

MCB-S Series

Features

1. Monolithic inorganic material construction.
2. Closed magnetic circuit avoids crosstalk.
3. S.M.T. type & suitable for reflow and wave soldering.
4. Available in various sizes.
5. Excellent solderability and heat resistance.
6. High reliability
7. Effectively filtering capability over a wide range of frequency.

Applications

Filtering between analog and digital circuitry, clock generation circuitry, I/O interconnects, isolation between RF noisy circuits and logic devices susceptible to functional degradation, power supply filtering to prevent conducted RF energy from corrupting the power generation circuitry, high frequency EMI prevention of computer, printers, VCRs, TVs and portable telephones.

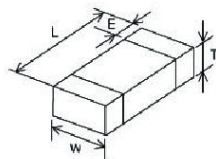
Part Number

$\frac{\text{MCB}}{(1)}$
 $\frac{1005}{(2)}$
 $\frac{\text{S}}{(3)}$
 $\frac{12}{(4)}$
 $\frac{1}{(5)}$
 $\frac{\text{A}}{(6)}$
 $\frac{\text{A}}{(7)}$

- (1) Series type : M4A—Chip Ferrite Bead
- (2) Size(mm) : Length x Width
- (3) Product Characteristics : S=Standard

- (4) Impedance (Ω)/ $\pm 25\%$:]ex: 60 Ω →600; 120 Ω →121
- (5) Fixed Decimal Point
- (6) Rated Current :
 A =50mA, B=80mA, C=100mA, D=150mA,
 E=200mA, F=300mA, G=400mA, H=500mA,
 I=600mA, J=700mA, K=800mA
- (7) Green Parts: A — Soldering Lead-Free,
 B — Parts Lead-Free

Dimensions



Size(EIA)	1005 (0402)	1608 (0603)	2012 (0805)	3216 (1206)	3225 (1210)	4516 (1806)	4532 (1812)
L	1.00±0.10	1.60±0.15	2.00±0.20	3.20±0.20	3.20±0.20	4.50±0.25	4.50±0.25
W	0.50±0.10	0.80±0.15	1.25±0.20	1.60±0.20	2.50±0.20	1.60±0.20	3.20±0.25
T	0.50±0.10	0.80±0.15	0.90±0.20	1.10±0.20	1.30±0.20	1.60±0.20	1.50±0.25
E	0.25±0.10	0.30±0.20	0.50±0.30	0.50±0.30	0.50±0.30	0.60±0.40	0.60±0.40

