

Chip Ferrite Beads

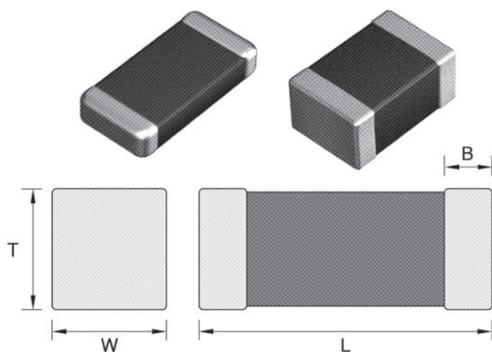
Features

- Various size(1005~4532)
- High impedance characteristics
- Low Rdc, High Current characteristics
- Good reliability(Monolithic structure)
- Magnetically shielded
- Fast mounting speed
- RoHS compliant

Applications

- High frequency noise removal of digital equipment
- PDP/LCD Monitor, Digital TV/VCR etc.

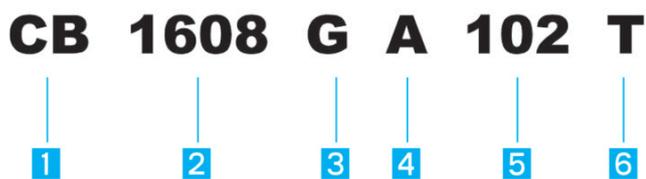
Shape & Dimensions



(Unit : mm)

Size	L	W	T	B
1005	1.0±0.10	0.5±0.10	0.5±0.10	0.25±0.1
1608	1.6±0.15	0.8±0.15	0.8±0.15	0.30 ± 0.2
1608S			0.6±0.15	
2012	2.0±0.20	1.25±0.20	0.85±0.20 1.25±0.2	0.50±0.3
3216	3.2±0.20	1.6±0.20	1.1±0.20	0.50±0.3
4516	4.5±0.25	1.6±0.20	1.3±0.20	0.50±0.3
4532	4.5±0.25	3.2±0.25	1.3±0.20	0.50±0.3

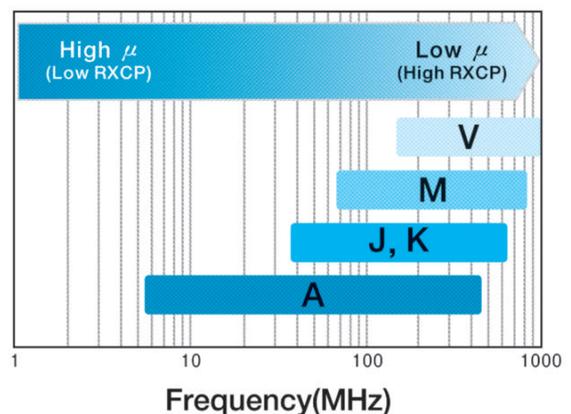
How to Order(Product Identification)



Temperature Range

- Operating Temp. -55 ~ +125°C
- Storage Temp. -55 ~ +125°C(After Mounting)

Typical Material Characteristics



1 Series Code

CB : Chip Ferrite Beads

2 Dimension Code

The first two digits : Length(mm)
The last two digits : Width(mm)

3 Application Code

G : Signal Line
P : High Current Line
U : Ultra High Current Line

4 Material Code

A : General Frequency
 K, J : Medium Frequency
 M : High Frequency
 V : Very High Frequency

5 Impedance Value Code

The first two digits represents significant
 The last digit is the number of zeros following
 ex) 121 = 120(Ω)

6 Packaging Code

T : Reel Paper Packaging
 E : Reel Embossed Tape Packaging

Specifications

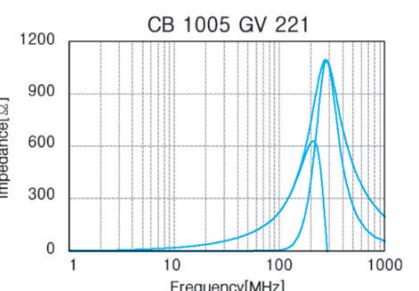
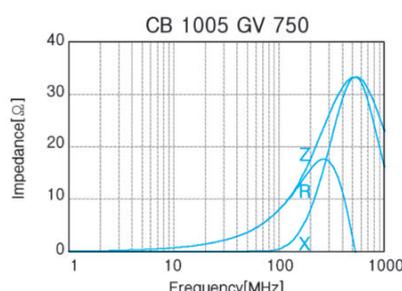
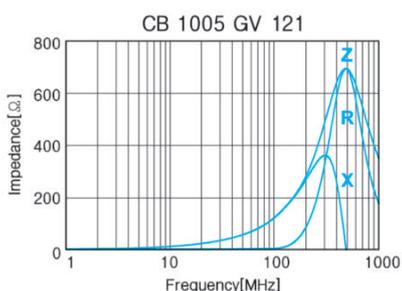
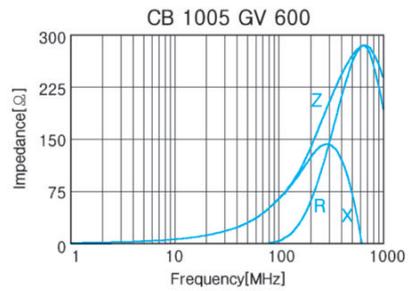
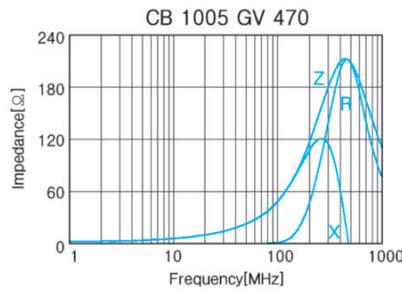
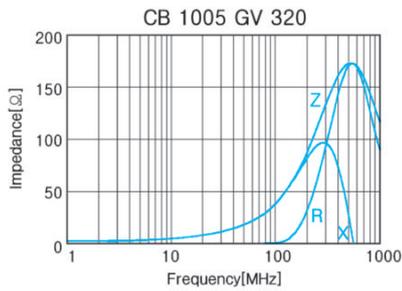
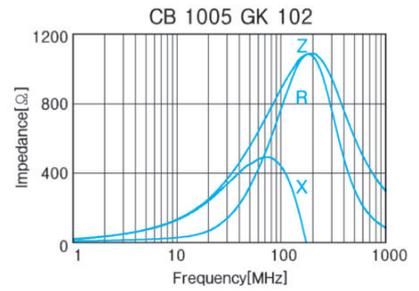
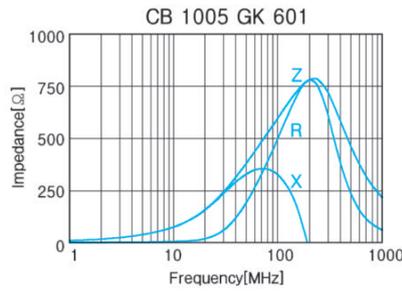
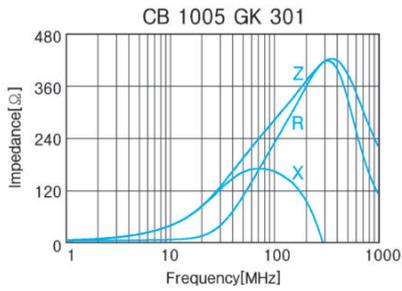
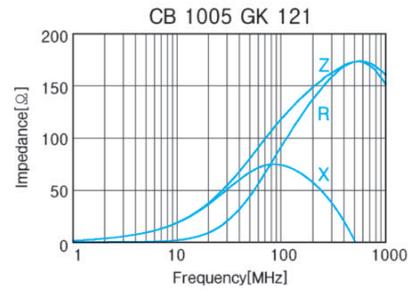
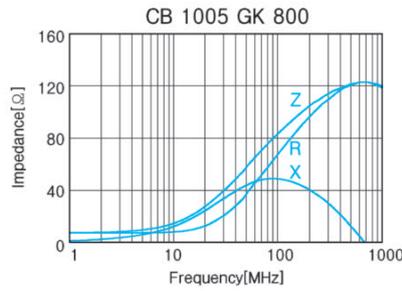
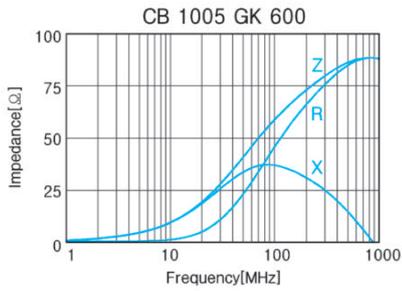
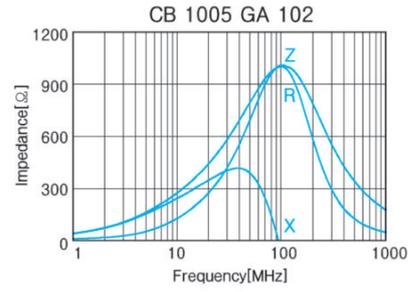
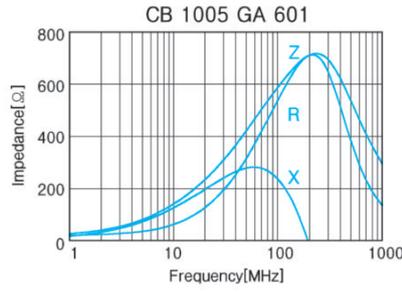
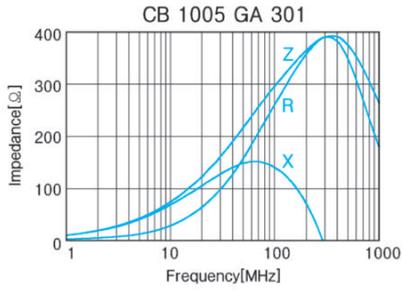
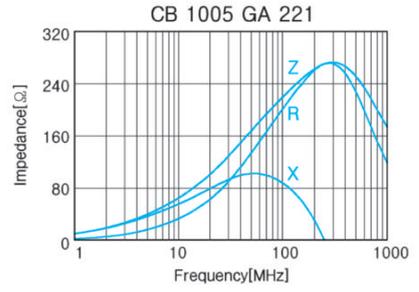
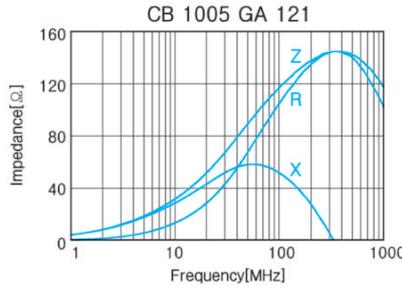
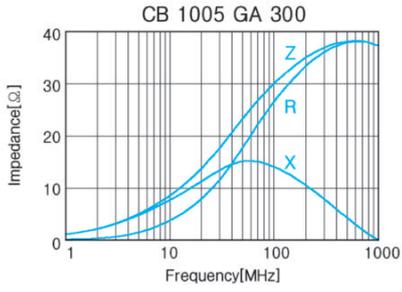
1005 SIZE for Signal Line

