471



CIM21J601



Electrical Characteristics



CIB/CIM
Series



CIB/CIM 3216(1206) Type

Part No.	Thickness (mm)	Impedance (Ω) $\pm 25\%$ @ 100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIB 31P 260	1.1 \pm 0.2	26	0.05	2000
CIB 31P 310	1.1 \pm 0.2	31	0.05	2000
CIB 31P 500	1.1 \pm 0.2	50	0.05	2000
CIB 31P 600	1.1 \pm 0.2	60	0.05	1500
CIB 31P 700	1.1 \pm 0.2	70	0.1	1500
CIM 31U 101	1.1 \pm 0.2	100	0.15	500
CIM 31U 601	1.1 \pm 0.2	600	0.3	400
CIM 31J 151	1.1 \pm 0.2	150	0.2	500
CIM 31J 221	1.1 \pm 0.2	220	0.2	400
CIM 31J 301	1.1 \pm 0.2	300	0.25	400
CIM 31J 601	1.1 \pm 0.2	600	0.3	400
CIM 31J 801	1.1 \pm 0.2	800	0.4	400
CIM 31J 102	1.1 \pm 0.2	1000	0.45	400
CIM 31J 152	1.1 \pm 0.2	1500(at 70MHz)	0.55	300

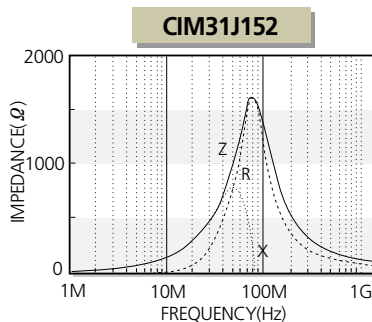
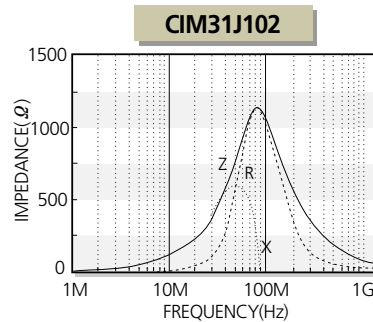
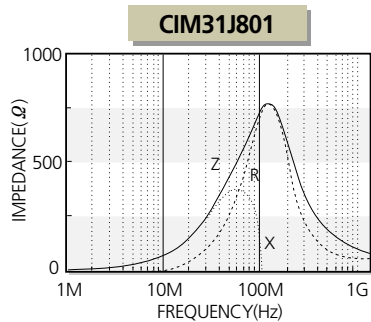
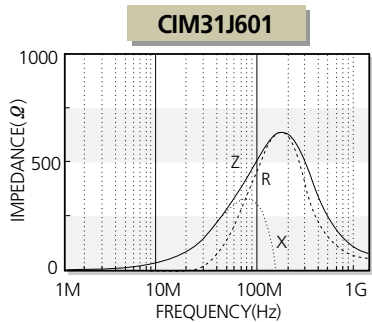
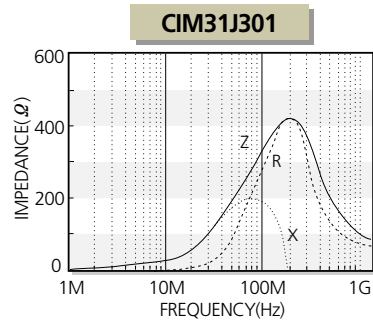
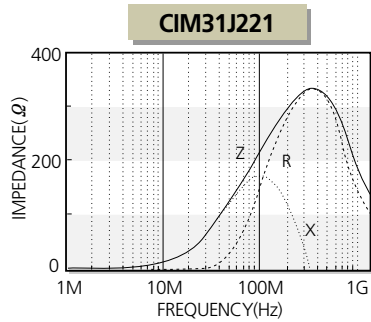
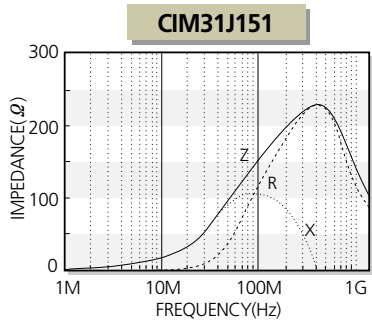
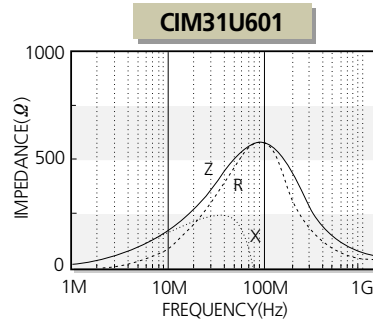
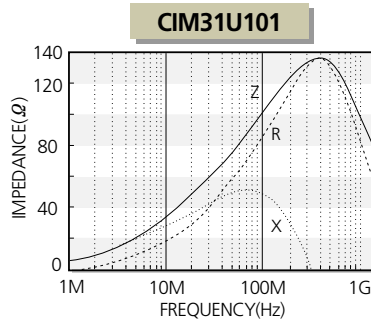
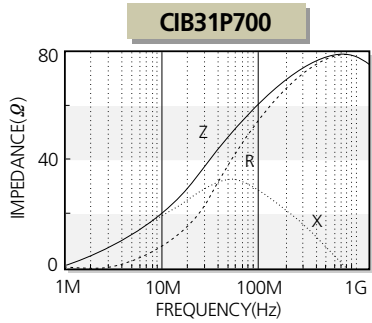
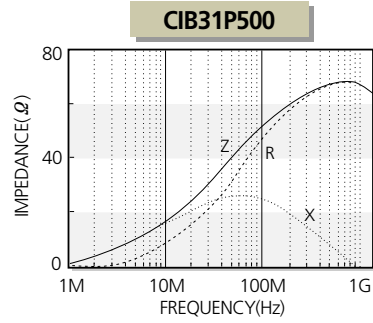
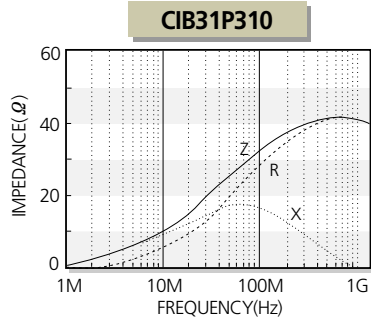
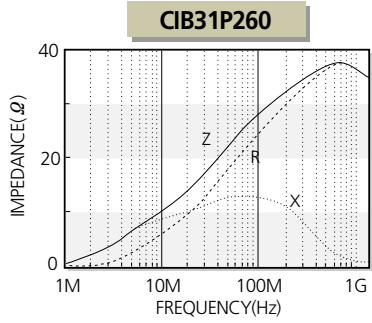
CIB/CIM 3225(1210), 4516(1806) Type