() means EIA size spec Unit: mm

Chip Ferrite Bead



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Specifications

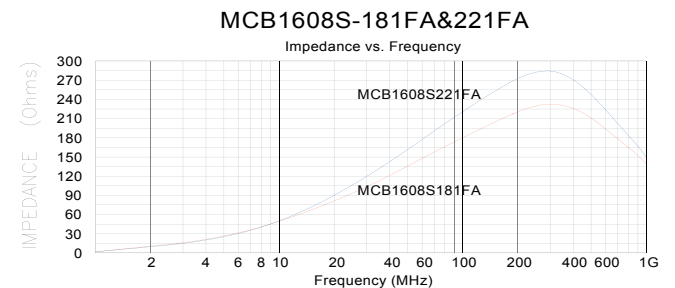
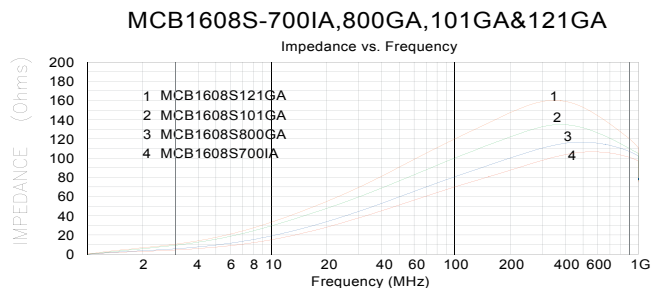
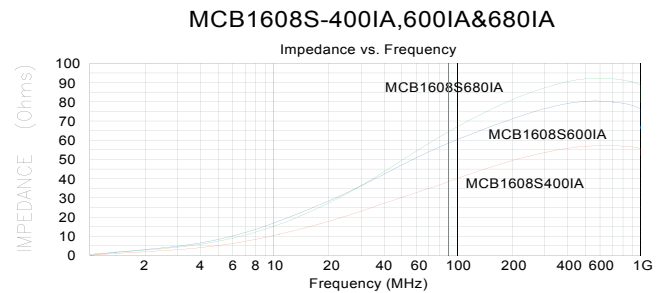
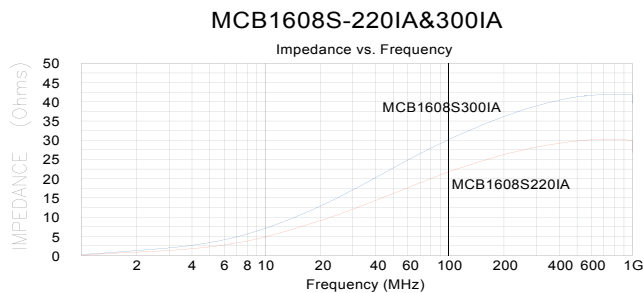
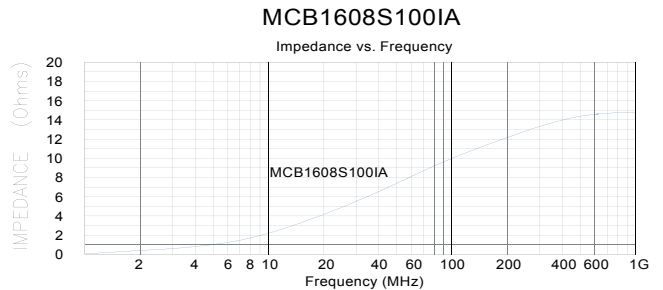
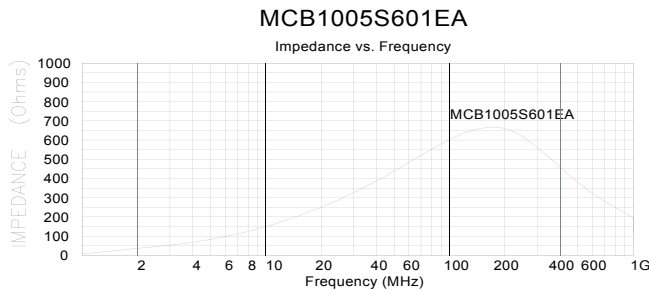
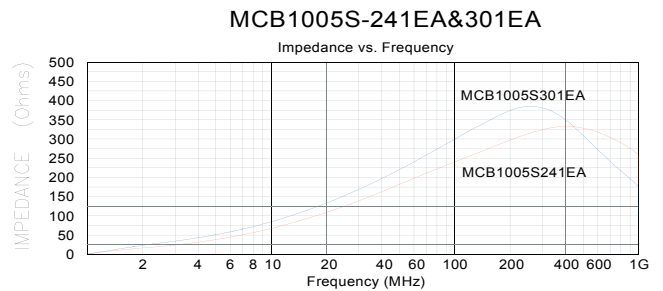
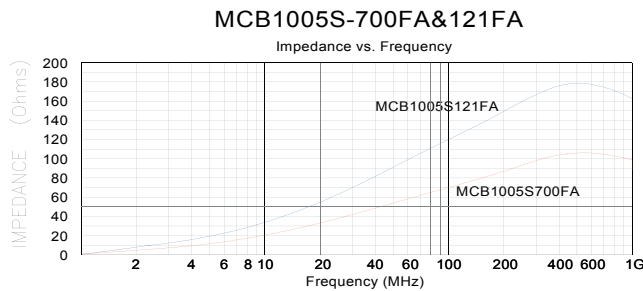
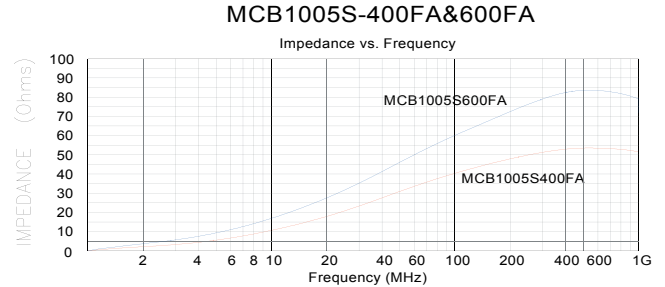
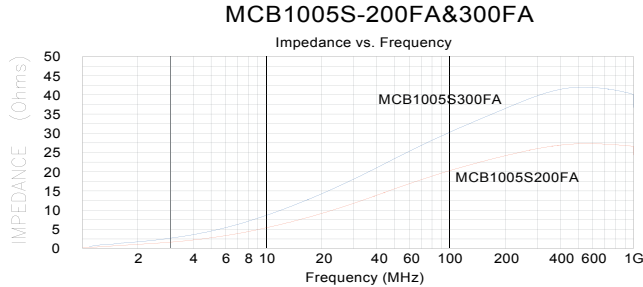
Part No.	Impedance +/- 25% (Ω)	@Freq. (MHz)	DCR max.(Ω)	Rated Current(mA)	Part No.	Impedance +/- 25% (Ω)	@ Freq. (MHz)	DCR max.(Ω)	Rated Current(mA)
1005(EIA 0402)					2012 (EIA 0805)				
MCB1005S200F_	20	100	0.20	300	MCB2012S181H_	180	100	0.20	500
MCB1005S300F_	30	100	0.25	300	MCB2012S221H_	220	100	0.20	500
MCB1005S400F_	40	100	0.30	300	MCB2012S301H_	300	100	0.20	500
MCB1005S600F_	60	100	0.35	300	MCB2012S401H_	400	100	0.30	500
MCB1005S700F_	70	100	0.35	300	MCB2012S601H_	600	100	0.30	500
MCB1005S121F_	120	100	0.40	300	MCB2012S701F_	700	100	0.35	300
MCB1005S241E_	240	100	0.70	200	MCB2012S102F_	1000	100	0.35	300
MCB1005S301E_	300	100	0.80	200	MCB2012S152E_	1500	100	0.40	200
MCB1005S601E_	600	100	1.00	200	MCB2012S202E_	2000	100	0.50	200
1608 (EIA 0603)					1608 (EIA 1206)				
MCB1608S100I_	10	100	0.05	600	MCB3216S190I_	19	100	0.05	600
MCB1608S220I_	22	100	0.05	600	MCB3216S260I_	26	100	0.05	600
MCB1608S300I_	30	100	0.08	600	MCB3216S310I_	31	100	0.05	600
MCB1608S400I_	40	100	0.10	600	MCB3216S500I_	50	100	0.08	600
