



◆ Features

1. Monolithic inorganic material construction
2. Closed magnetic circuit avoids crosstalk
3. SMD 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



◆ Application

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.

◆ How to Order

<b>MCB</b>	<b>1005</b>	<b>S</b>	<b>12</b>	<b>1</b>	<b>F</b>	<b>B</b>	<b>=</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

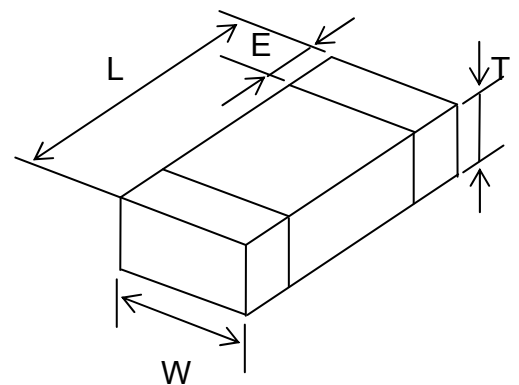
- (1) Series Type
- (2) Size(mm): Length x Width
- (3) Material Code:
- (4) Impedance ( $\Omega$ )/ $\pm 25\%$  ex.:  $60\Omega \rightarrow 600$ ;  $120\Omega \rightarrow 121$
- (5) Fixed Decimal Point
- (6) Rated current: A=50mA, B=80mA, C=100mA, D=150mA, E=200mA, F=300mA, G=400mA, H=500mA, I=600mA, J=700mA, K=800mA
- (7) Soldering: Green Parts: B- Lead-Free for whole chip
- (8) Packaging: P – Embossed paper tape, 7" reel  
E – Embossed plastic tape, 7" reel  
T – Embossed plastic tape, 13" reel

◆ Dimensions

Unit: mm

Size(EIA)	0603 (0201)	1005 (0402)	1608 (0603)	2012 (0805)
L	0.60 $\pm$ 0.03	1.00 $\pm$ 0.10	1.60 $\pm$ 0.15	2.00 $\pm$ 0.20
W	0.30 $\pm$ 0.03	0.50 $\pm$ 0.10	0.80 $\pm$ 0.15	1.25 $\pm$ 0.20
T	0.30 $\pm$ 0.03	0.50 $\pm$ 0.10	0.80 $\pm$ 0.15	0.90 $\pm$ 0.20
E	0.15 $\pm$ 0.05	0.25 $\pm$ 0.10	0.30 $\pm$ 0.20	0.50 $\pm$ 0.30

Size(EIA)	3216 (1206)	3225 (1210)	4516 (1806)	4532 (1812)
L	3.20 $\pm$ 0.20	3.20 $\pm$ 0.20	4.50 $\pm$ 0.25	4.50 $\pm$ 0.25
W	1.60 $\pm$ 0.20	2.50 $\pm$ 0.20	1.60 $\pm$ 0.20	3.20 $\pm$ 0.25
T	1.10 $\pm$ 0.20	1.30 $\pm$ 0.20	1.60 $\pm$ 0.20	1.50 $\pm$ 0.25
E	0.50 $\pm$ 0.30	0.50 $\pm$ 0.30	0.60 $\pm$ 0.40	0.60 $\pm$ 0.40



### ◆ Specifications

Part Number	Impedance +/- 25% ( $\Omega$ )	Test Freq. (MHz)	DCR ( $\Omega$ ) Max	Rated Current (mA)
<b>0603 (EIA 0201)</b>				
MCB0603B800FBP	80	100	0.40	300
MCB0603B121FBP	120	100	0.40	300
MCB0603B241FBP	240	100	0.80	300
MCB0603B301CBP	300	100	1.00	100
<b>1005 (EIA 0402)</b>				
MCB1005S200FBP	20	100	0.20	300
MCB1005S300FBP	30	100	0.25	300
MCB1005S400FBP	40	100	0.30	300
MCB1005S600FBP	60	100	0.35	300
MCB1005S700FBP	70	100	0.35	300
MCB1005S121FBP	120	100	0.40	300
MCB1005S241EBP	240	100	0.70	200
MCB1005S301EBP	300	100	0.80	200
MCB1005S471EBP	470	100	1.00	200
MCB1005S601FBP	600	100	0.70	300
MCB1005S102FBP	1000	100	1.00	300
MCB1005B601FBP	600	100	0.60	300
MCB1005B102EBP	1000	100	1.00	200
MCB1005B152DBP	1500	100	1.50	150
MCB1005B182ABP	1800	100	1.50	50
<b>1608 (EIA 0603) Packaging Code: P、E、T</b>				
MCB1608S100IB_	10	100	0.05	600
MCB1608S220IB_	22	100	0.05	600
MCB1608S300IB_	30	100	0.08	600
MCB1608S400IB_	40	100	0.10	600
MCB1608S600IB_	60	100	0.10	600
MCB1608S680IB_	68	100	0.10	600
MCB1608S700IB_	70	100	0.10	600
MCB1608S800IB_	80	100	0.10	600
MCB1608S101IB_	100	100	0.15	600
MCB1608S121IB_	120	100	0.15	600
MCB1608S181FB_	180	100	0.30	300
MCB1608S221FB_	220	100	0.30	300
MCB1608S301FB_	300	100	0.35	300
MCB1608S451FB_	450	100	0.40	300
MCB1608S471FB_	470	100	0.40	300
MCB1608S601EB_	600	100	0.45	200
MCB1608S751CB_	750	100	0.60	100
MCB1608S102CB_	1000	100	0.60	100