Part No.	Impedance(Ω) \pm 25%	DC Resistance(Ω) Max.	Rated Current(mA) Max.	Test Frequency(MHz)
CB1005GA100	10	0.05	1000	100
CB1005GA200	20	0.10	900	
CB1005GA300	30	0.10	900	
CB1005GA600	60	0.20	600	
CB1005GA121	120	0.25	500	
CB1005GA221	220	0.30	500	
CB1005GA301	300	0.45	400	
CB1005GA601	600	0.60	400	
CB1005GA102	1000	1.00	200	
CB1005GK300	30	0.10	900	
CB1005GK600	60	0.20	600	
CB1005GK800	80	0.20	600	
CB1005GK121	120	0.30	500	
CB1005GK221	220	0.35	500	
CB1005GK301	300	0.45	400	
CB1005GK471	470	0.55	300	
CB1005GK601	600	0.60	300	
CB1005GK102	1000	0.95	250	
CB1005GM300	30	0.20	600	
CB1005GM600	60	0.20	600	
CB1005GM121	120	0.30	500	
CB1005GV080	8	0.10	500	
CB1005GV320	32	0.25	500	
CB1005GV470	47	0.30	400	
CB1005GV600	60	0.30	400	
CB1005GV750	75	0.35	300	
CB1005GV121	120	0.55	300	
CB1005GV221	220	0.80	200	

※ Measuring Equipment :

Z : HP4291B / E4991A Rdc : HP4338B

Electrical Characteristics



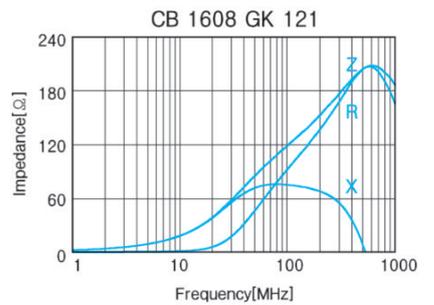
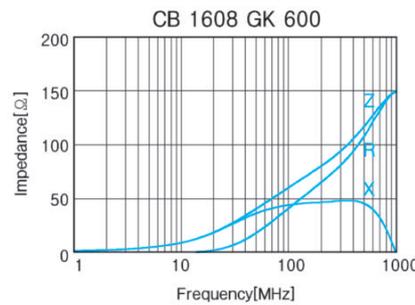
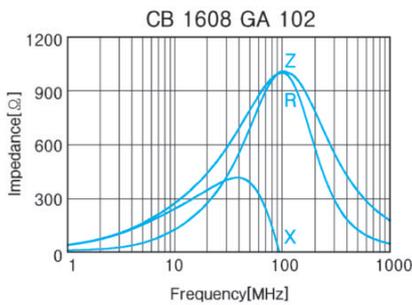
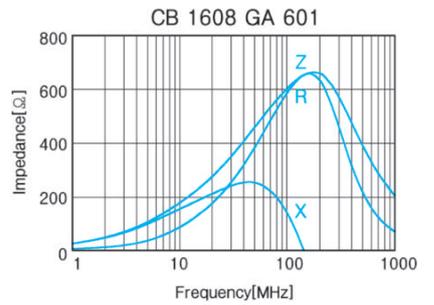
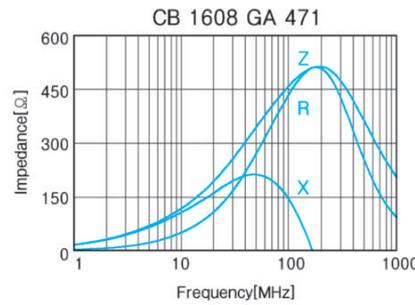
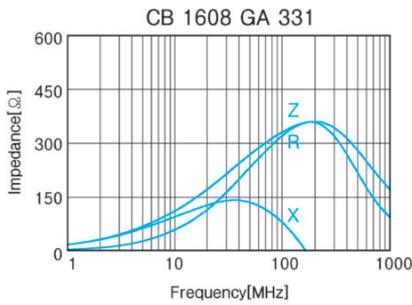
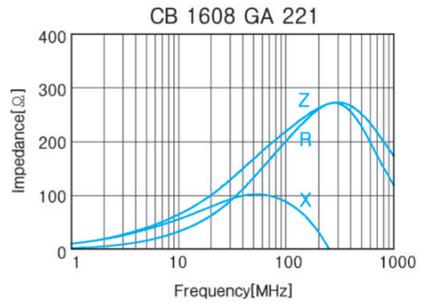
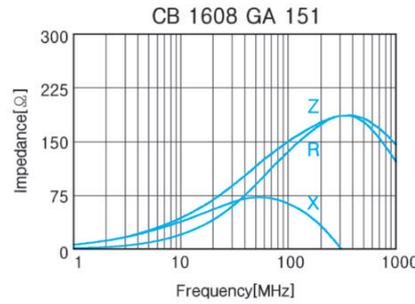
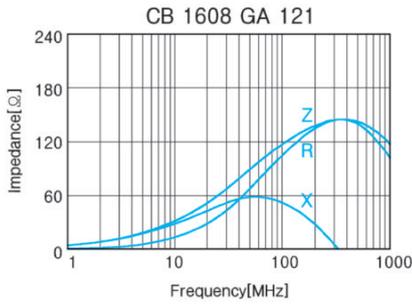
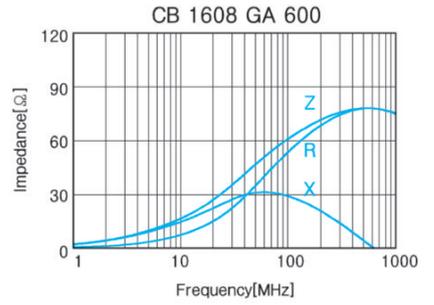
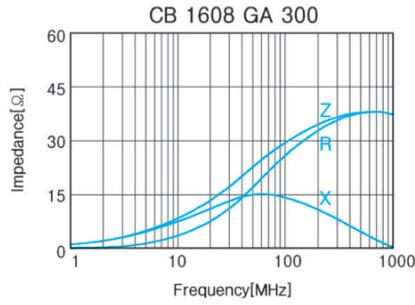
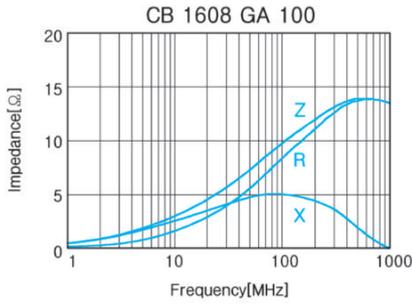
Specifications