MCB1608S600I_	60	100	0.10	600	MCB3216S700I_	70	100	0.10	600
MCB1608S680I_	68	100	0.10	600	MCB3216S900H_	90	100	0.15	500
MCB1608S700I_	70	100	0.10	600	MCB3216S121H_	120	100	0.15	500
MCB1608S800G_	80	100	0.10	400	MCB3216S151H_	150	100	0.15	500
MCB1608S101G_	100	100	0.15	400	MCB3216S201H_	200	100	0.20	500
MCB1608S121G_	120	100	0.15	400	MCB3216S221H_	220	100	0.20	500
MCB1608S181F_	180	100	0.30	300	MCB3216S301H_	300	100	0.20	500
MCB1608S221F_	220	100	0.30	300	MCB3216S601H_	600	100	0.30	500
MCB1608S301F_	300	100	0.35	300	MCB3216S801E_	800	100	0.30	200
MCB1608S451F_	450	100	0.40	300	MCB3216S102E_	1000	100	0.40	200
MCB1608S471E_	470	100	0.40	200	MCB3216S122E_	1200	100	0.40	200
MCB1608S601E_	600	100	0.45	200	MCB3216S152E_	1500	50	0.50	200
MCB1608S751C_	750	100	0.60	100	MCB3216S202E_	2000	30	0.50	200
MCB1608S102C_	1000	100	0.60	100	3225 (EIA 1210)				
2012 (EIA 0805)					MCB3225S310G_	31	100	0.30	400
MCB2012S070I_	7	100	0.05	600	MCB3225S600G_	60	100	0.30	400
MCB2012S110I_	11	100	0.05	600	MCB3225S900G_	90	100	0.30	400
MCB2012S170I_	17	100	0.05	600	4516 (EIA 1806)				
MCB2012S260I_	26	100	0.05	600	MCB4516S680H_	68	100	0.10	500
MCB2012S320I_	32	100	0.05	600	MCB4516S800G_	80	100	0.10	400
MCB2012S400I_	40	100	0.05	600	MCB4516S101F_	100	100	0.20	300
MCB2012S600I_	60	100	0.15	600	MCB4516S151E_	150	100	0.30	200
MCB2012S800I_	80	100	0.15	600	4532 (EIA 1812)				
MCB2012S900I_	90	100	0.15	600	MCB4532S700E_	70	100	0.40	200
MCB2012S121H_	120	100	0.15	500	MCB4532S800E_	80	100	0.40	200
MCB2012S151H_	150	100	0.15	500	MCB4532S121E_	120	100	0.40	200