Part Number	Impedance +/- 25% ( $\Omega$ )	Test Freq. (MHz)	DCR ( $\Omega$ ) Max	Rated Current (mA)
<b>2012 (EIA 0805) Packaging Code: P \ E \ T</b>				
MCB2012S070KB_	7	100	0.05	800
MCB2012S110KB_	11	100	0.05	800
MCB2012S170KB_	17	100	0.05	800
MCB2012S260KB_	26	100	0.05	800
MCB2012S300KB_	30	100	0.05	800
MCB2012S400KB_	40	100	0.05	800
MCB2012S600KB_	60	100	0.15	800
MCB2012S800KB_	80	100	0.15	800
MCB2012S900KB_	90	100	0.15	800
MCB2012S121KB_	120	100	0.15	800
MCB2012S151KB_	150	100	0.15	800
MCB2012S181HB_	180	100	0.20	500
MCB2012S221HB_	220	100	0.20	500
MCB2012S301HB_	300	100	0.20	500
MCB2012S401HB_	400	100	0.30	500
MCB2012S601HB_	600	100	0.30	500
MCB2012S701FB_	700	100	0.35	300
MCB2012S102FB_	1000	100	0.35	300
MCB2012S152FB_	1500	100	0.40	300
MCB2012S202EB_	2000	100	0.50	200
<b>3216 (EIA 1206) Packaging Code: E \ T</b>				
MCB3216S190KB_	19	100	0.05	800
MCB3216S260KB_	26	100	0.05	800
MCB3216S310KB_	31	100	0.05	800
MCB3216S500KB_	50	100	0.08	800
MCB3216S700KB_	70	100	0.10	800
MCB3216S900KB_	90	100	0.15	800
MCB3216S121IB_	120	100	0.15	600
MCB3216S151IB_	150	100	0.15	600
MCB3216S201IB_	200	100	0.20	600
MCB3216S221IB_	220	100	0.20	600
MCB3216S301IB_	300	100	0.20	600
MCB3216S601HB_	600	100	0.30	500
MCB3216S801HB_	800	100	0.30	500
MCB3216S102HB_	1000	100	0.40	500
MCB3216S122HB_	1200	100	0.40	500
MCB3216S152EB_	1500	50	0.50	200
MCB3216S202EB_	2000	30	0.50	200
<b>3225 (EIA 1210)</b>				
MCB3225S310KBE	31	100	0.30	800
MCB3225S600KBE	60	100	0.30	800
MCB3225S900KBE	90	100	0.30	800

◆ Specifications

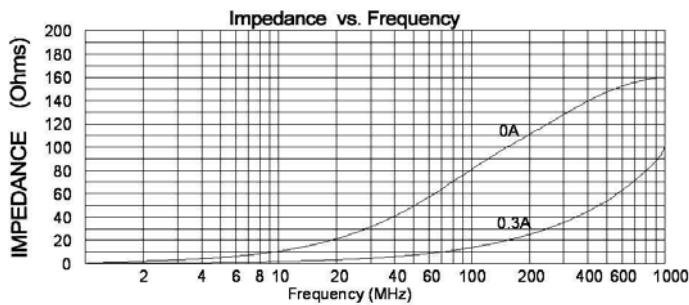
Part Number	Impedance +/- 25% (Ω)	Test Freq. (MHz)	DCR (Ω) Max	Rated Current (mA)
<b>4516 (EIA 1806)</b>				
MCB4516S680KBE	68	100	0.10	800
MCB4516S800KBE	80	100	0.10	800
MCB4516S101KBE	100	100	0.20	800
MCB4516S151KBE	150	100	0.30	800
<b>4532 (EIA 1812)</b>				
MCB4532S700KBE	70	100	0.40	800
MCB4532S800KBE	80	100	0.40	800
MCB4532S121KBE	120	100	0.40	800

◆ General Technical Data

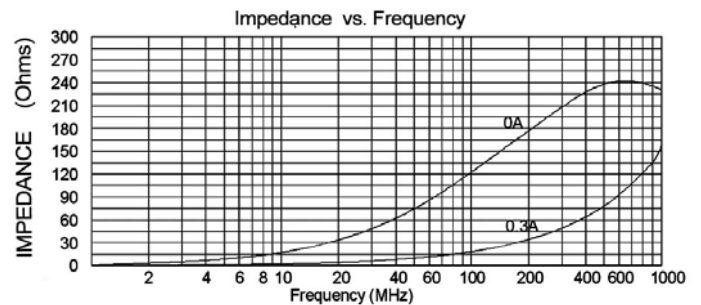
Operating Temperature Range	-55°C ~ +125°C
Storage Temperature (on board)	-40°C ~ +85°C
Storage Condition	Less than 40°C and 70% RH
Soldering Method	Reflow or Wave Soldering

