

### 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

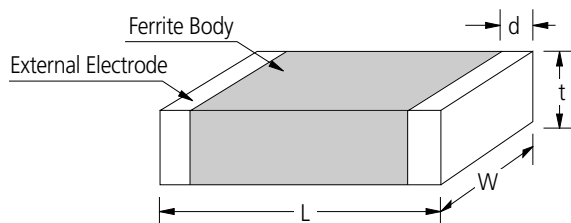
The CIB Series is composed of mono-layer internal conductor that allows low impedance and low DC resistance.

#### 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

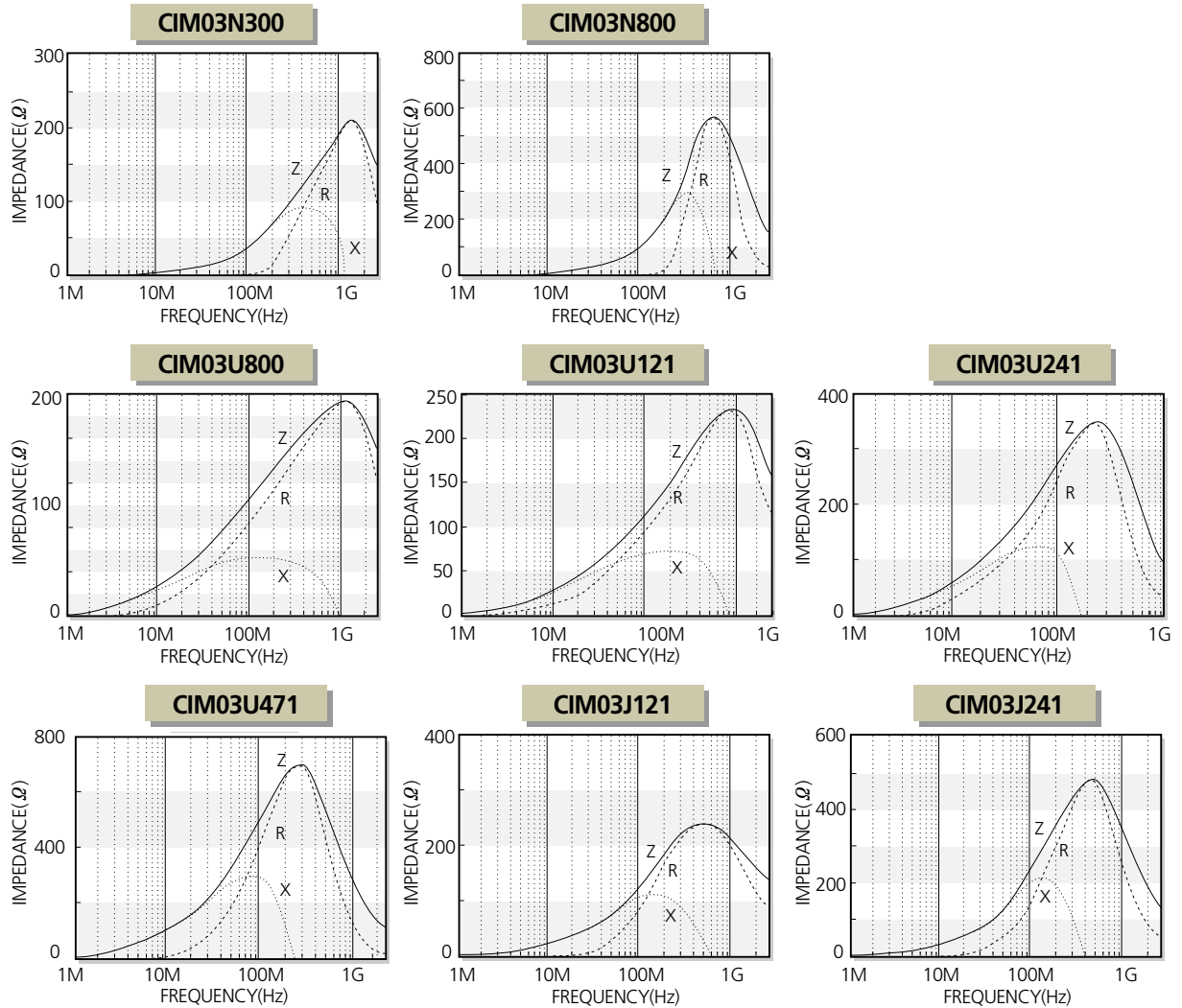
**CI**    **M**    **03**    **J**    **121**    **N**    **C**  
 (1)    (2)    (3)    (4)    (5)    (6)    (7)

- (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 ( $\Omega$ ) $\pm 25\%$ @ 100 MHz	DC Resistance ( $\Omega$ ) 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**


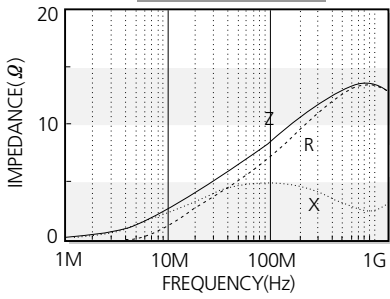
CIM 1005(0402) Type

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

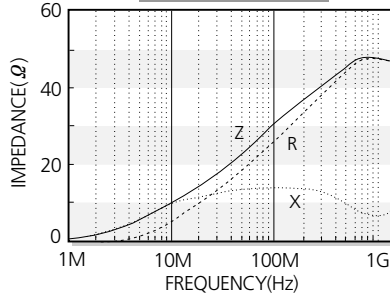
※Test equipment: Agilent E4991A + 16192A