General technical data

Operating temperature range	-55 °C ~ +125 °C
Storage temperature	-40 °C ~ +85 °C , 70% RH Max
Soldering method	Reflow or Wave Soldering

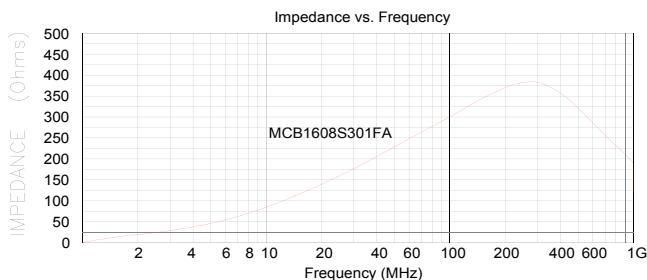
MCB-S Series

Impedance vs. Frequency

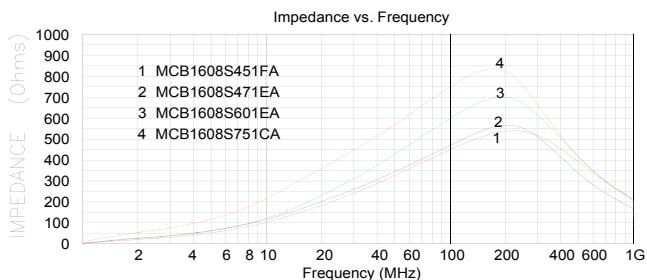


MCB-S Series

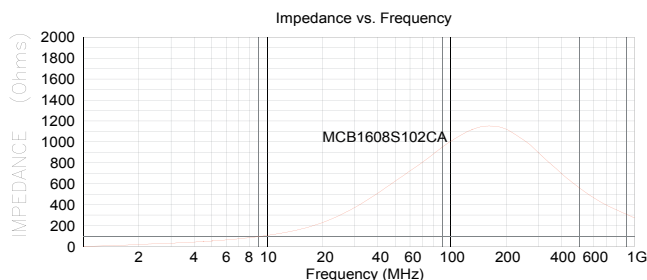
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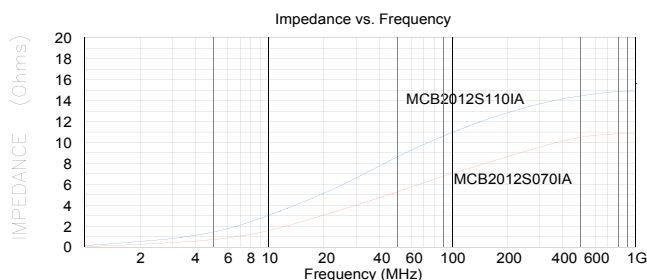
MCB1608S-451FA,471EA,601EA&751CA