◆ Impedance vs. Frequency

MCB0603B800F

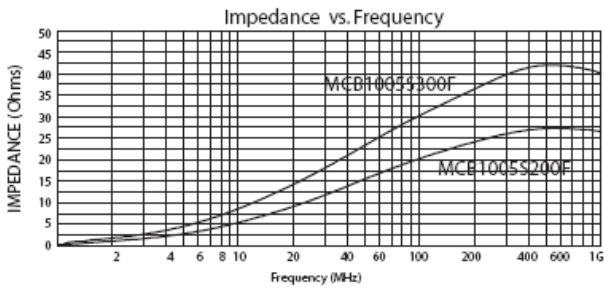


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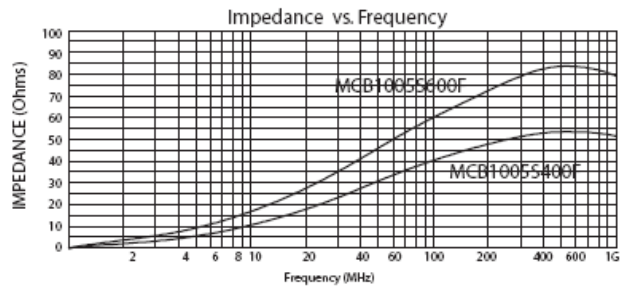


◆ Impedance vs. Frequency

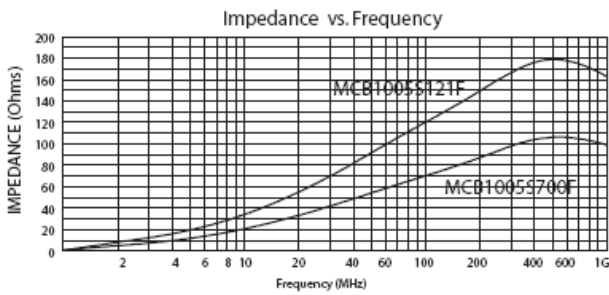
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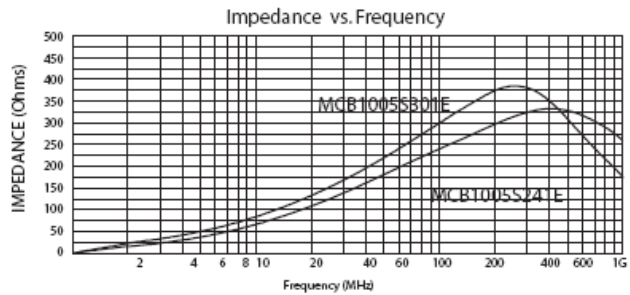
**MCB1005S-400F & 600F**



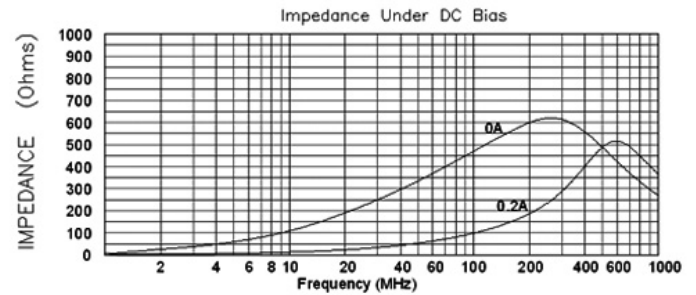
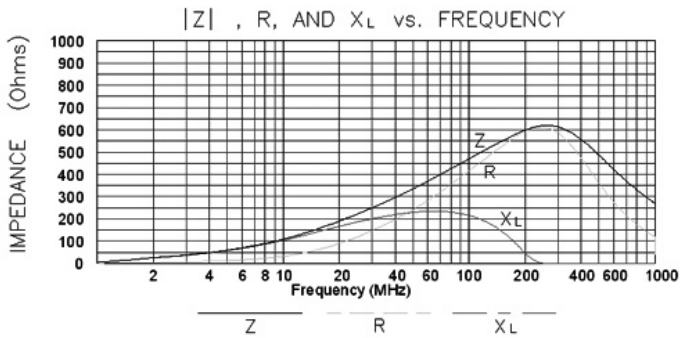
**MCB1005S-700F & 121F**



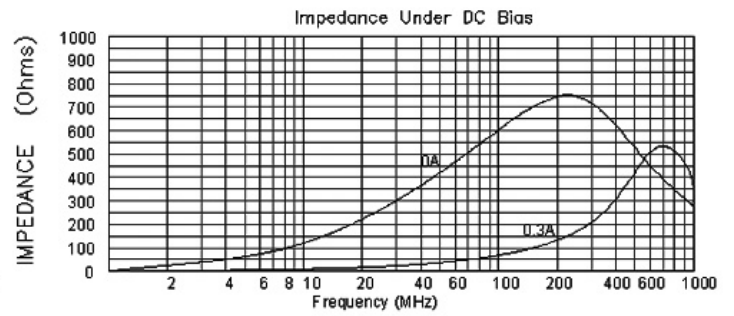
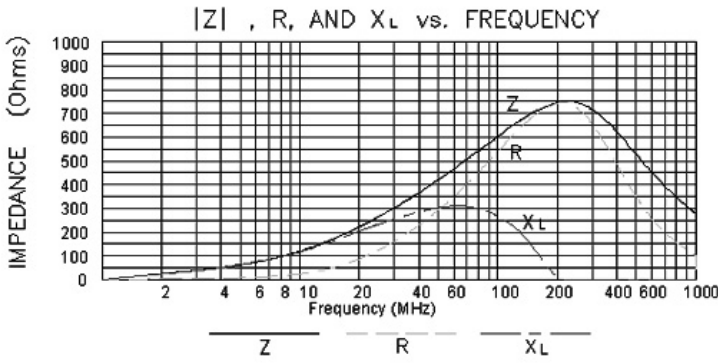
**MCB1005S-241E & 301E**