1608 SIZE for Signal Line

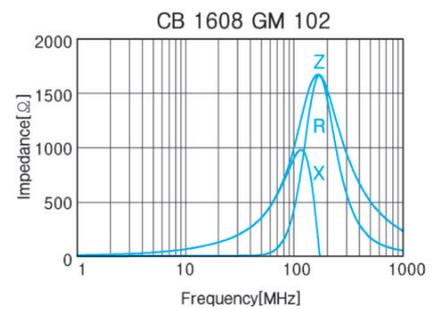
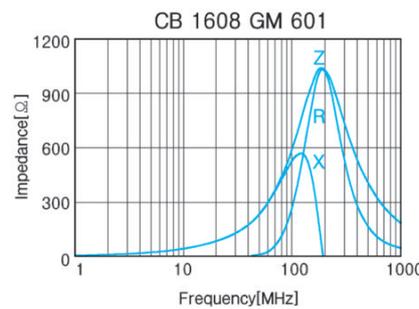
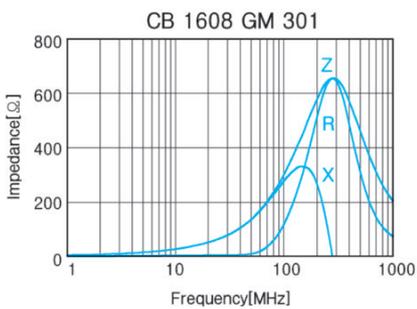
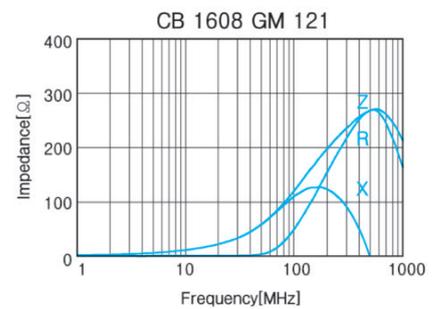
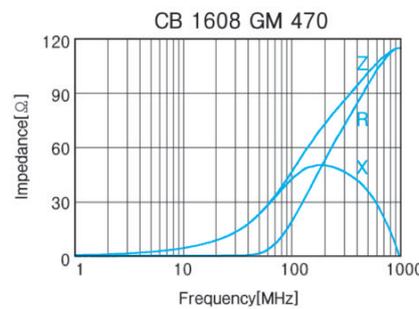
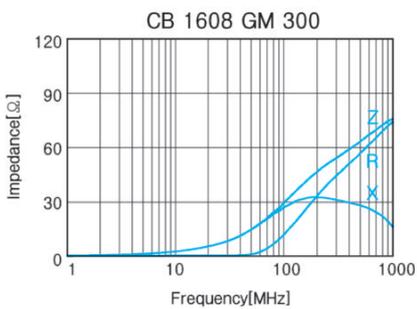
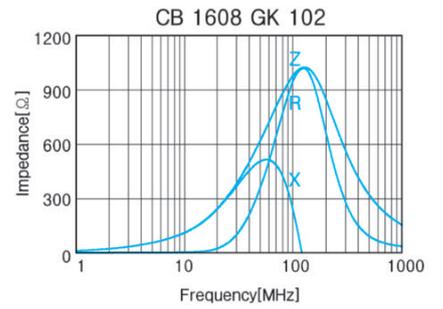
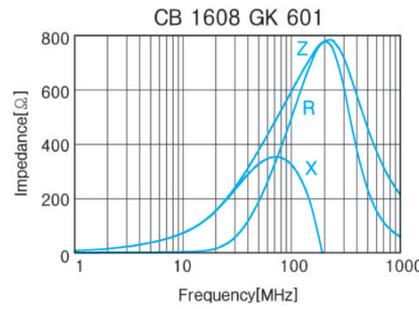
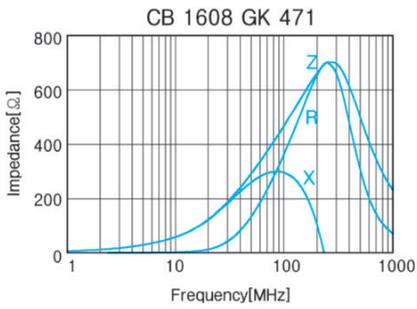
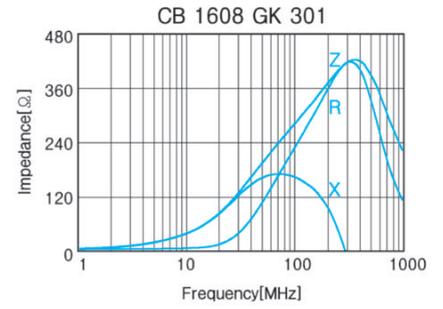
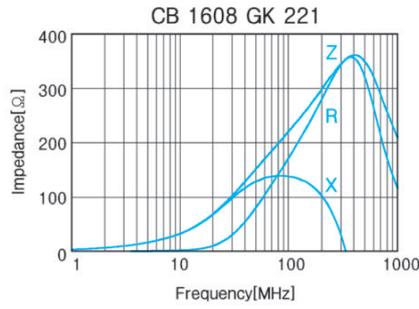
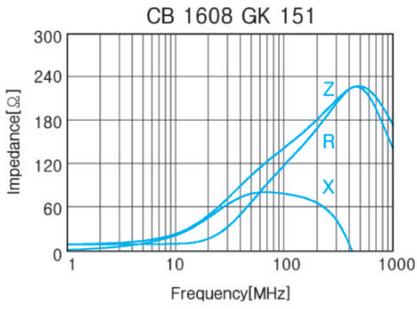
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CB1608GA100	10	0.05	1000	100
CB1608GA180	18	0.05	1000	
CB1608GA200	20	0.05	1000	
CB1608GA300	30	0.05	1000	
CB1608GA600	60	0.10	800	
CB1608GA121	120	0.15	600	
CB1608GA151	150	0.20	500	
CB1608GA221	220	0.30	400	
CB1608GA301	300	0.35	400	
CB1608GA451	450	0.40	400	
CB1608GA471	470	0.40	400	
CB1608GA601	600	0.50	300	
CB1608GA102	1000	0.70	250	
CB1608GJ300	30	0.70	1000	
CB1608GJ600	60	0.80	800	
CB1608GJ121	120	0.20	500	
CB1608GK300	30	0.07	1000	
CB1608GK600	60	0.09	800	
CB1608GK101	100	0.15	600	
CB1608GK121	120	0.15	600	
CB1608GK221	220	0.20	500	
CB1608GK301	300	0.30	400	
CB1608GK471	470	0.40	400	
CB1608GK601	600	0.40	400	
CB1608GK102	1000	0.50	400	
CB1608GK202	2000	1.00	200	
CB1608GK252	2500	1.50	150	
CB1608GM300	30	0.07	1000	
CB1608GM470	47	0.08	900	
CB1608GM600	60	0.09	800	
CB1608GM800	80	0.10	700	
CB1608GM121	120	0.12	500	
CB1608GM151	150	0.15	500	
CB1608GM221	220	0.20	500	
CB1608GM301	300	0.30	400	
CB1608GM471	470	0.40	400	
CB1608GM601	600	0.50	400	
CB1608GM102	1000	0.60	300	
CB1608GM222	2200	0.85	200	
CB1608GV100	10	0.05	1000	
CB1608GV300	30	0.10	700	
CB1608GV600	60	0.10	700	
CB1608GV121	120	0.25	500	
CB1608GV151	150	0.30	400	
CB1608GV221	220	0.40	400	

※ Measuring Equipment : Z - HP4291B / E4991A Rdc - HP4338B

Electrical Characteristics



Electrical Characteristics



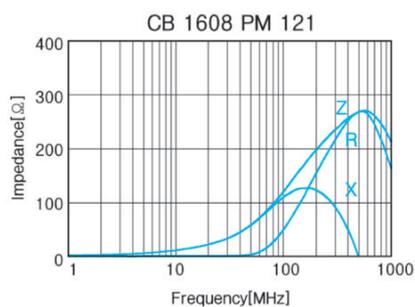
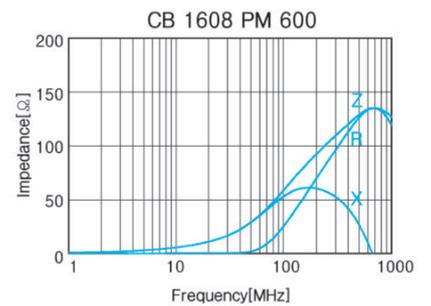
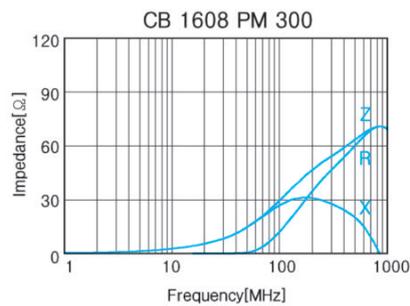
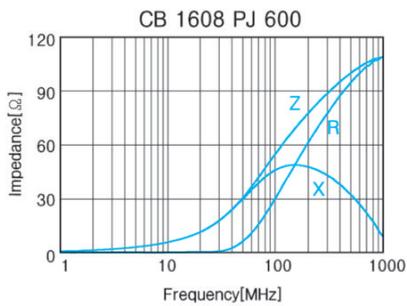
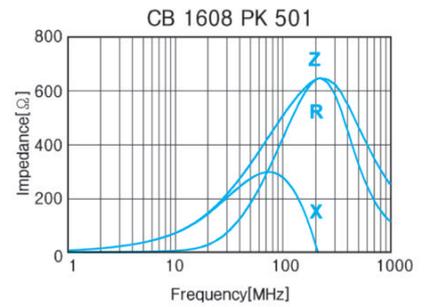
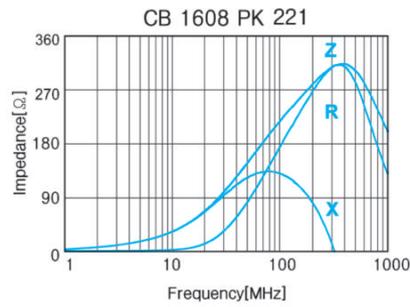
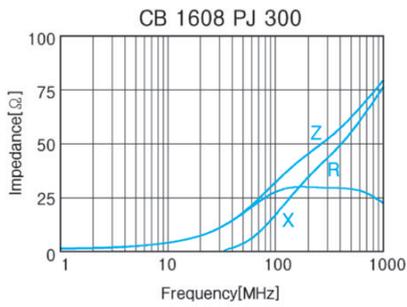
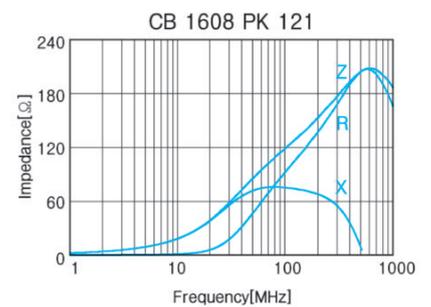
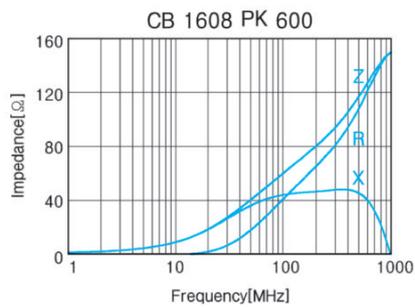
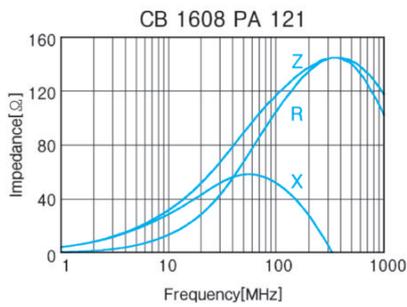
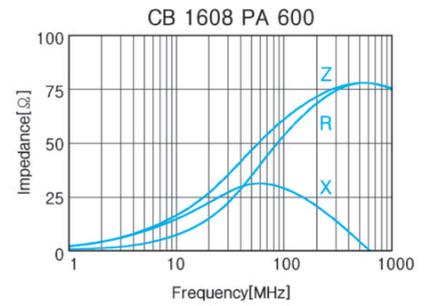
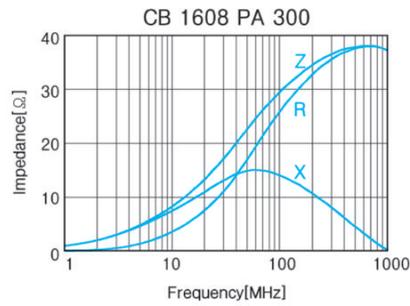
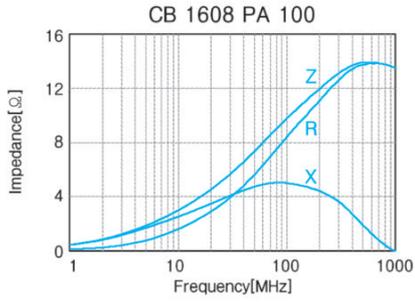
Specifications