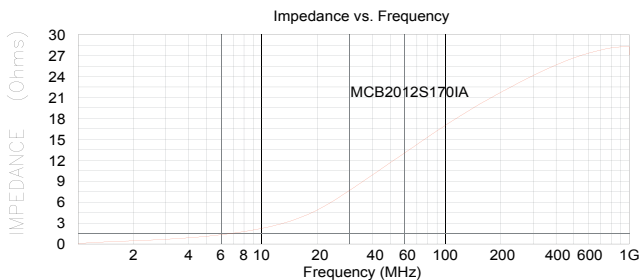
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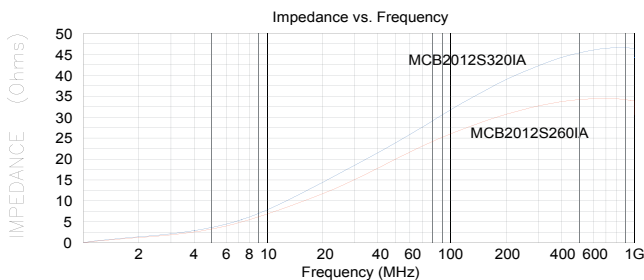
MCB2012S-070IA&110IA



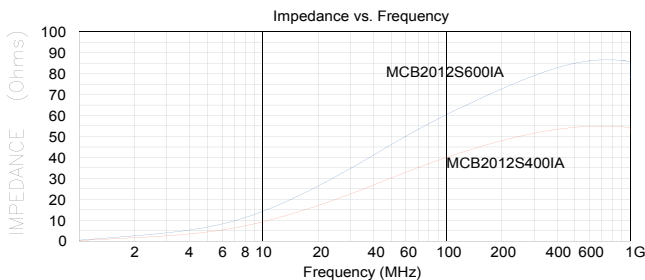
MCB2012S170IA



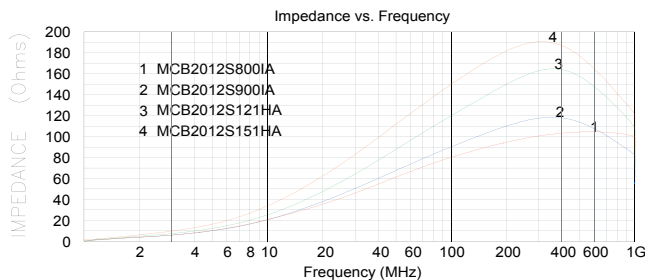
MCB2012S-260IA&320IA



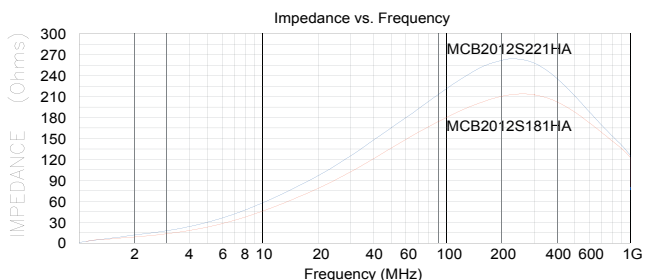
MCB2012S-400IA&600IA



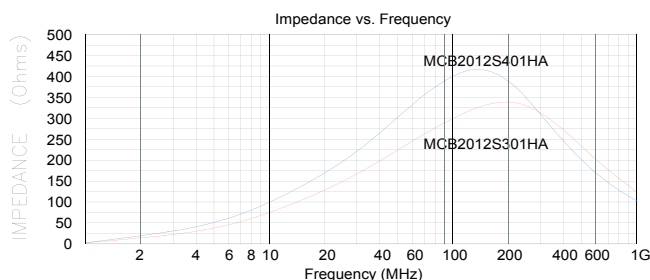
MCB2012S-800IA,900IA,121HA&151HA



MCB2012S-181HA&221HA

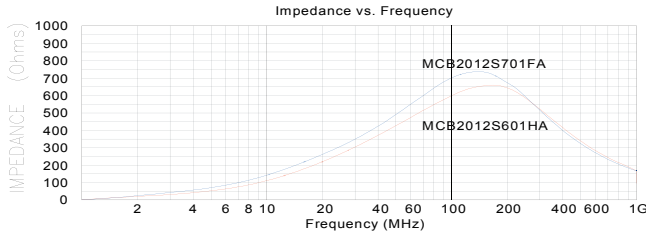


MCB2012S-301HA&401HA

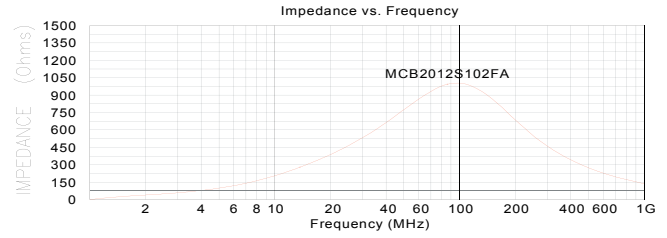