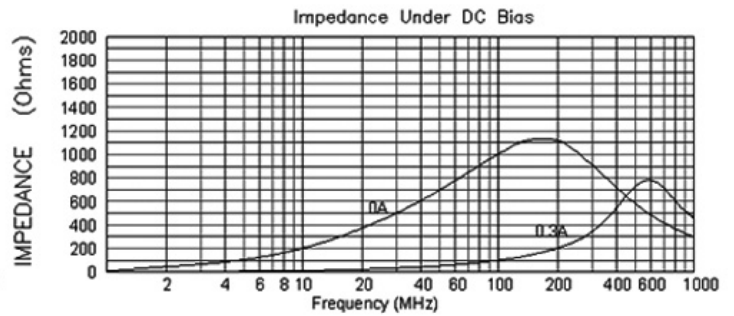
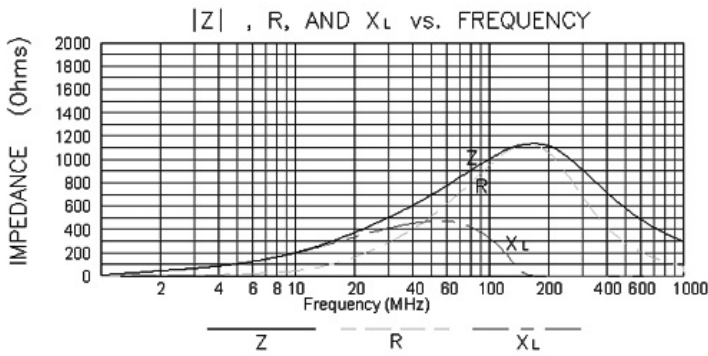
**MCB1005S471E**



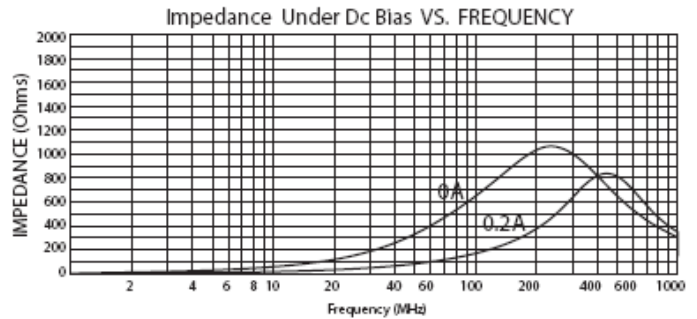
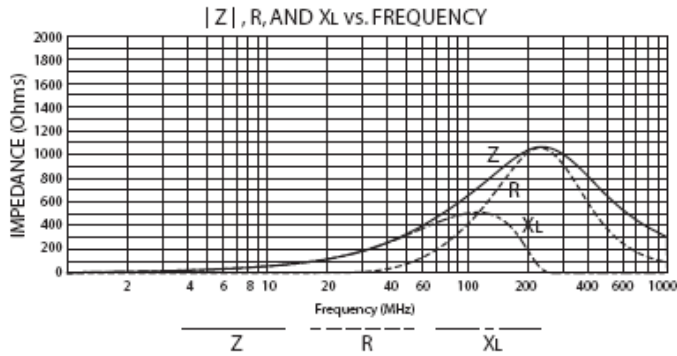
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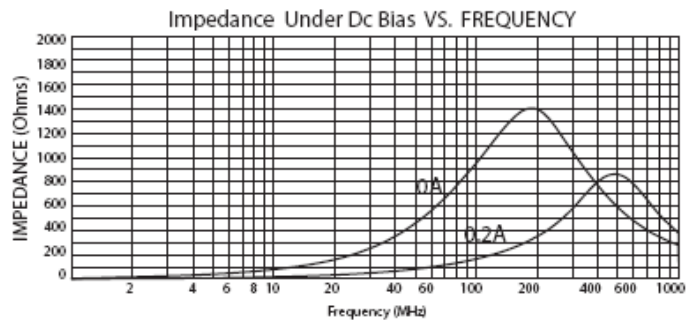
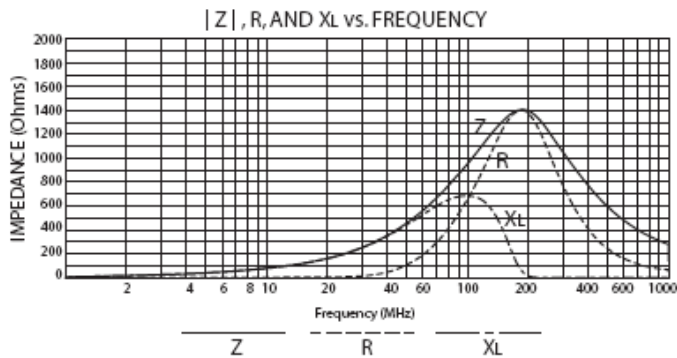
**MCB1005S102F**