1005 & 1608 SIZE for Power Line

Part No.	Impedance(Ω) $\pm 25\%$	DC Resistance(Ω) Max.	Rated Current(mA) Max.	Test Frequency(MHz)
CB1005PK100	10	0.05	1000	100
CB1005PA121	120	0.25	800	
CB1608PA100	10	0.05	2000	
CB1608PA300	30	0.05	2000	
CB1608PA600	60	0.08	1500	
CB1608PA800	80	0.08	1500	
CB1608PA121	120	0.10	800	
CB1608PA181	180	0.09	1500	
CB1608PA221	220	0.20	1000	
CB1608PA301	300	0.30	900	
CB1608PA501	500	0.40	600	
CB1608PA601	600	0.40	600	
CB1608PK100	10	0.05	2000	
CB1608PK300	30	0.05	2000	
CB1608PK600	60	0.08	1500	
CB1608PK100	10	0.05	2000	
CB1608PK121	120	0.08	1000	
CB1608PK181	180	0.12	1000	
CB1608PK221	220	0.20	1000	
CB1608PK301	300	0.30	900	
CB1608PK501	500	0.25	800	
CB1608PK601	600	0.25	800	
CB1608PJ300	30	0.05	2000	
CB1608PJ600	60	0.10	1500	
CB1608PJ121	120	0.12	1000	
CB1608PM300	30	0.06	2000	
CB1608PM600	60	0.08	1500	
CB1608PM121	120	0.12	800	

※ Measuring Equipment : Z : HP4291B / E4991A Rdc : HP4338B

Electrical Characteristics



Specifications

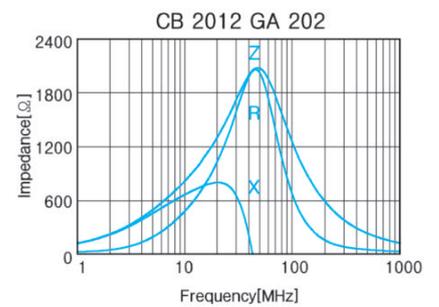
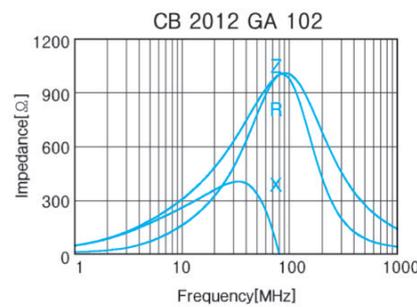
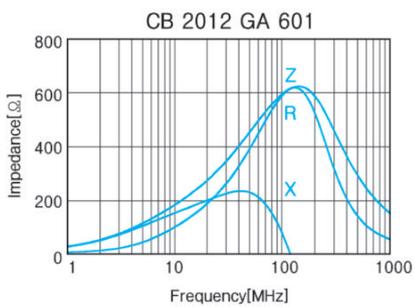
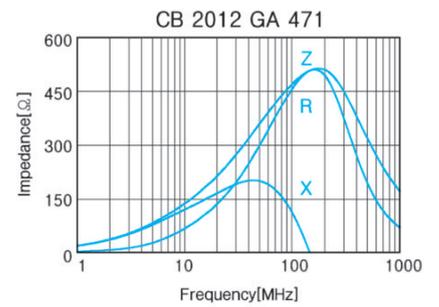
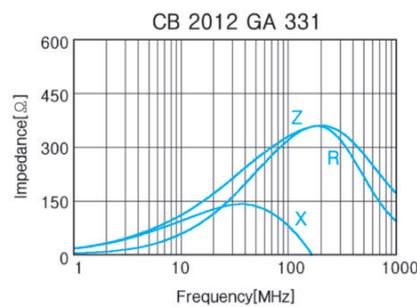
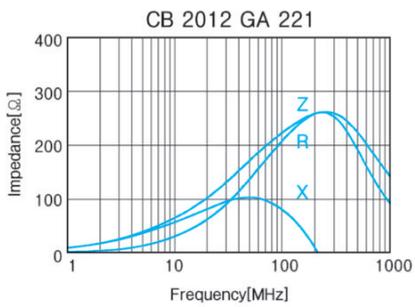
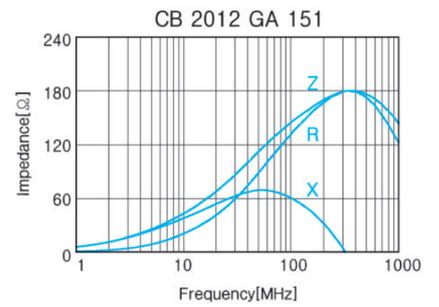
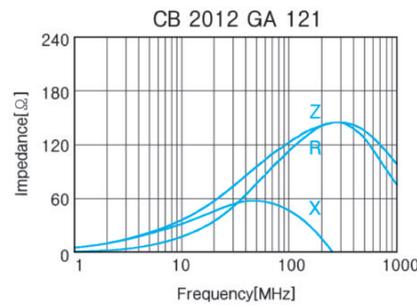
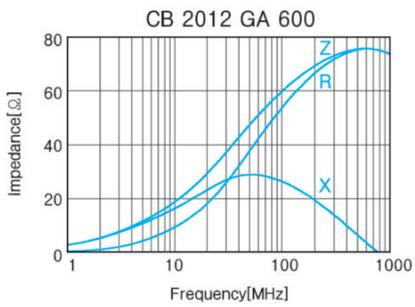
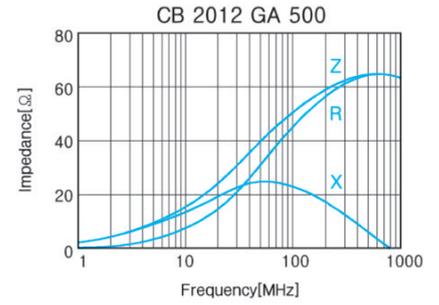
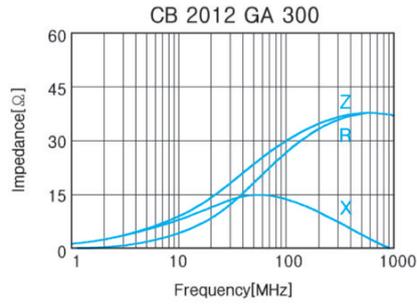
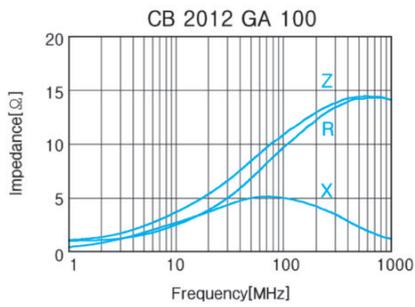
2012 SIZE for Signal Line

Part No.	Impedance(Ω) $\pm 25\%$	DC Resistance(Ω) Max.	Rated Current(mA) Max.	Test Frequency(MHz)	
CB2012GA150	10	0.010	1000	100	
CB2012GA300	30	0.025	1000		
CB2012GA500	50	0.06	600		
CB2012GA600	60	0.06	600		
CB2012GA121	120	0.10	300		
CB2012GA151	150	0.10	300		
CB2012GA221	220	0.12	200		
CB2012GA301	300	0.15	200		
CB2012GA471	470	0.15	200		
CB2012GA601	600	0.25	200		
CB2012GA102	1000	0.30	200		
CB2012GA202	2000	0.50	200		40
CB2012GK150	15	0.02	1000	100	
CB2012GK500	50	0.06	600		
CB2012GK121	120	0.10	300		
CB2012GK151	150	0.10	300		
CB2012GK221	220	0.12	300		
CB2012GK301	300	0.15	300		
CB2012GK471	470	0.25	300		
CB2012GK601	600	0.25	300		
CB2012GK102	1000	0.30	300		
CB2012GK202	2000	0.50	300		40
CB2012GJ300	30	0.02	1000		100
CB2012GJ600	60	0.06	600		
CB2012GM300	30	0.02	1000		
CB2012GM600	60	0.06	600		
CB2012GM800	80	0.08	500		
CB2012GM121	120	0.10	300		
CB2012GM151	150	0.10	300		
CB2012GM221	220	0.12	300		
CB2012GM301	300	0.15	300		
CB2012GM601	600	0.25	300		
CB2012GM102	1000	0.30	300		
CB2012GV080	8	0.05	1000		
CB2012GV121	120	0.20	300		
CB2012GV221	220	0.30	300		