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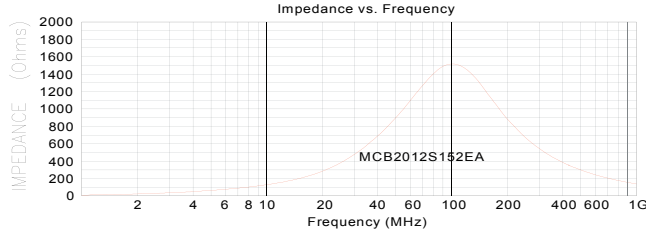
MCB2012S-601HA&701FA



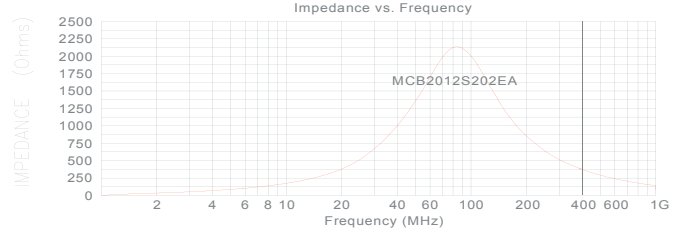
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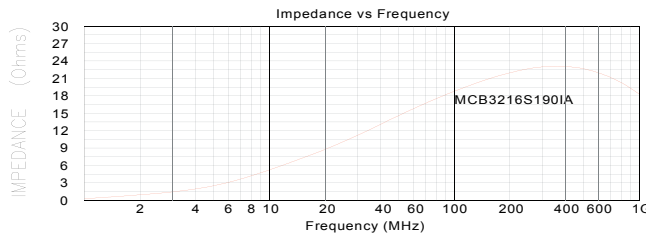
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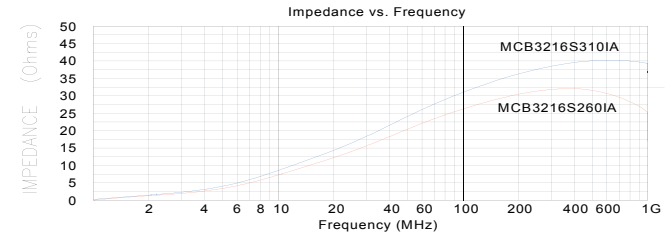
MCB2012S-202EA



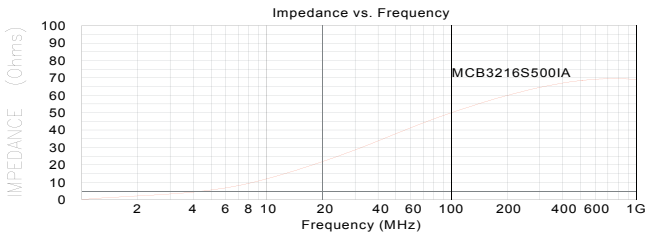
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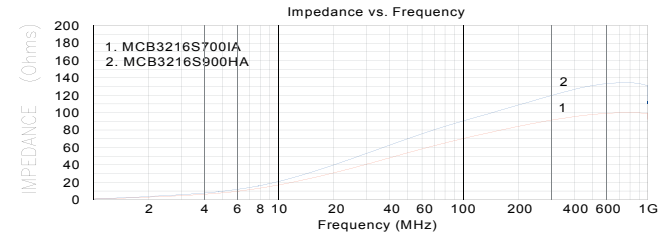
MCB3216S-260IA&310IA