**Electrical Characteristics**

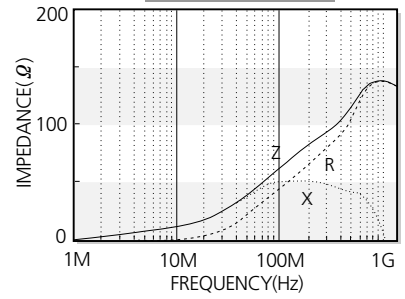
**CIM05U100**



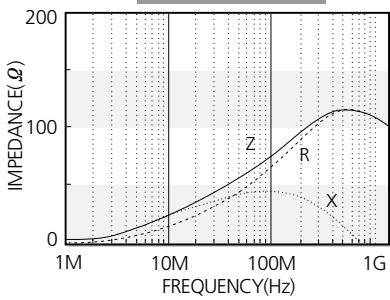
**CIM05U300**



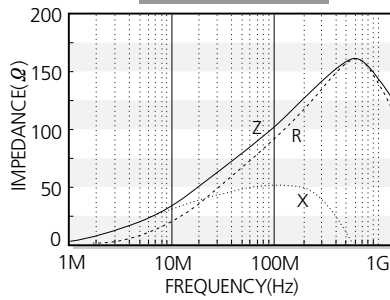
**CIM05U600**



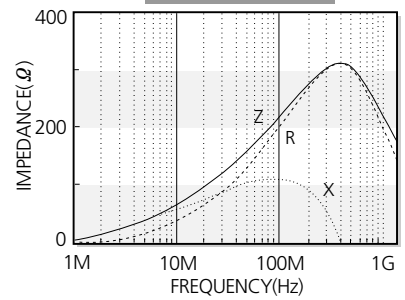
**CIM05U800**



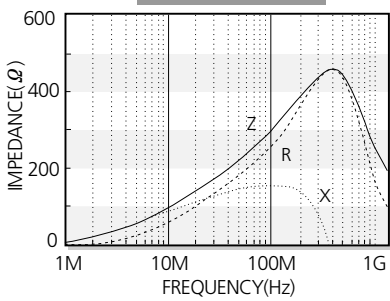
**CIM05U121**



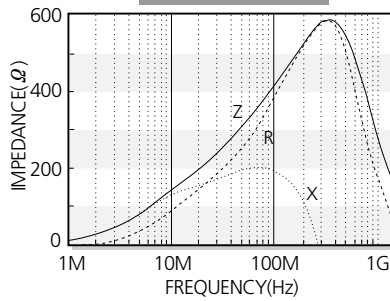
**CIM05U241**



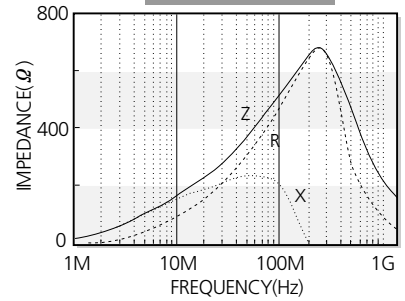
**CIM05U301**



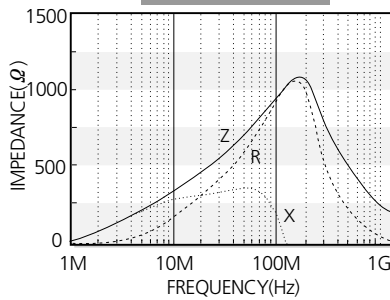
**CIM05U471**



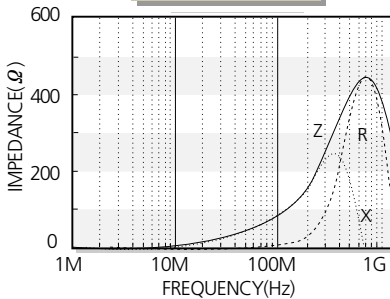
**CIM05U601**



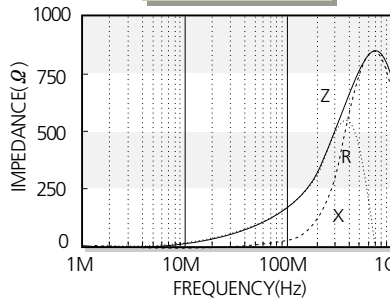
**CIM05U102**



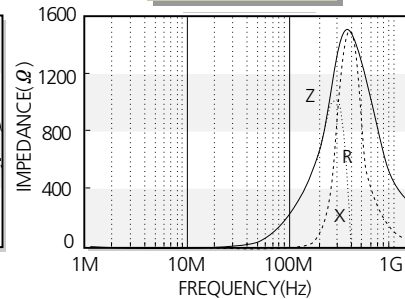
**CIM05N750**



**CIM05N121**

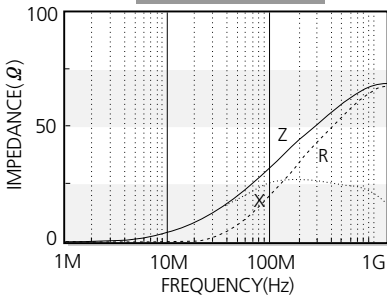


**CIM05N221**

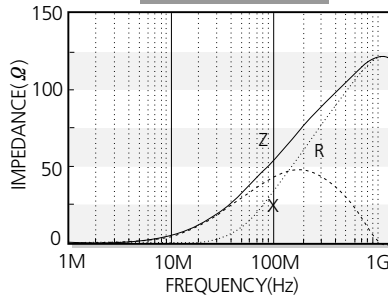


Electrical Characteristics

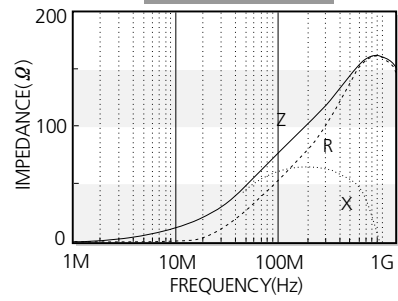
**CIM05J300**



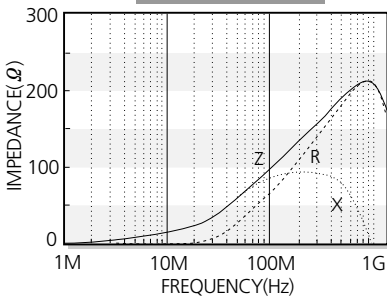
**CIM05J600**



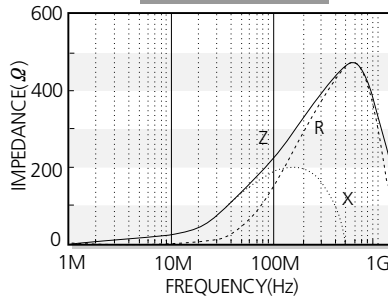
**CIM05J800**



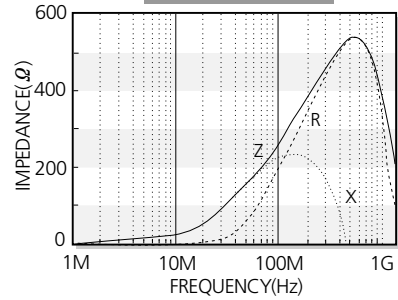