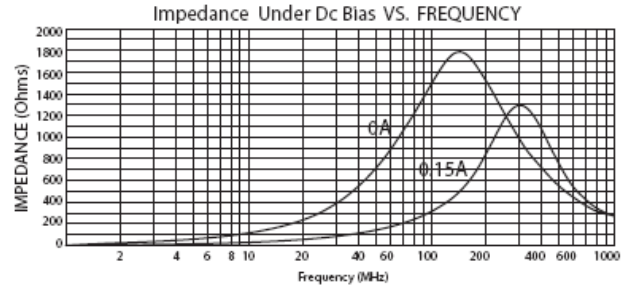
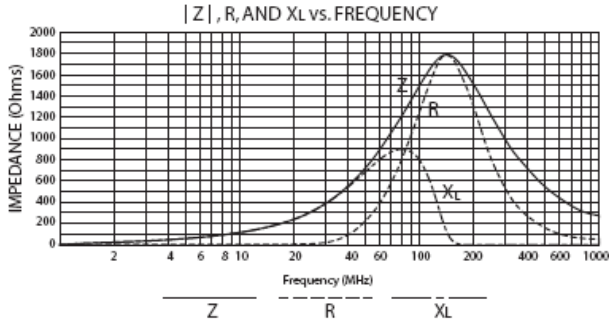
**MCB1005B 601E**



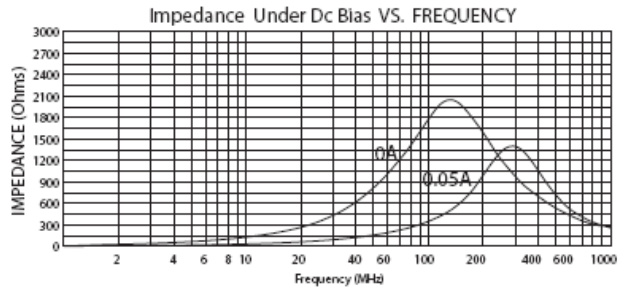
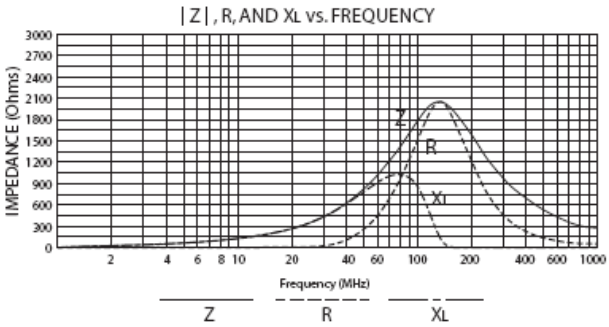
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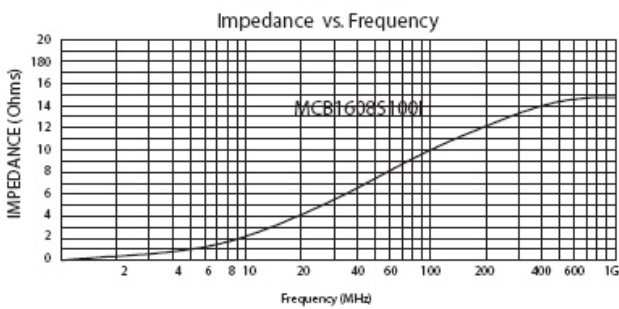
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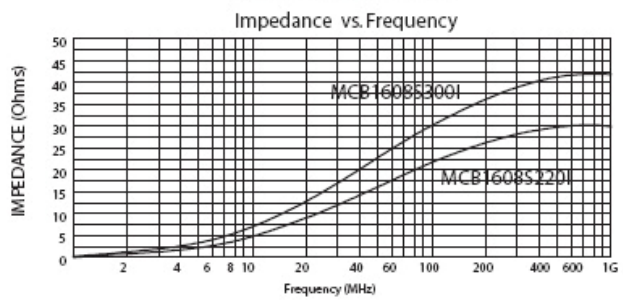
**MCB1005B 182A**