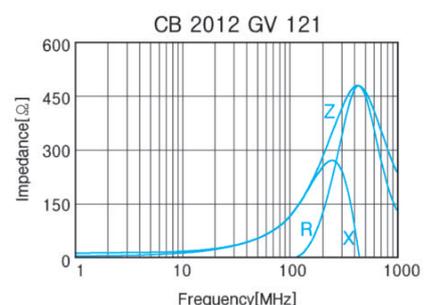
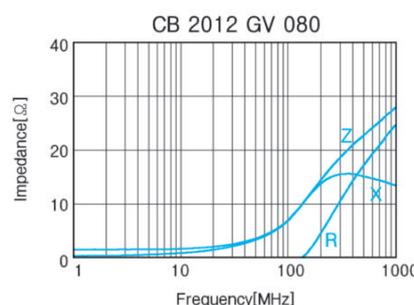
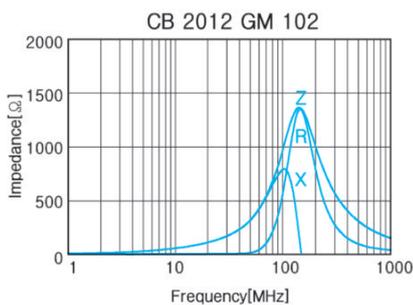
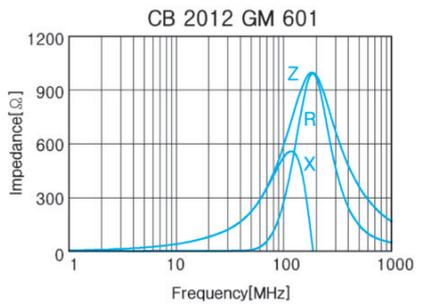
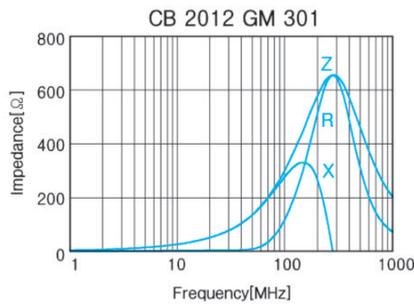
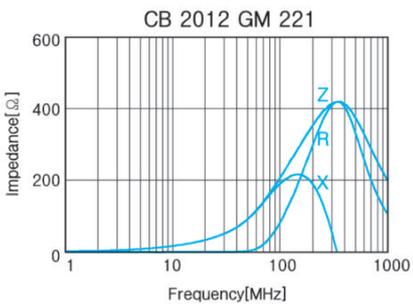
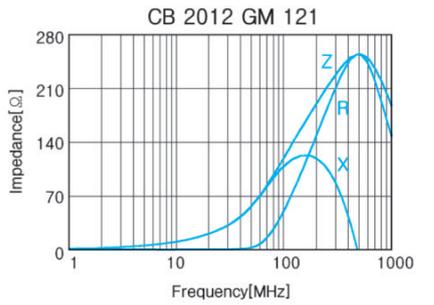
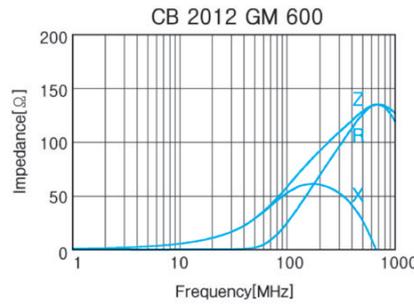
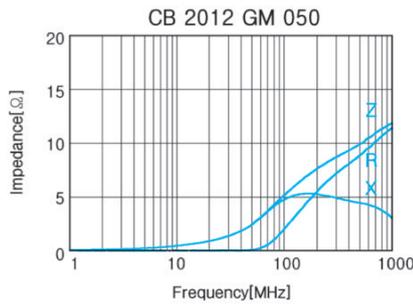
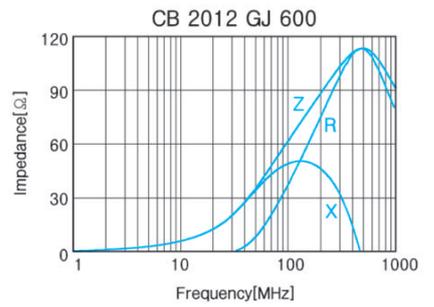
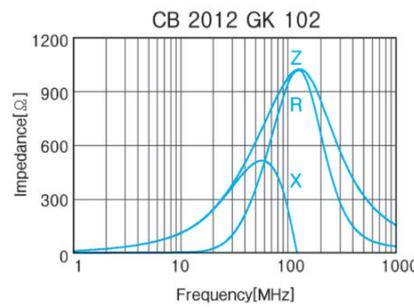
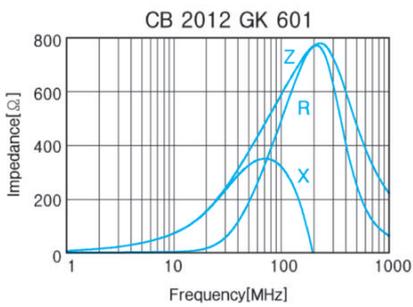
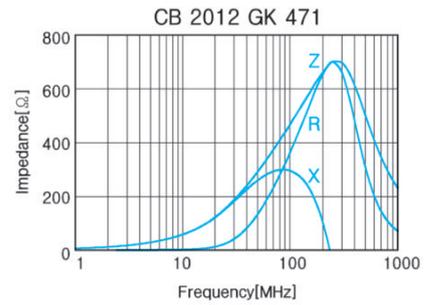
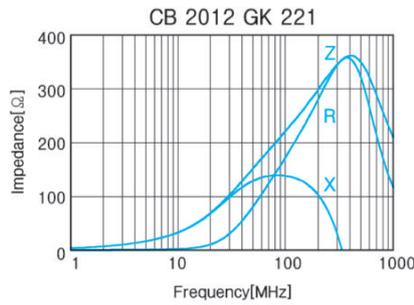
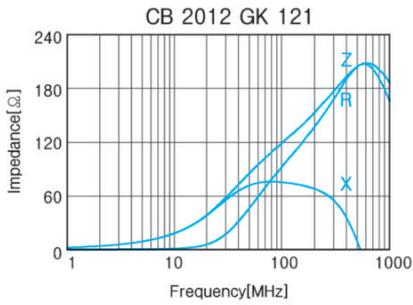
※ Measuring Equipment :