Part No.	Thickness (mm)	Impedance (Ω) $\pm 25\%$ @ 100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIB 32P 310	1.3 \pm 0.2	31	0.02	3000
CIB 32P 600	1.3 \pm 0.2	60	0.02	1500
CIB 41P 800	1.6 \pm 0.2	80	0.03	1000
CIB 41P 151	1.6 \pm 0.2	150	0.05	1000

Customized products are available.

※ Test equipment: Agilent E4991A + 16192A

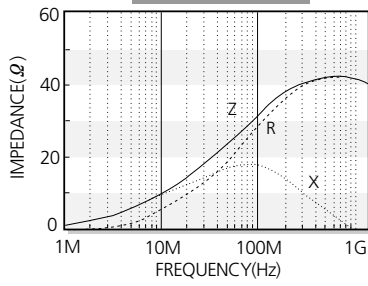
Electrical Characteristics



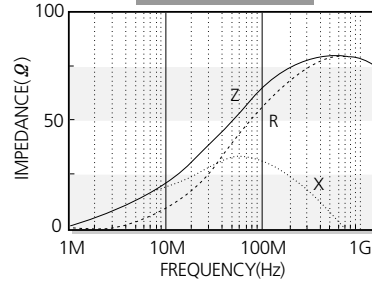
CIB/CIM
Series

Electrical Characteristics

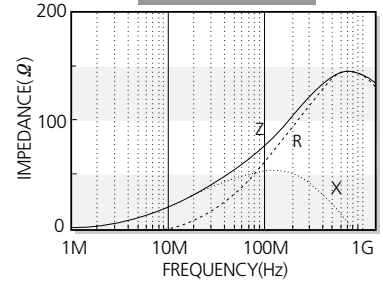
CIB32P310



CIB32P600



CIB41P800



CIB41P151