**CIM05J121**



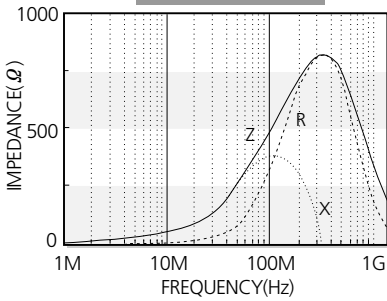
**CIM05J241**



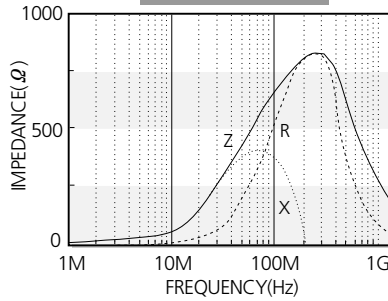
**CIM05J301**



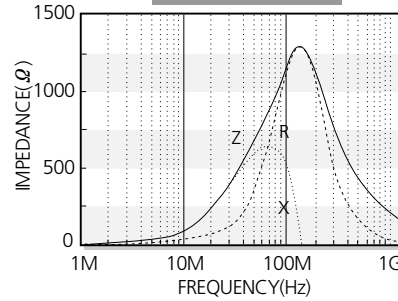
**CIM05J471**



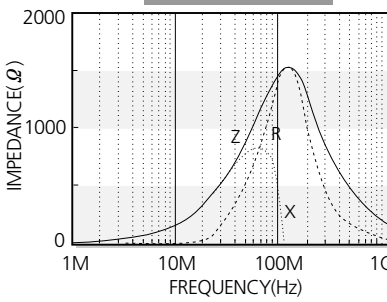
**CIM05J601**



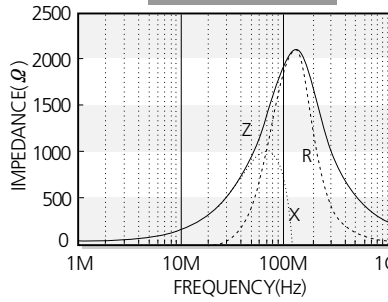
**CIM05J102**



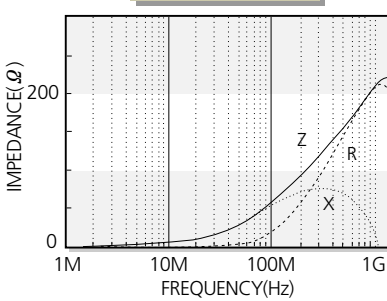
**CIM05J152**



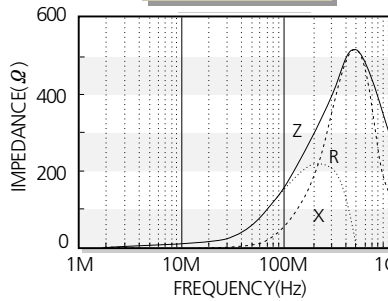
**CIM05J182**



**CIM05F470**



**CIM05F121**



CIB/CIM  
Series

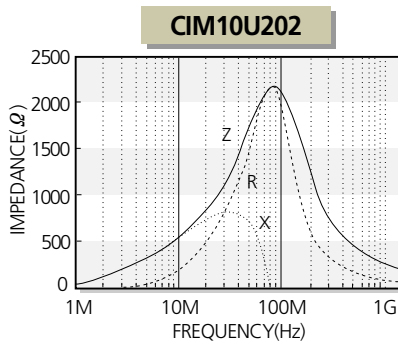
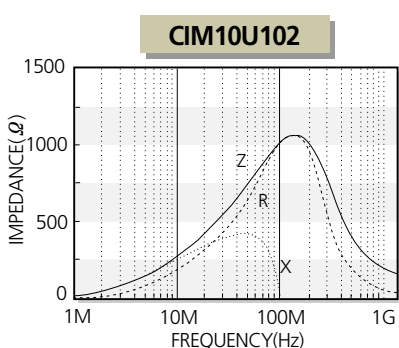
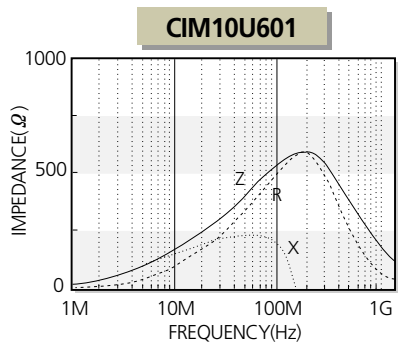
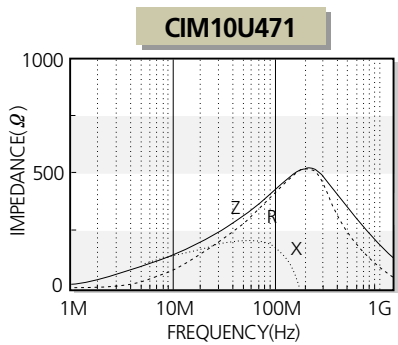
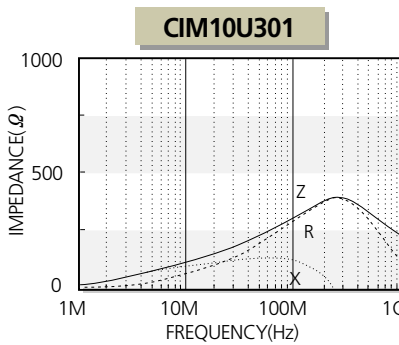
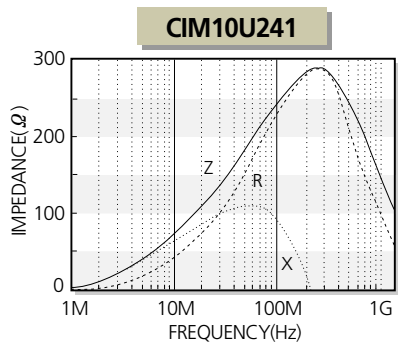
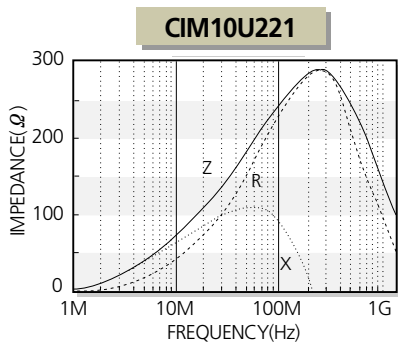
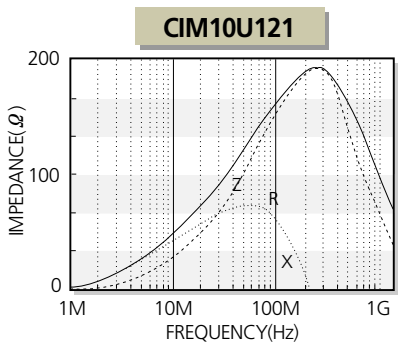
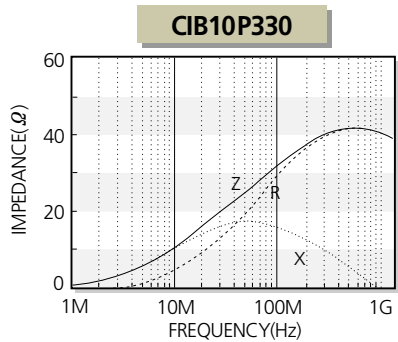
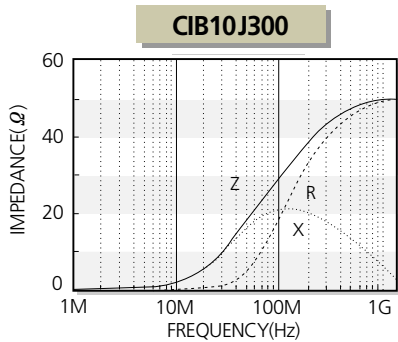
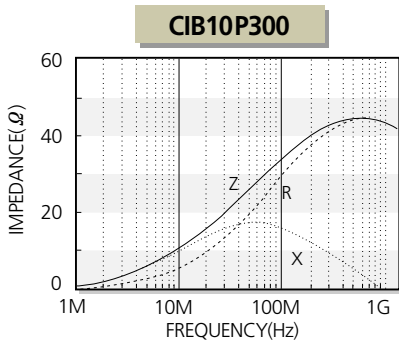
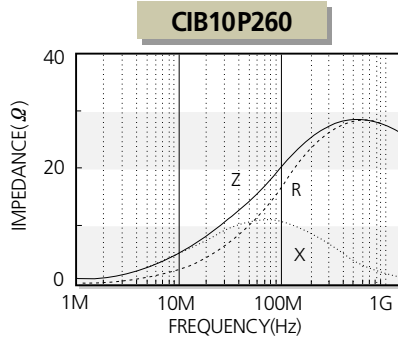
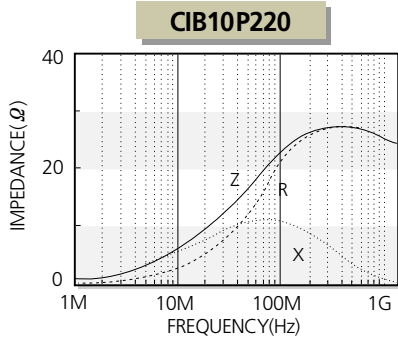
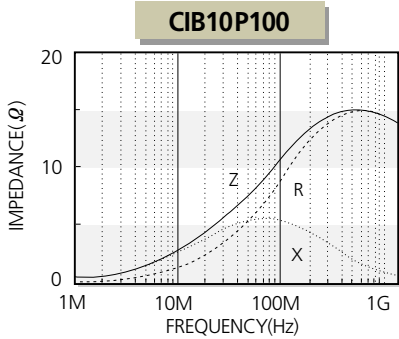