Z : HP4291B / E4991A Rdc : HP4338B

Electrical Characteristics



Electrical Characteristics



Specifications

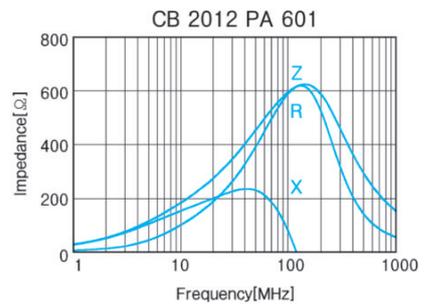
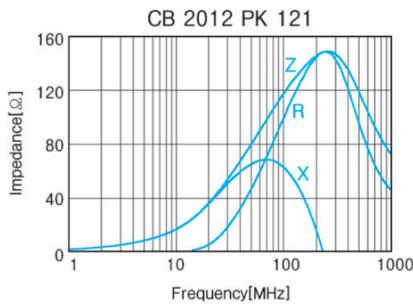
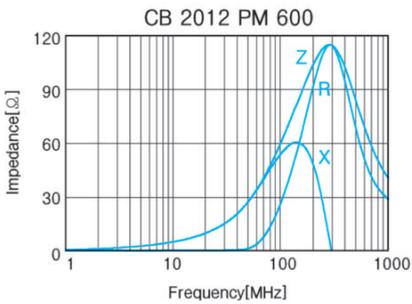
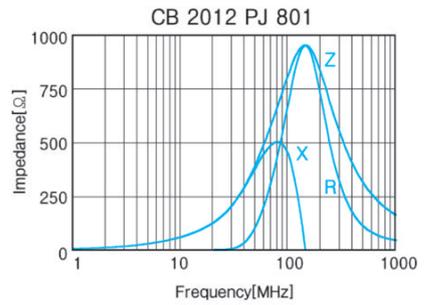
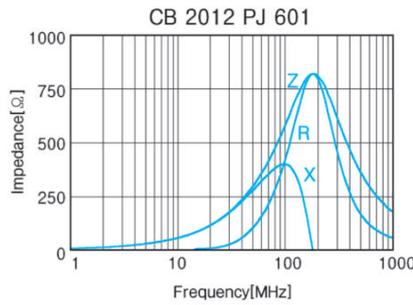
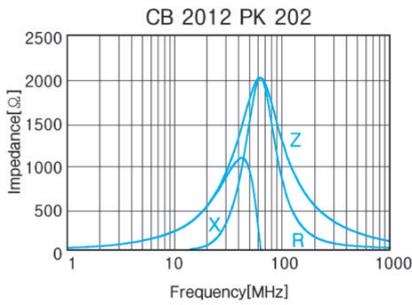
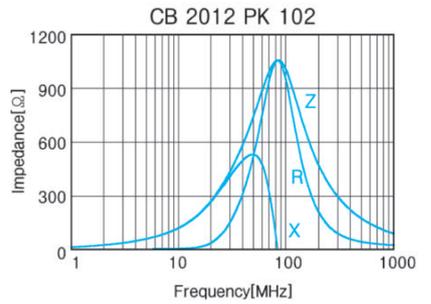
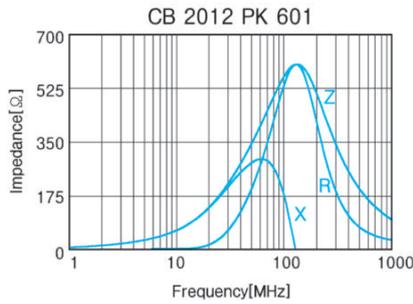
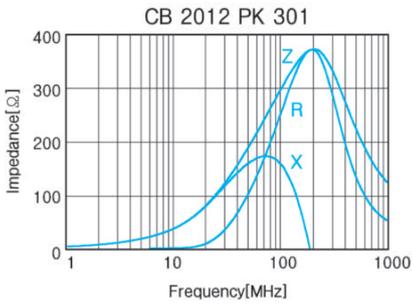
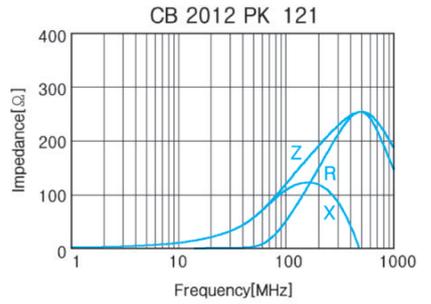
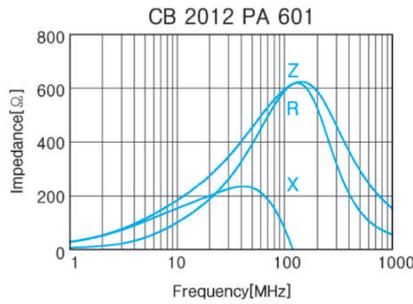
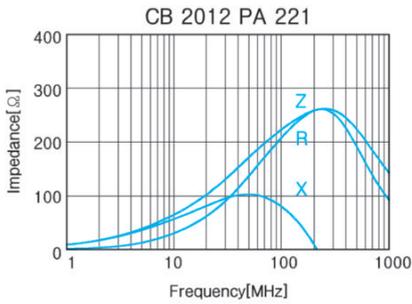
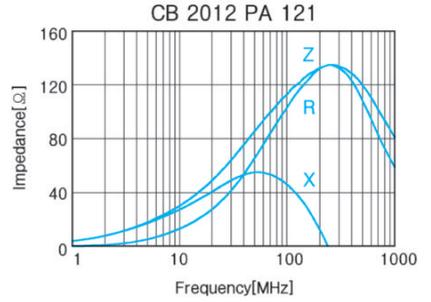
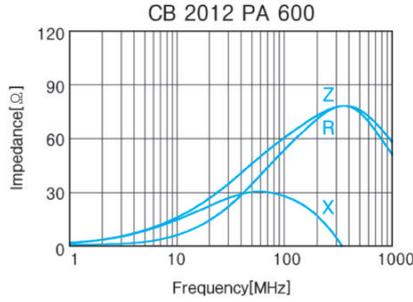
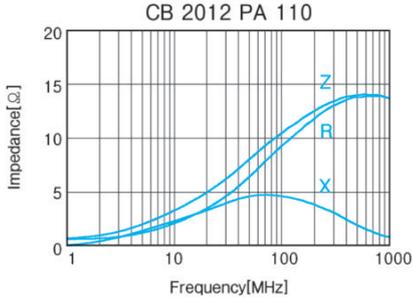
2012 SIZE for Power Line

Part No.	Impedance(Ω) $\pm 25\%$	DC Resistance(Ω) Max.	Rated Current(mA) Max.	Test Frequency(MHz)
CB2012PA110	11	0.010	3000	100
CB2012PA300	30	0.02	3000	
CB2012PA500	50	0.03	3000	
CB2012PA600	60	0.03	3000	
CB2012PA800	80	0.03	3000	
CB2012PA101	100	0.05	2500	
CB2012PA121	120	0.05	2500	
CB2012PA221	220	0.05	2000	
CB2012PA301	300	0.1	2000	
CB2012PA601	600	0.13	1500	
CB2012PK150	15	0.020	3000	
CB2012PK260	26	0.02	3000	
CB2012PK300	30	0.020	3000	
CB2012PK600	60	0.030	3000	
CB2012PK800	80	0.03	3000	
CB2012PK121	120	0.050	3000	
CB2012PK151	150	0.05	3000	
CB2012PK181	180	0.05	3000	
CB2012PK221	220	0.050	2500	
CB2012PK301	300	0.06	3000	
CB2012PK501	500	0.06	3000	
CB2012PK601	600	0.100	2000	
CB2012PK102	1000	0.250	1000	
CB2012PK202	2000	0.300	500	70
CB2012PJ601	600	0.100	2000	100
CB2012PJ102	1000	0.300	800	
CB2012PM260	26	0.030	4000	
CB2012PM600	60	0.030	4000	
CB2012PM121	120	0.050	2500	
CB2012PM221	220	0.050	2000	
CB2012PM301	300	0.07	2000	
CB2012PM601	600	0.130	1500	
CB2012PM252	2500	0.400	700	70

※ Measuring Equipment :

Z : HP4291B / E4991A Rdc : HP4338B

Electrical Characteristics



Specifications

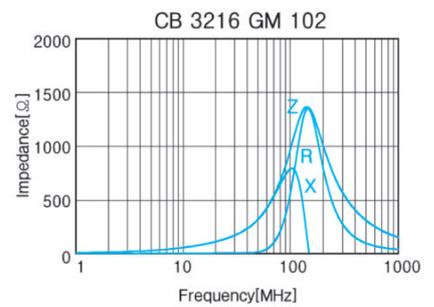
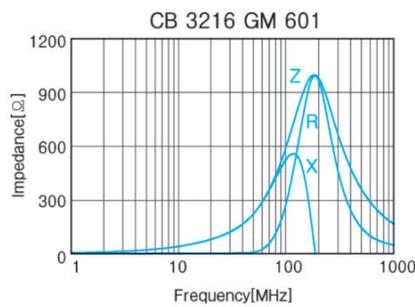
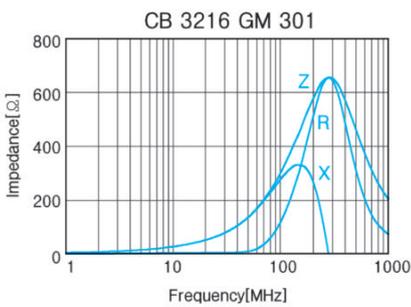
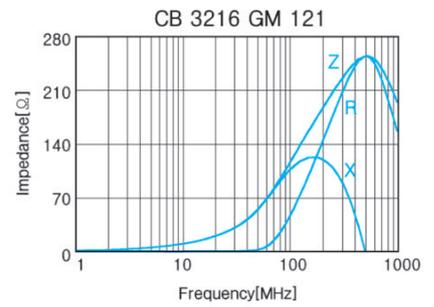
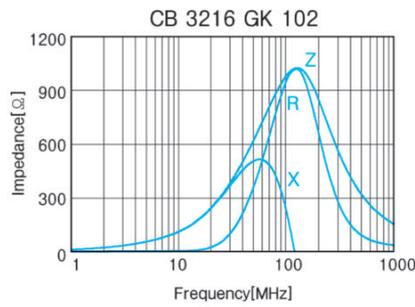
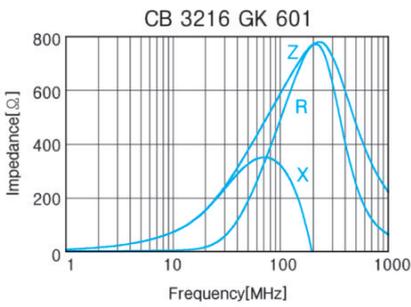
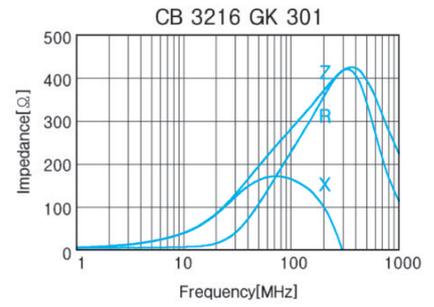
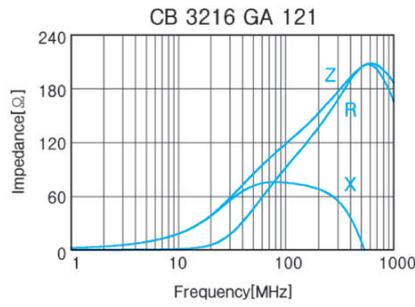
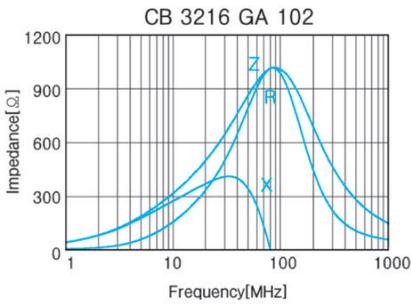
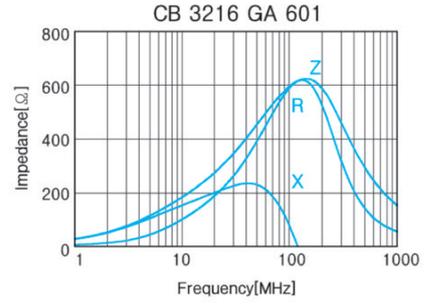
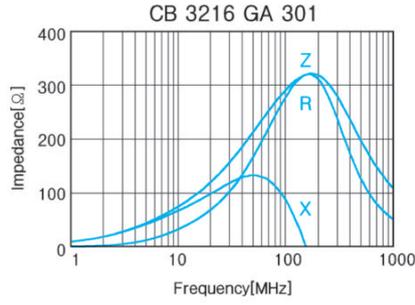
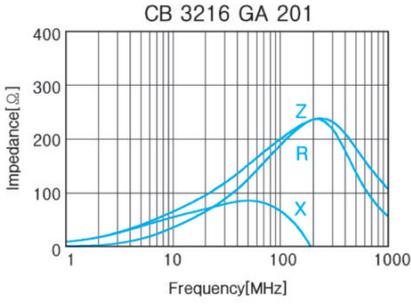
3216 SIZE for Signal Line