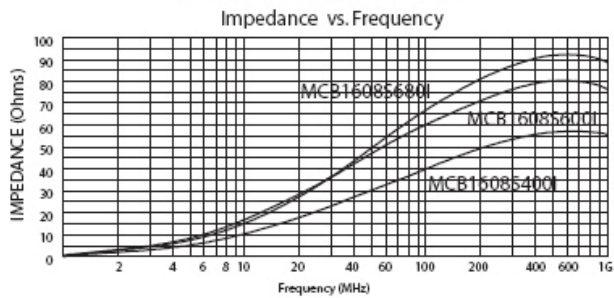
**MCB1608S100I**



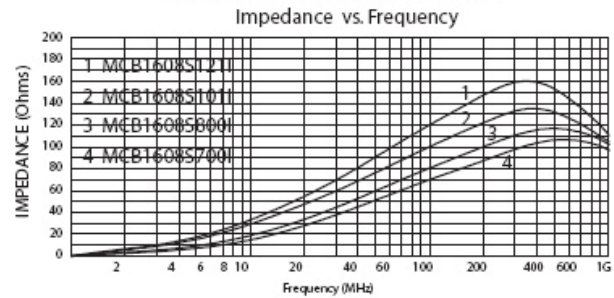
**MCB1608S-220I & 300I**



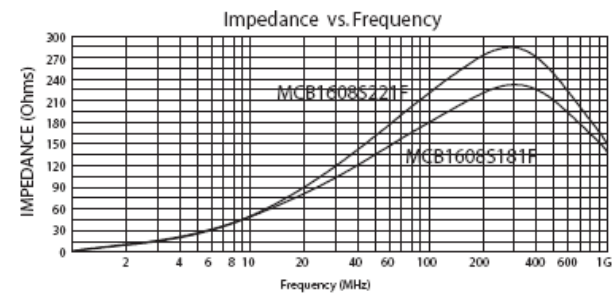
**MCB1608S-400I, 600I & 680I**



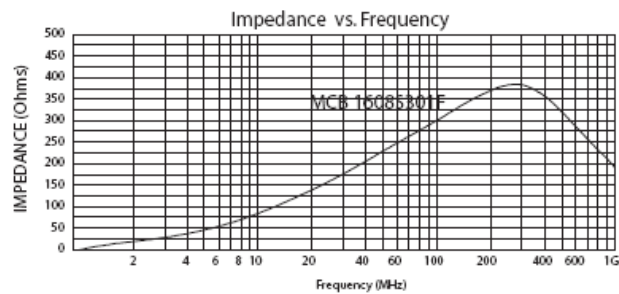
**MCB1608S-700I, 800I, 101I & 121I**



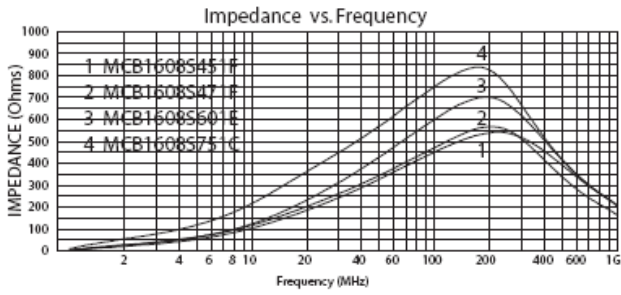
**MCB1608S-181F & 221F**



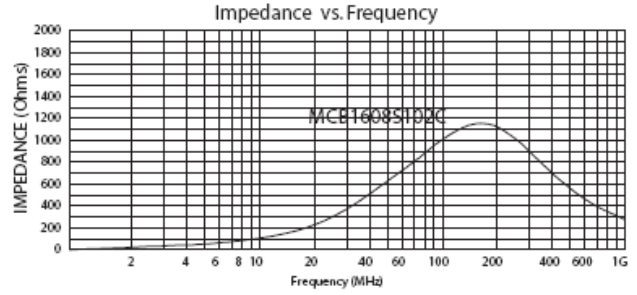
**MCB1608S301F**



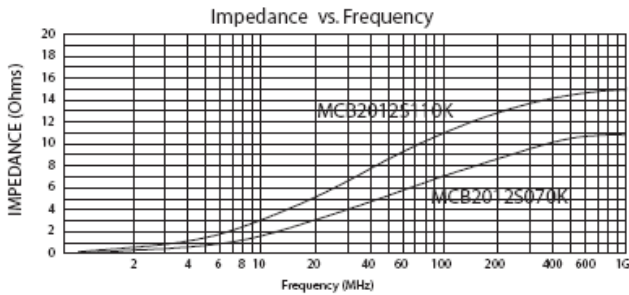
**MCB1608S - 451F, 471F, 601E & 751C**



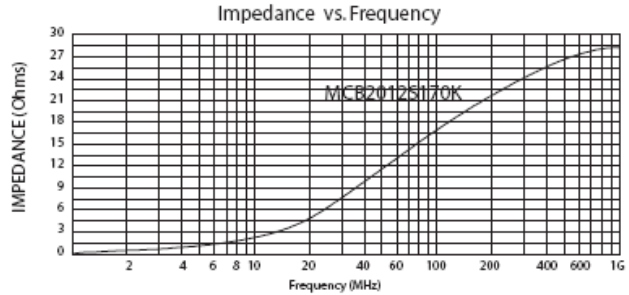
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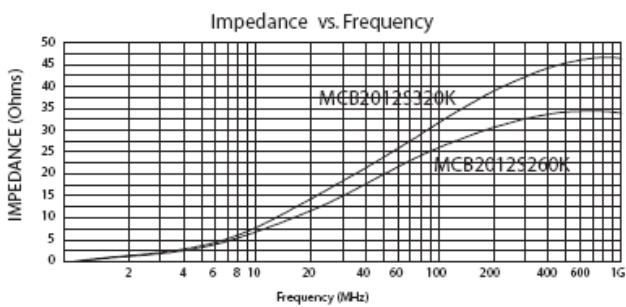
**MCB2012S - 070K & 110K**