### CIB/CIM 1608(0603) Type

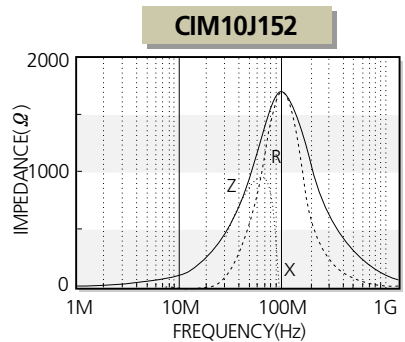
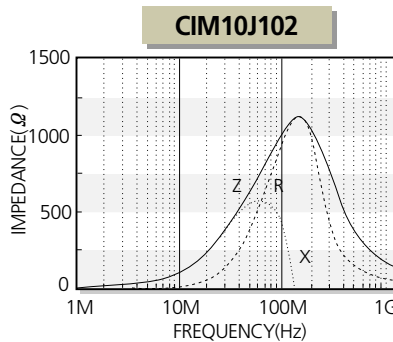
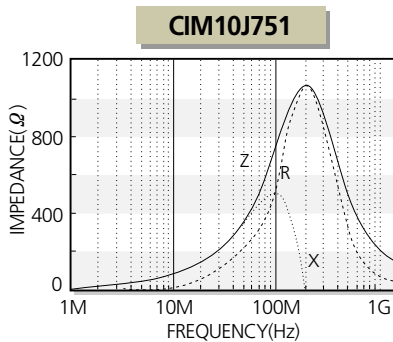
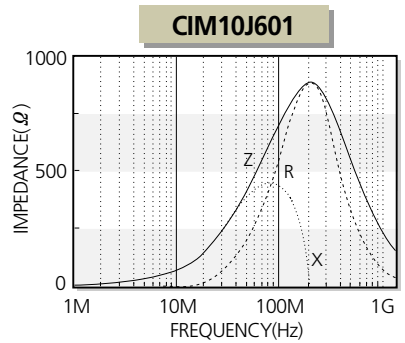
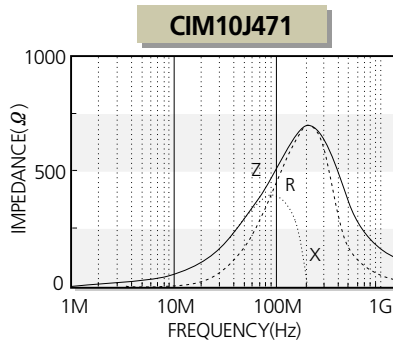
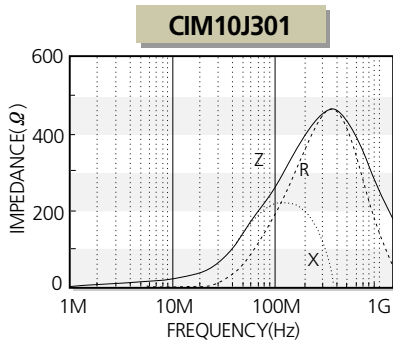
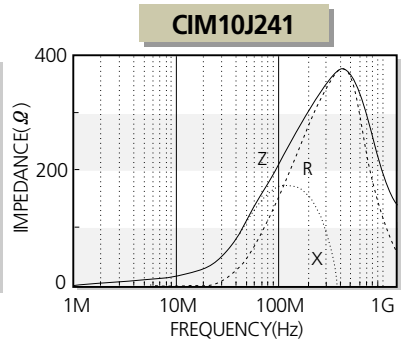
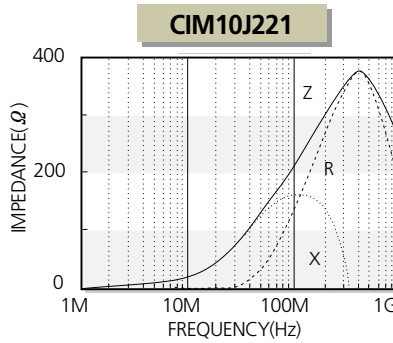
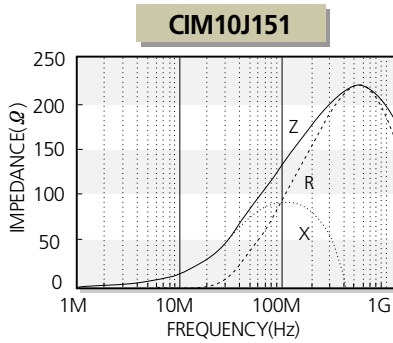
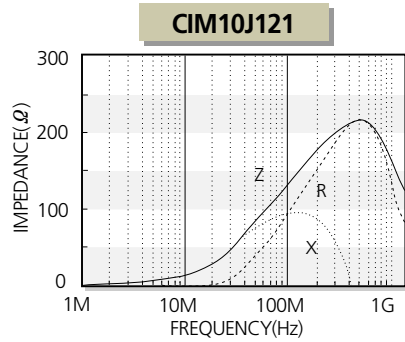
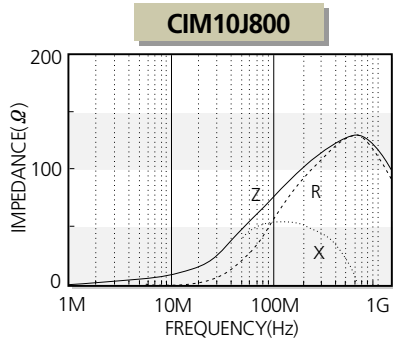
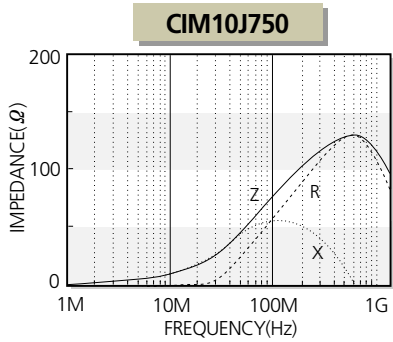
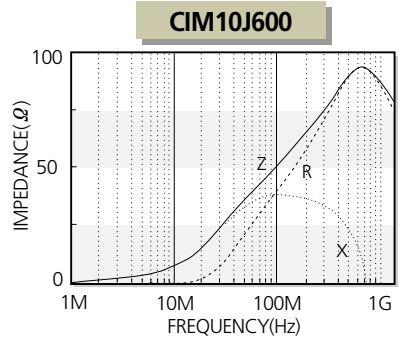
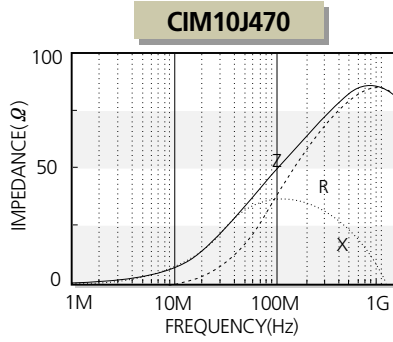
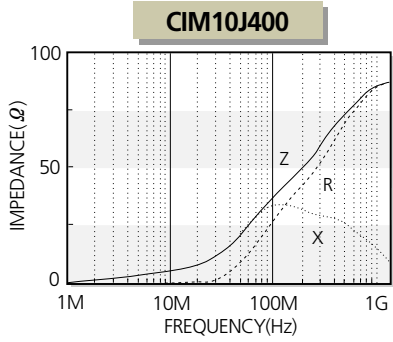
Part No.	Thickness (mm)	Impedance ( $\Omega$ ) $\pm$ 25% @ 100 MHz	DC Resistance ( $\Omega$ ) Max.	Rated Current (mA) Max.
CIB 10P 100	0.8 $\pm$ 0.15	10	0.05	1000
CIB 10P 220	0.8 $\pm$ 0.15	22	0.05	1500
CIB 10P 260	0.8 $\pm$ 0.15	26	0.08	1000
CIB 10J 300	0.8 $\pm$ 0.15	30	0.08	1000
CIB 10P 300	0.8 $\pm$ 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 F471	0.8 $\pm$ 0.15	470	0.85	300