Part No.	Impedance(Ω) $\pm 25\%$	DC Resistance(Ω) Max.	Rated Current(mA) Max.	Test Frequency(MHz)
CB3216GA330	33	0.02	600	100
CB3216GA350	33	0.03	600	
CB3216GA500	50	0.03	600	
CB3216GA600	60	0.04	600	
CB3216GA700	70	0.04	600	
CB3216GA101	100	0.05	500	
CB3216GA121	120	0.10	300	
CB3216GA151	150	0.10	300	
CB3216GA201	200	0.15	300	
CB3216GA301	300	0.20	250	
CB3216GA601	600	0.30	200	
CB3216GA102	1000	0.40	200	
CB3216GK500	50	0.03	600	
CB3216GK121	120	0.05	600	
CB3216GK151	150	0.05	600	
CB3216GK221	220	0.10	300	
CB3216GK301	300	0.12	250	
CB3216GK471	470	0.15	200	
CB3216GK601	600	0.20	200	
CB3216GK102	1000	0.25	200	
CB3216GM121	120	0.10	300	
CB3216GM151	150	0.10	300	
CB3216GM201	200	0.15	300	
CB3216GM301	300	0.20	250	
CB3216GM601	600	0.30	200	
CB3216GM102	1000	0.40	200	

※ Measuring Equipment :

Z : HP4291B / E4991A Rdc : HP4338B

Electrical Characteristics



Specifications

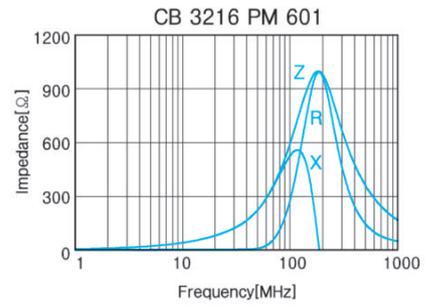
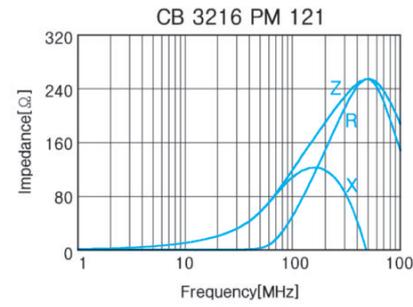
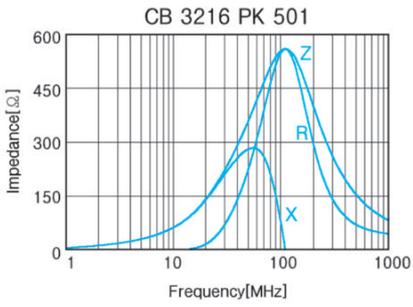
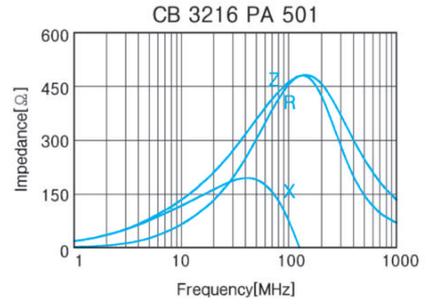
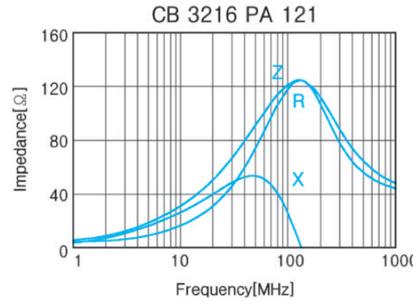
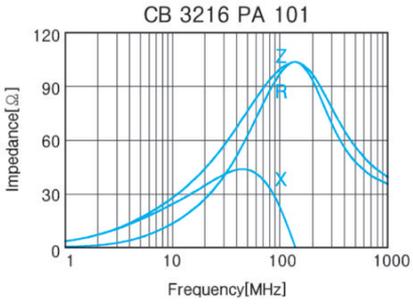
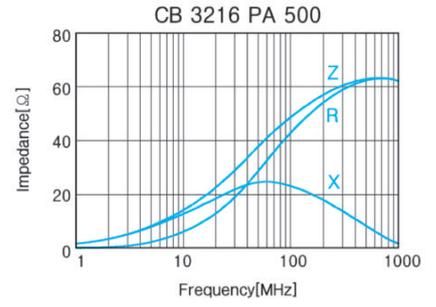
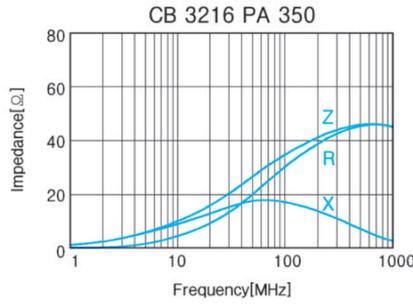
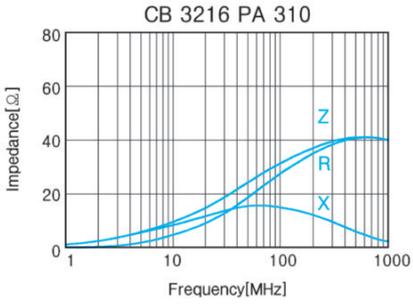
3216 SIZE for Power Line

Part No.	Impedance(Ω) $\pm 25\%$	DC Resistance(Ω) Max.	Rated Current(mA) Max.	Test Frequency(MHz)
CB3216PA310	31	0.03	4000	100
CB3216PA330	33	0.03	4000	
CB3216PA350	35	0.03	4000	
CB3216PA500	50	0.03	4000	
CB3216PA600	60	0.03	4000	
CB3216PA700	70	0.03	4000	
CB3216PA900	90	0.03	4000	
CB3216PA101	100	0.03	3000	
CB3216PA121	120	0.04	3000	
CB3216PA151	150	0.05	3000	
CB3216PA301	300	0.06	3000	
CB3216PA391	390	0.06	3000	
CB3216PA501	500	0.06	3000	
CB3216PA500	50	0.02	4000	
CB3216PA121	120	0.03	4000	
CB3216PA301	300	0.06	3000	
CB3216PA601	600	0.06	3000	
CB3216PK501	500	0.06	3000	
CB3216PK601	600	0.06	3000	
CB3216PJ601	600	0.06	3000	
CB3216PM121	120	0.03	3000	
CB3216PM601	600	0.06	3000	

※ Measuring Equipment :