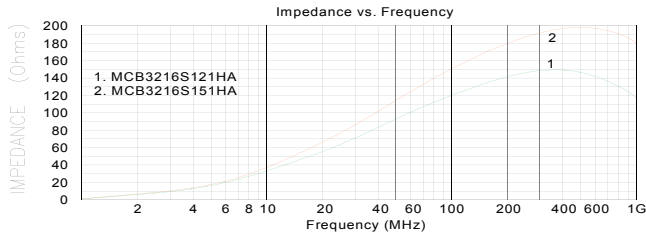
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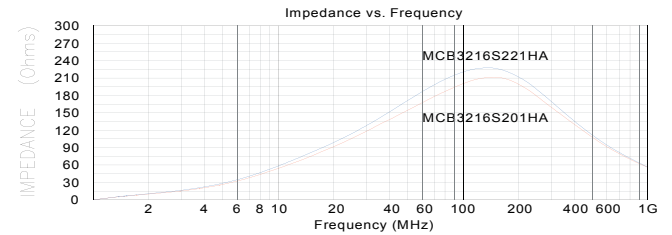
MCB3216S-700IA & 900HA



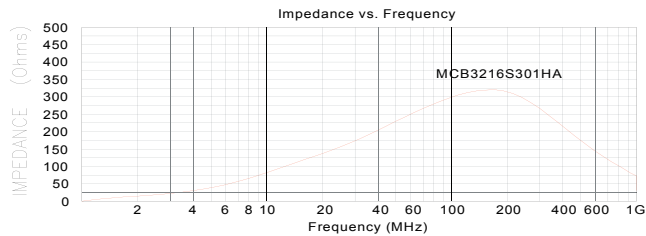
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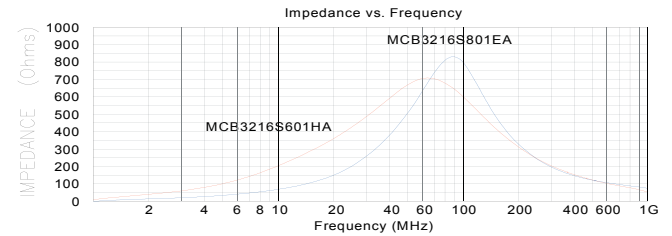
MCB3216S-201HA&221HA