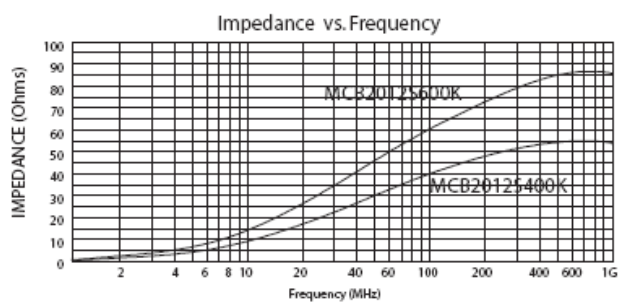
**MCB2012S170K**



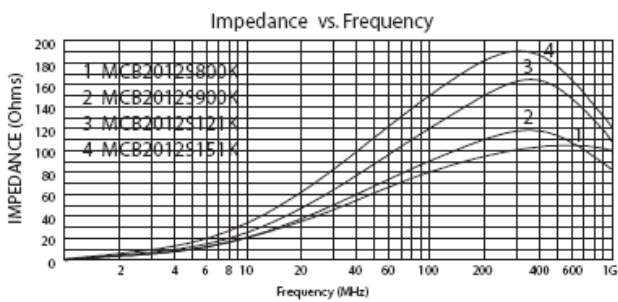
**MCB2012S - 260K & 320K**



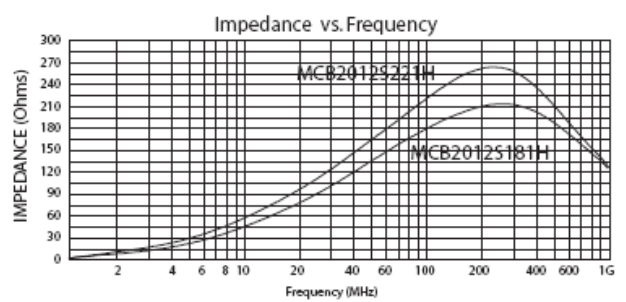
**MCB2012S - 400K & 600K**



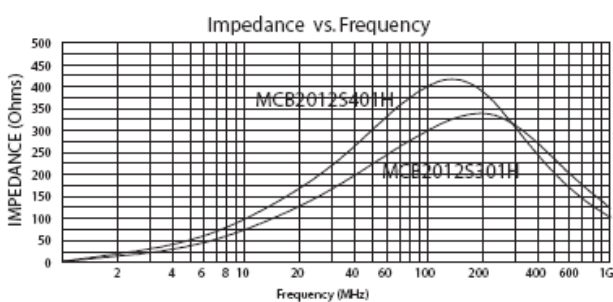
**MCB2012S - 800K, 900K, 121K & 151K**



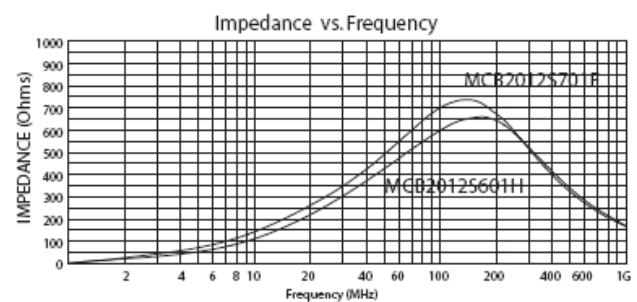
**MCB2012S - 181H & 221H**



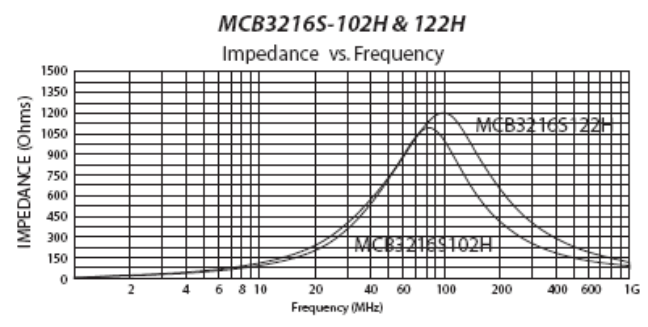
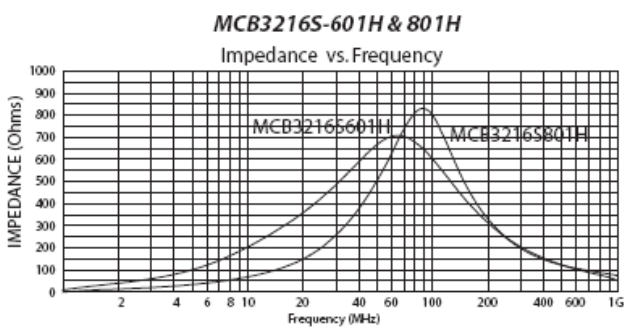