※Test equipment: Agilent E4991A + 16192A

Electrical Characteristics



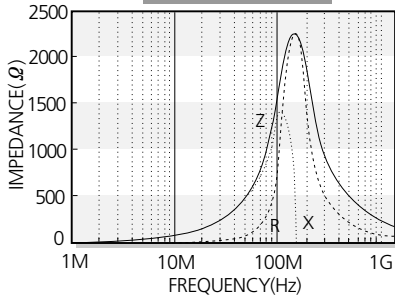
**Electrical Characteristics**



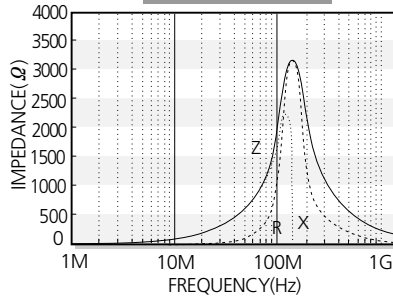


Electrical Characteristics

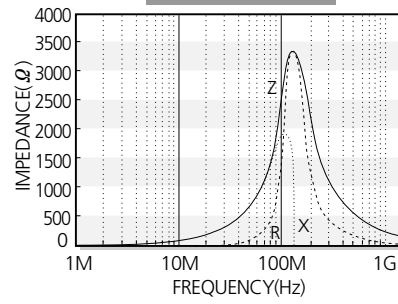
**CIM10K152**



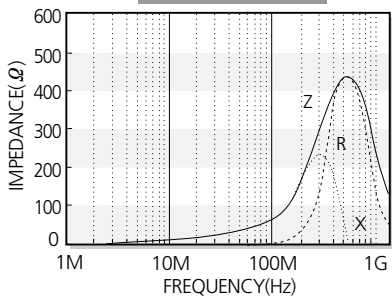
**CIM10K202**



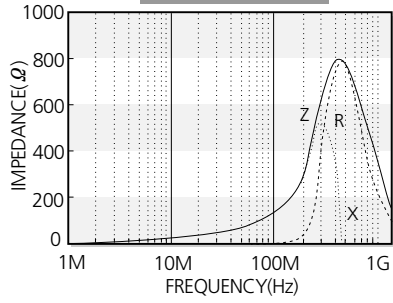
**CIM10K252**



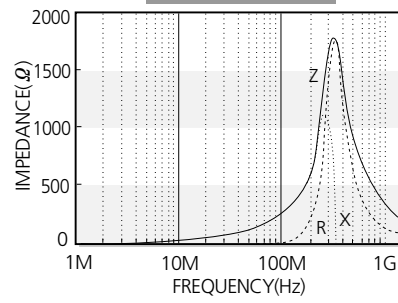
**CIM10N700**



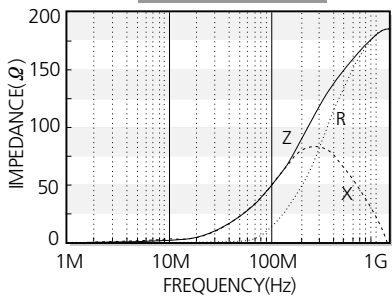
**CIM10N121**



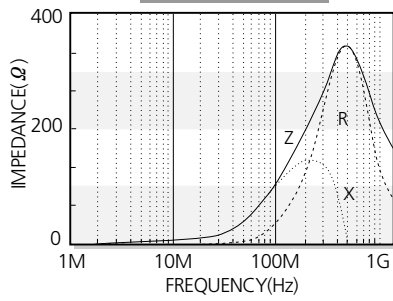
**CIM10N241**



**CIM10F600**



**CIM10F121**



CIB/CIM  
Series



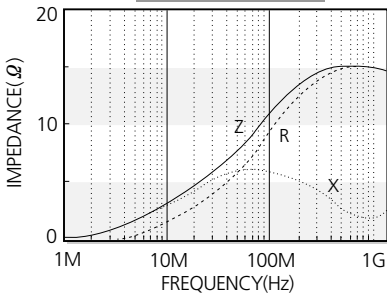
### CIB/CIM 2012(0805) Type

Part No.	Thickness (mm)	Impedance ( $\Omega$ ) $\pm 25\%$ @ 100 MHz	DC Resistance ( $\Omega$ ) 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

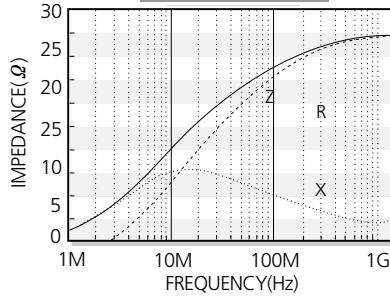
※Test equipment: Agilent E4991A + 16192A