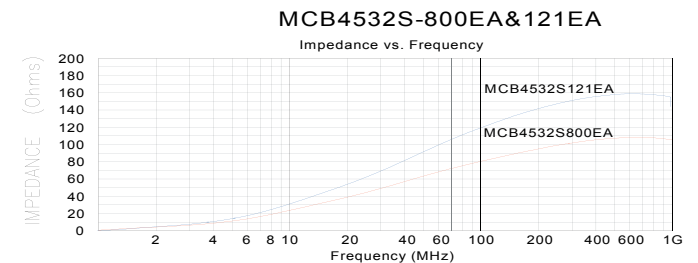
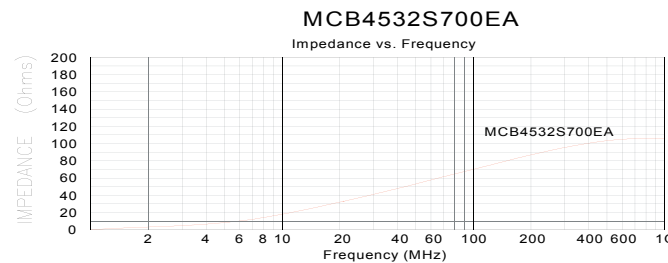
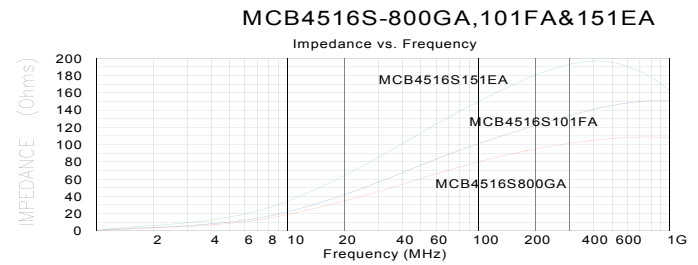
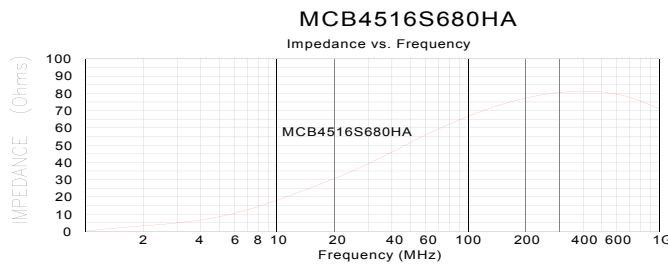
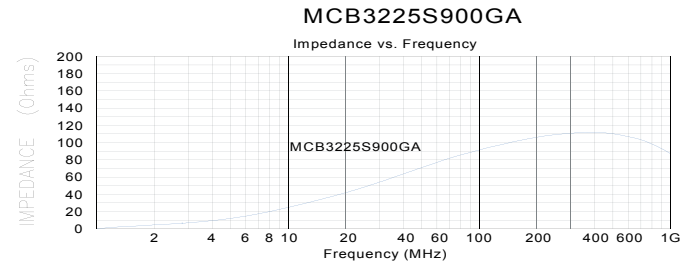
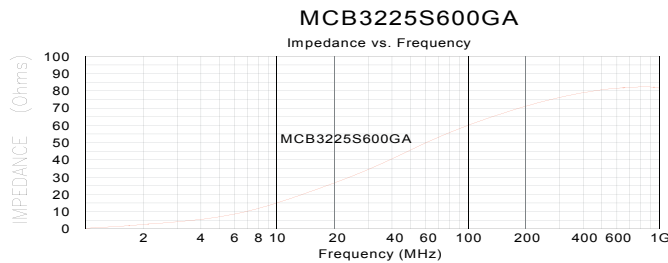
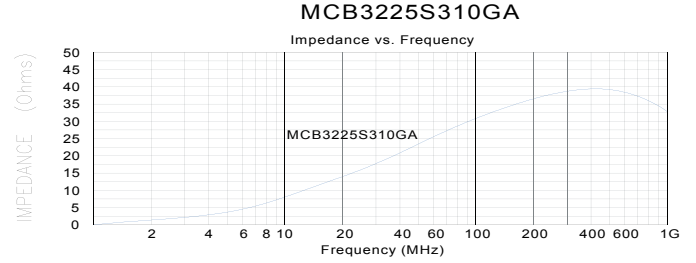
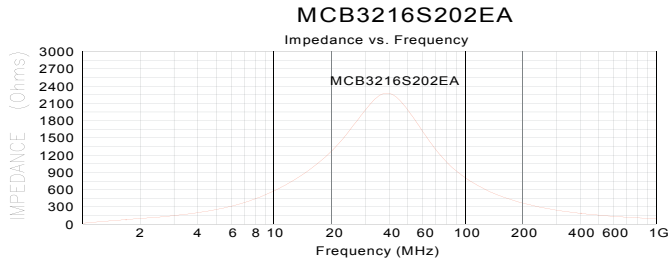
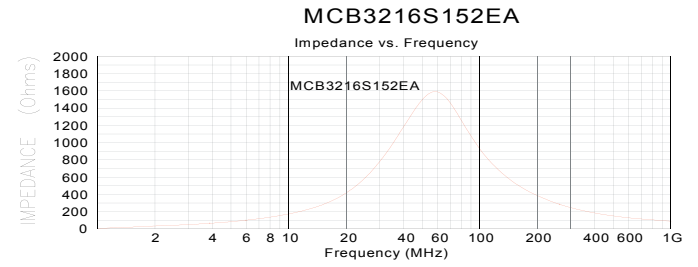
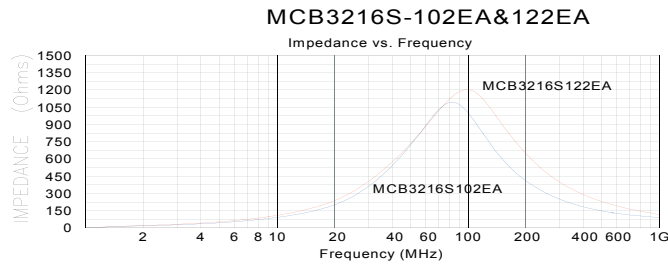
MCB3216S301HA



MCB3216S-601HA&801EA



MCB-S Series



Package

Size (EIA)	1005 (0402)	1608 (0603)	2012 (0805)	3216 (1206)	3225 (1210)	4516 (1806)	4532 (1812)
Standard packing quantity (PCS/Reel)	10,000	4,000	4,000	3,000	2,000	2,000	1,000