Z : HP4291B / E4991A Rdc : HP4338B

Electrical Characteristics



Ultra Power Line Series

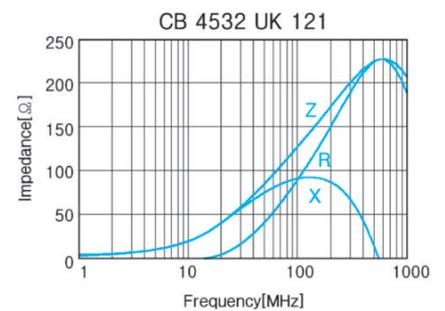
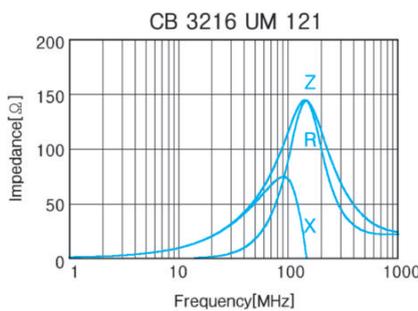
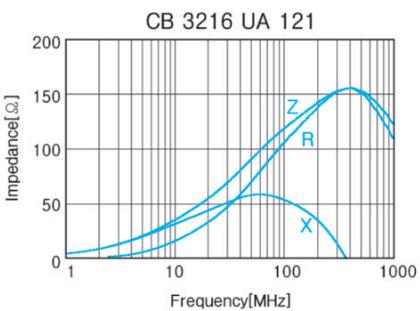
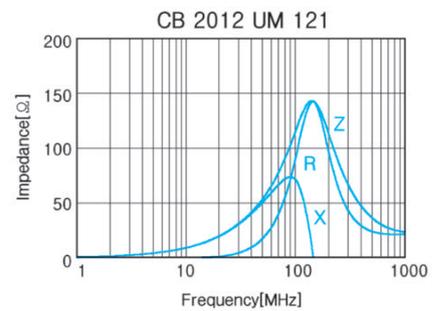
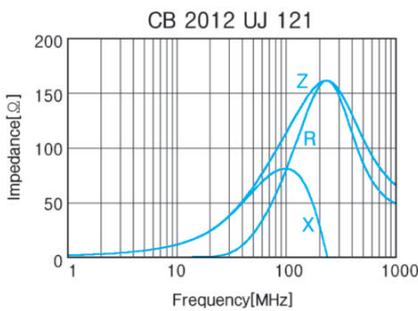
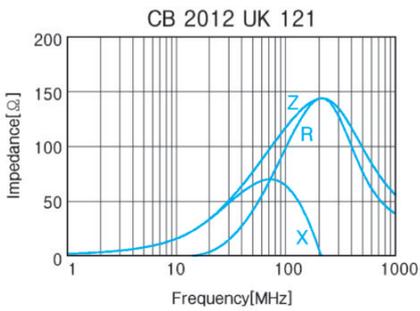
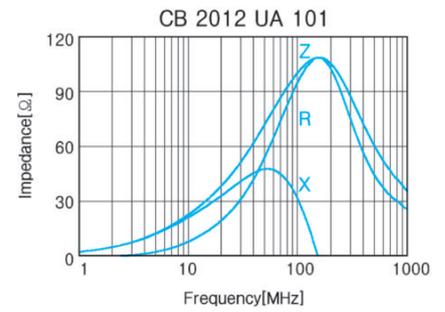
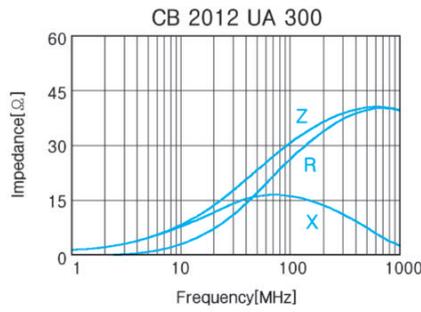
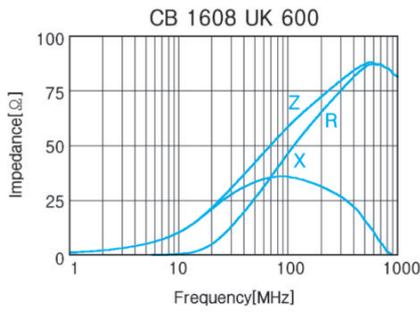
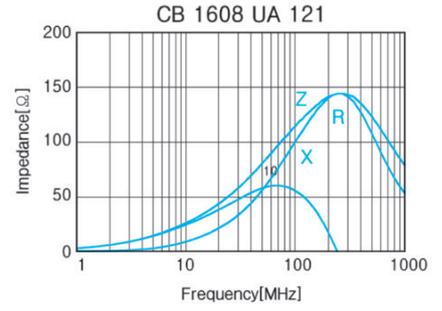
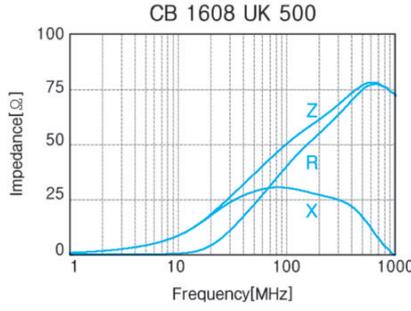
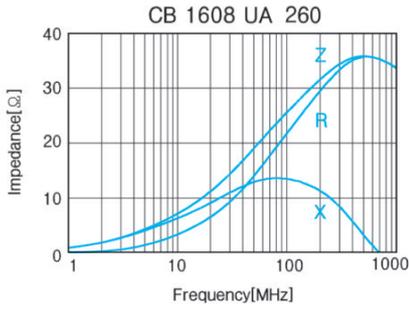
1608~4532 SIZE

Part No.	Impedance(Ω) $\pm 25\%$	DC Resistance(Ω) Max.	Rated Current(mA) Max.	Test Frequency(MHz)
CB1608UA600	60	0.03	4000	100
CB1608UA101	100	0.03	4000	
CB1608UA121	120	0.050	2000	
CB1608UA260	26	0.01	6000	
CB1608UA260S	26	0.007	6000	
CB1608UK500	50	0.030	4000	
CB1608UK600	60	0.030	4000	
CB2012UA300	30	0.08	5000	
CB2012UA600	60	0.015	5000	
CB2012UA101	100	0.020	4000	
CB2012UA121	120	0.030	5000	
CB2012UK400	40	0.02	5000	
CB2012UK121	120	0.030	4000	
CB2012UJ121	120	0.030	4000	
CB2012UM121	120	0.030	4000	
CB3216UA300	30	0.02	6000	
CB3216UA350	35	0.02	6000	
CB3216UA121	120	0.020	6000	
CB3216UM600	60	0.010	6000	
CB3216UM121	120	0.200	6000	
CB4516UM600	60	0.010	6000	
CB4532UK121	120	0.02	6000	
CB4532UK401	400	0.04	4000	

※ Measuring Equipment :

Z : HP4291B / E4991A Rdc : HP4338B

Electrical Characteristics



Chip Giga Ferrite Beads

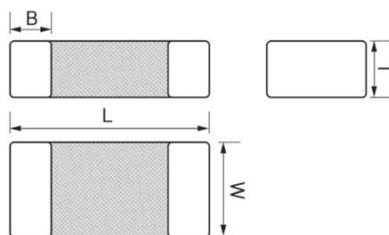
Features

- High impedance characteristics at GHz band
- Good reliability (Monolithic structure)
- Magnetically shielded
- Fast mounting speed
- RoHS compliant

Applications

- PDP/LCD Monitor, DSC, DVC, Set Top Box
- Mobile phone

Dimensions



(Unit : mm)

Size	L	W	T	B
1005	1.0±0.1	0.5±0.05	0.5±0.05	0.25±0.1
1608	1.6±0.15	0.8±0.15	0.8±0.15	0.4±0.2

How to Order(Product Identification)

GB 2012 G A 601 T



Temperature Range

- Operating Temp. -55 ~ +125°C
- Storage Temp. -55 ~ +125°C(After mounting)

1 Series Code

GB : Giga Ferrite Beads

2 Dimension Code

The first two digits : length(mm)
The last two digits : width(mm)

3 Application Code

G : Signal Line
P : High Current Line

4 Material Code

5 Impedance Value Code

The first two digits represents significant
The last digit is the number of zeros following
ex) 601 = 600 (Ω)

6 Package Code

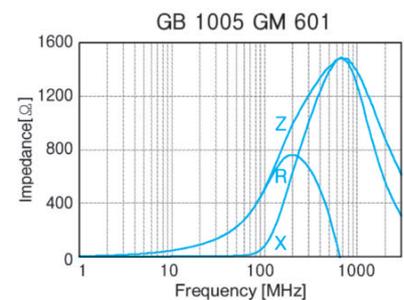
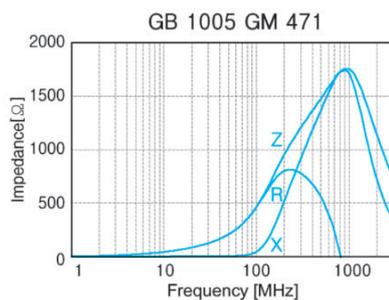
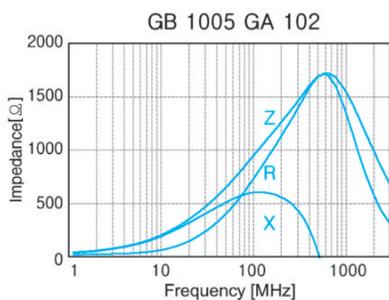
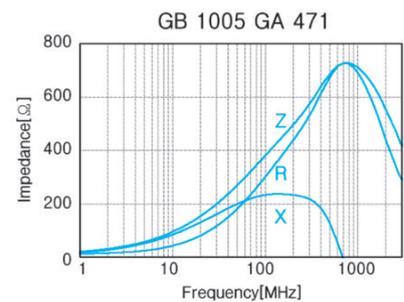
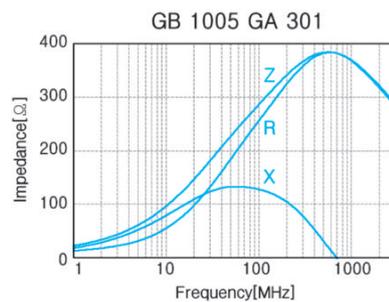
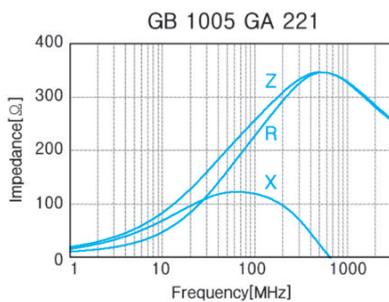
T : Reel paper packaging
E : Reel embossed tape packaging

Specifications

1005 SIZE

Part No.	Impedance(Ω) $\pm 25\%$		Impedance(Ω) $\pm 40\%$		DC Resistance(Ω)		Rated Current(mA)	
	@100MHz		@1GHz		Max.		Max.	
GB1005GA221	220		420		0.7		200	
GB1005GA301	300		560		0.8		200	
GB1005GA471	470		1000		1.0		100	
GB1005GA102	1000		1700		1.6		100	
GB1005GM471	470		1100		0.8		300	
GB1005GM601	600		1400		0.85		300	

Electrical Characteristics



Specifications

1608 SIZE

Part No.	Impedance(Ω) $\pm 25\%$ @100MHz	DC Resistance(Ω) $+/-40\%$ @1GHz	DC Resistance(Ω) Max.	Rated Current(mA) Max.
GB1608GA102	1000	1200 \pm 40%	1.5	50
GB1608GA152	1200	1000 \pm 40%	1.5	50
GB1608GK601	600	1000 (Typ.)	0.8	200
GB1608GK102	1000	1400 (Typ.)	1.0	100
GB1608GM601	600	1200 (Min.)	1.5	100
GB1608GV221	220	1100 \pm 40%	0.8	100
GB1608GV471	470	2100 \pm 40%	1.2	50

※ Measuring Equipment :

Z : HP4291B / E4991A Rdc : HP4338B

Electrical Characteristics