Electrical Characteristics

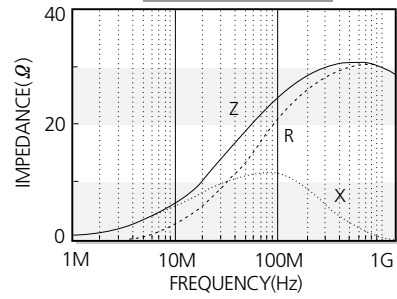
**CIB21P110**



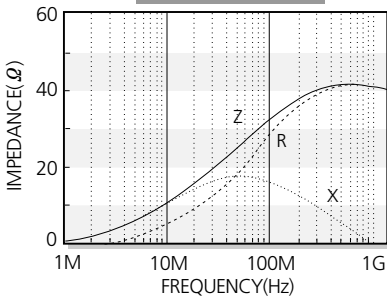
**CIB21P150**



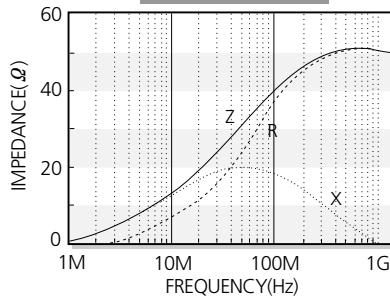
**CIB21P260**



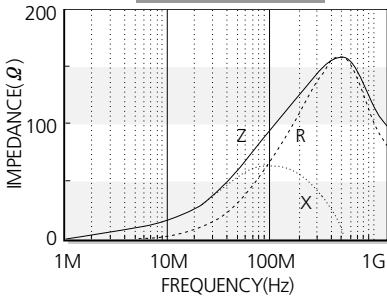
**CIB21P330**



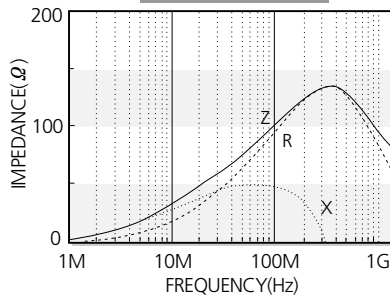
**CIB21P470**



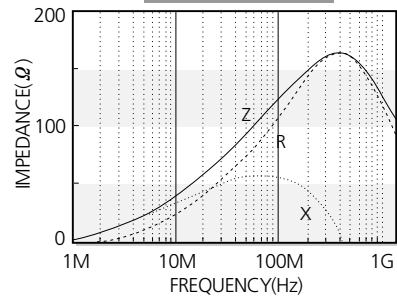
**CIM21U800**



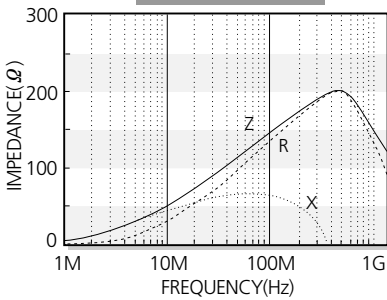
**CIM21U101**



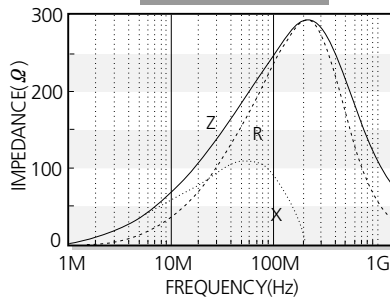
**CIM21U121**



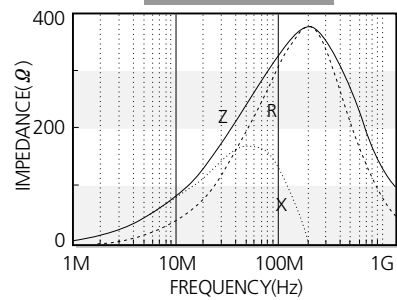
**CIM21U151**



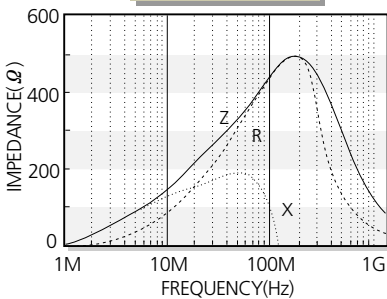
**CIM21U241**



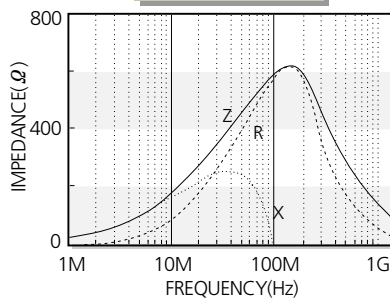
**CIM21U301**



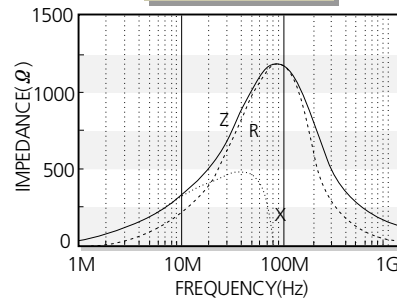
**CIM21U471**



**CIM21U601**

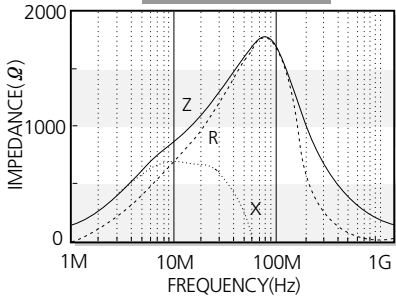


**CIM21U102**

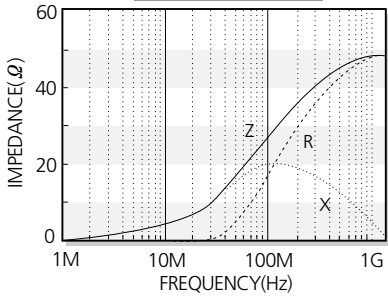


**Electrical Characteristics**

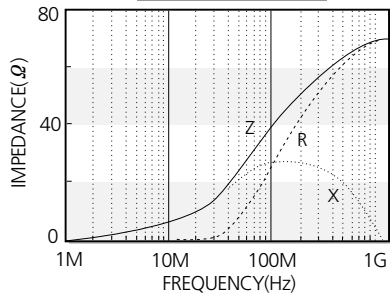
**CIM21U202**



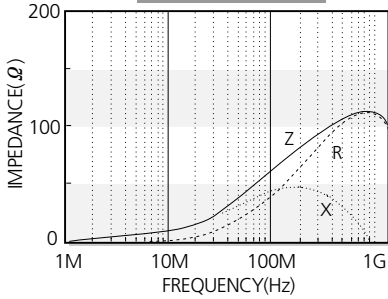
**CIB21J260**



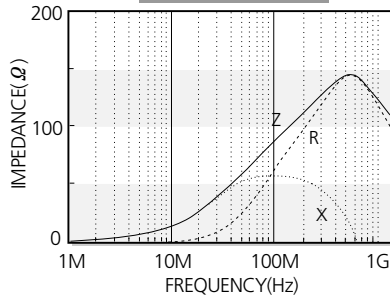
**CIB21J400**



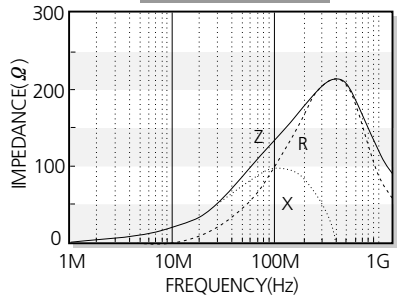
**CIM21J600**



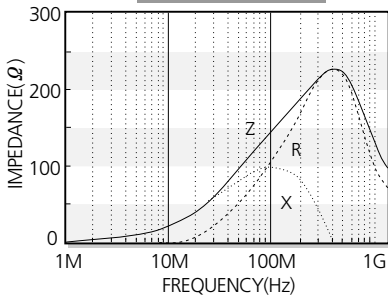
**CIM21J800**



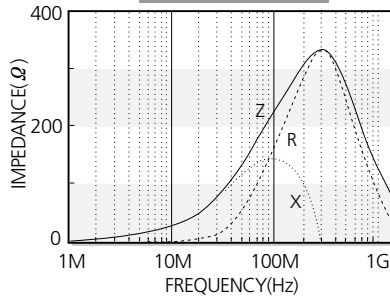
**CIM21J121**



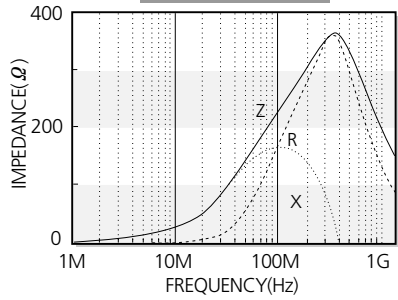
**CIM21J151**



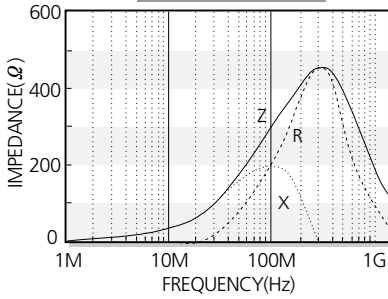
**CIM21J221**



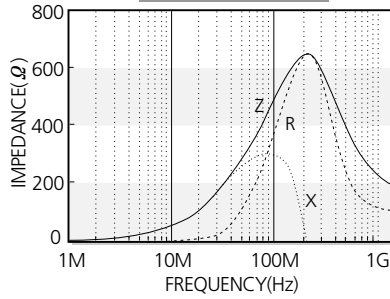
**CIM21J241**



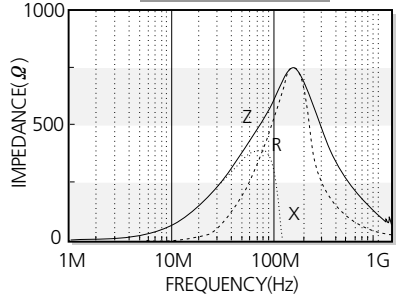
**CIM21J301**



**CIM21J471**

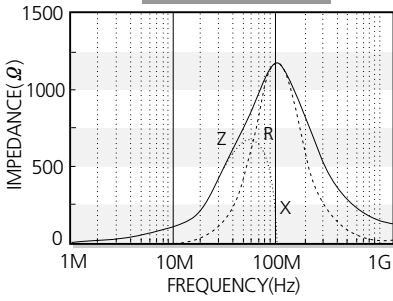


**CIM21J601**

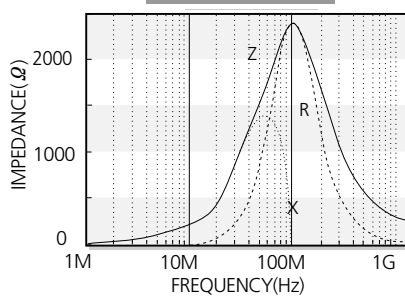


Electrical Characteristics

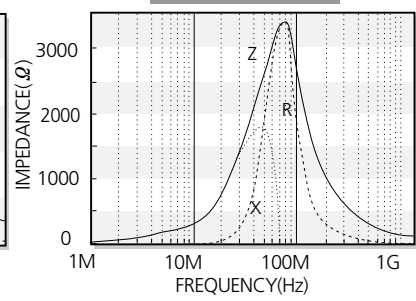
**CIM21J102**



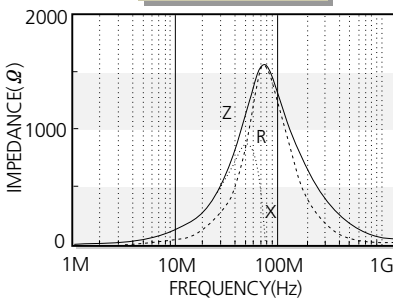
**CIM21J222**



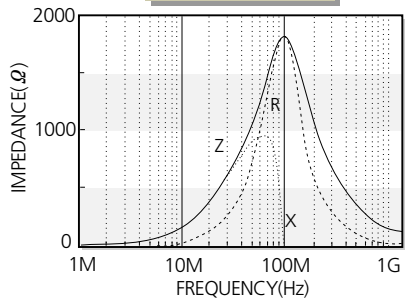
**CIM21J252**



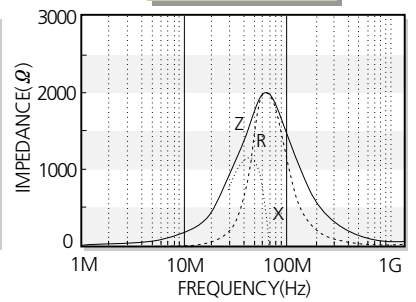
**CIM21J152**



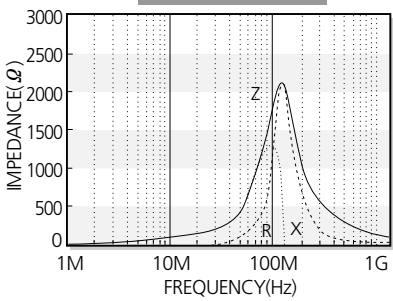
**CIM21J182**



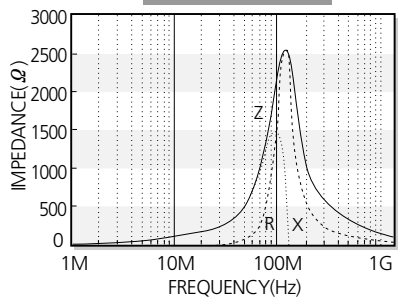
**CIM21J202**



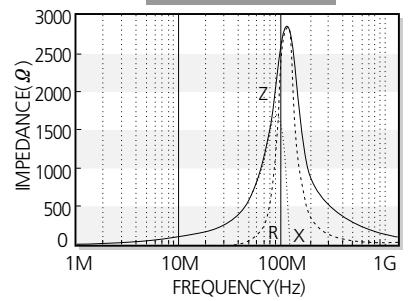
**CIM21K152**



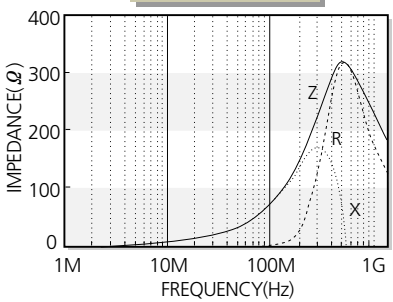
**CIM21K222**



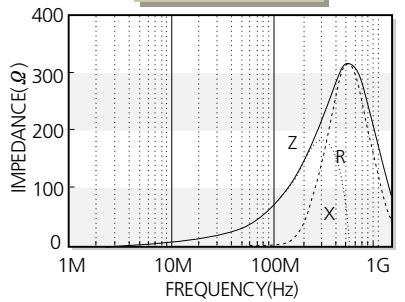
**CIM21K252**



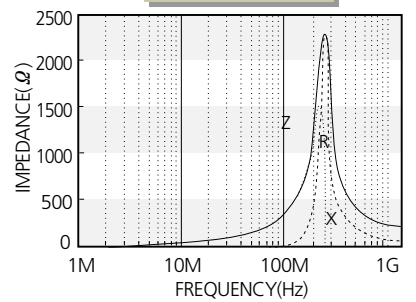
**CIM21N700**



**CIM21N121**



**CIM21N241**





### CIB/CIM 3216(1206) Type

Part No.	Thickness (mm)	Impedance ( $\Omega$ ) $\pm 25\%$ @ 100 MHz	DC Resistance ( $\Omega$ ) 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

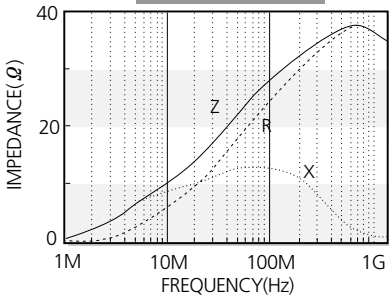
Part No.	Thickness (mm)	Impedance ( $\Omega$ ) $\pm 25\%$ @ 100 MHz	DC Resistance ( $\Omega$ ) Max.	Rated Current (mA) Max.
CIB 32P 310	1.3 $\pm$ 0.2	31	0.02	3000
CIB 32P 600	1.3 $\pm$ 0.2	60	0.02	1500
CIB 41P 800	1.6 $\pm$ 0.2	80	0.03	1000
CIB 41P 151	1.6 $\pm$ 0.2	150	0.05	1000

Customized products are available.

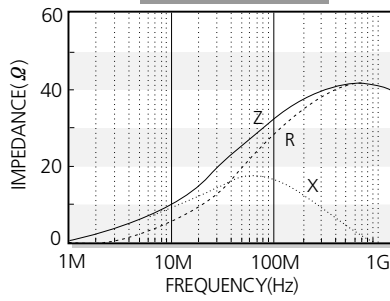
※ Test equipment: Agilent E4991A + 16192A

Electrical Characteristics

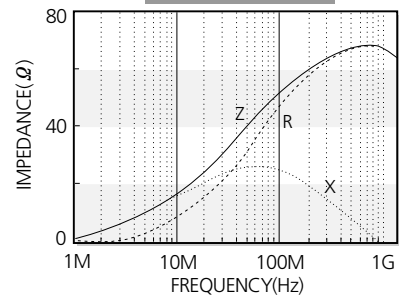
**CIB31P260**



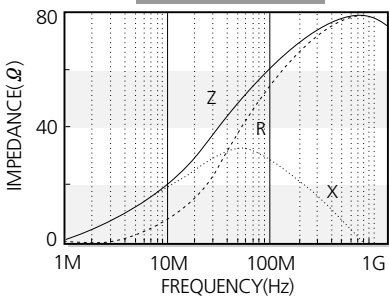
**CIB31P310**



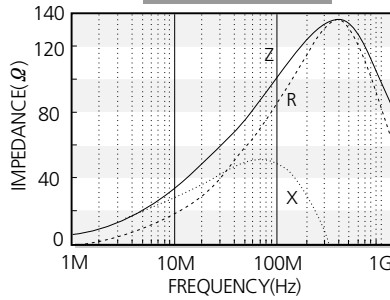
**CIB31P500**



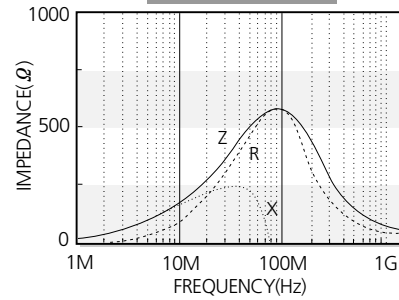
**CIB31P700**



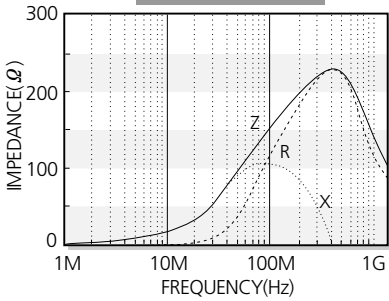
**CIM31U101**



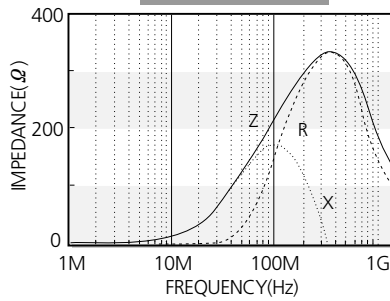
**CIM31U601**



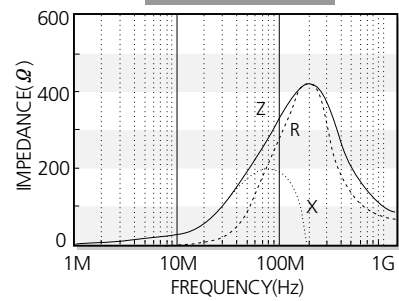
**CIM31J151**



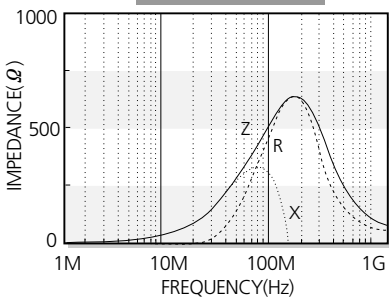
**CIM31J221**



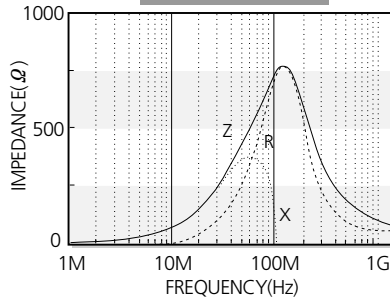
**CIM31J301**



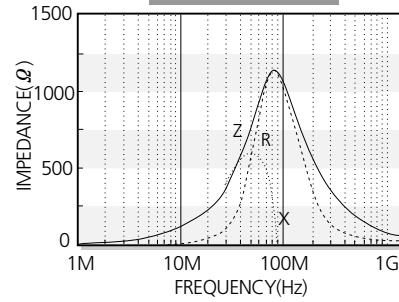
**CIM31J601**



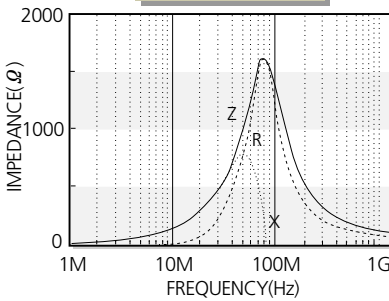
**CIM31J801**



**CIM31J102**



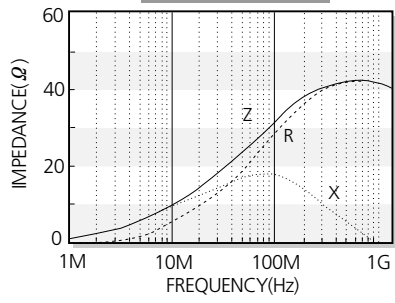
**CIM31J152**



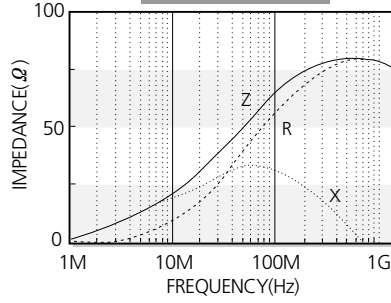
CIB/CIM  
Series

Electrical Characteristics

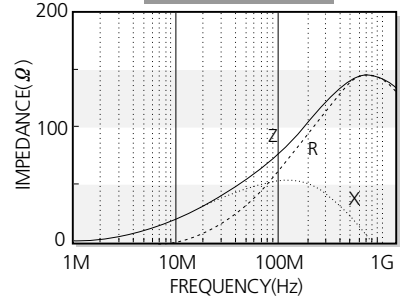
**CIB32P310**



**CIB32P600**



**CIB41P800**



**CIB41P151**