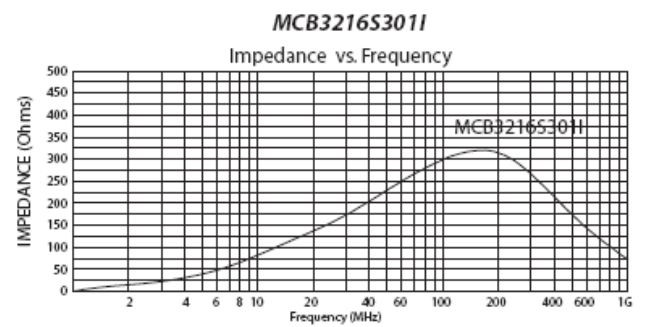
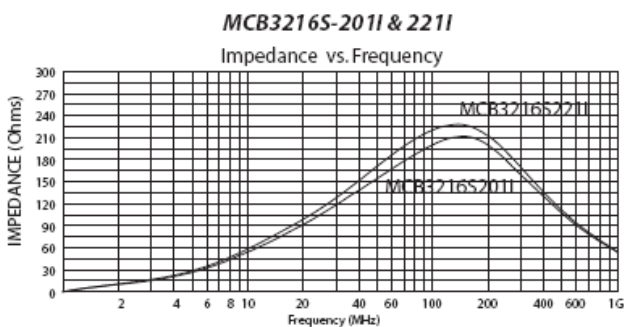
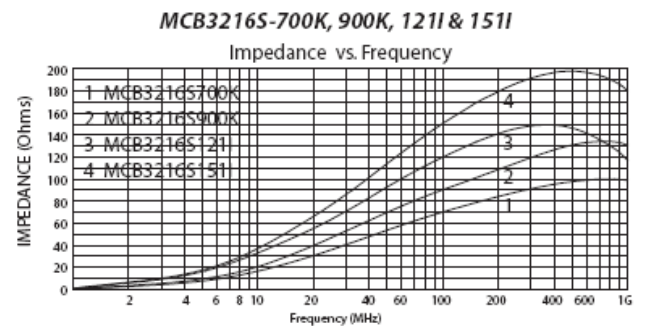
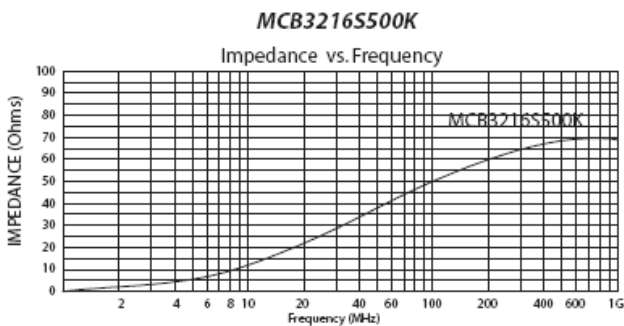
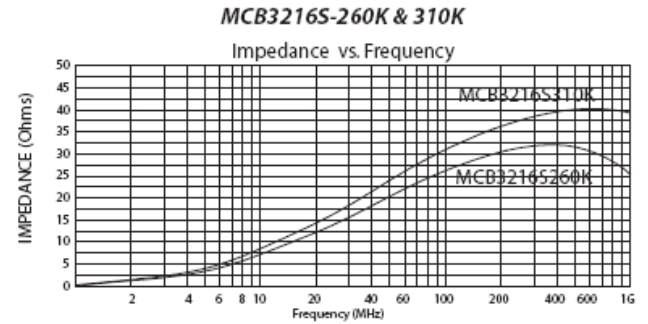
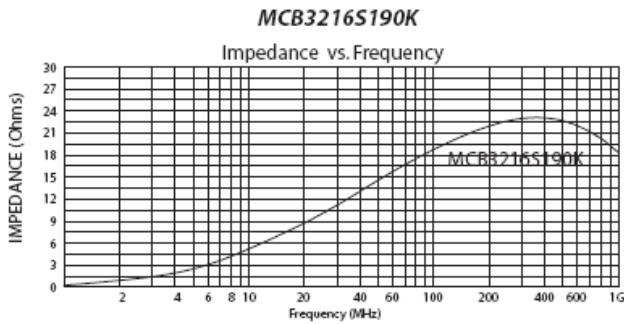
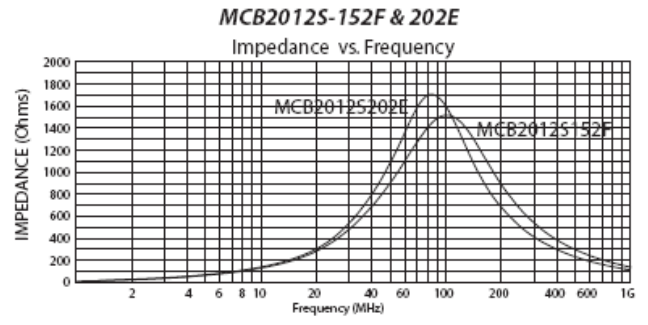
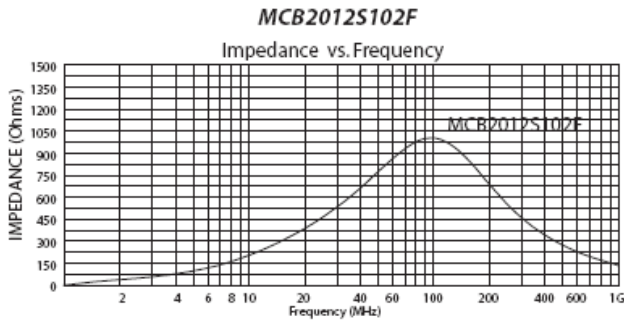
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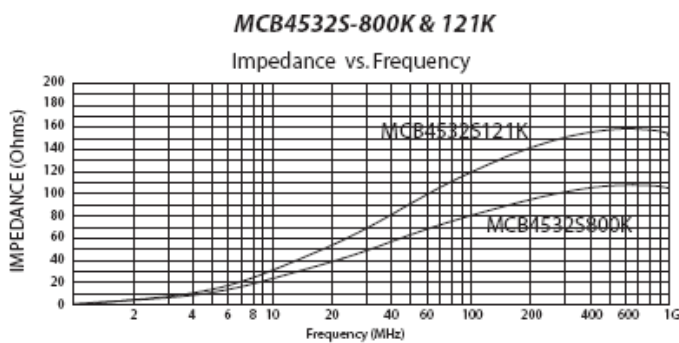
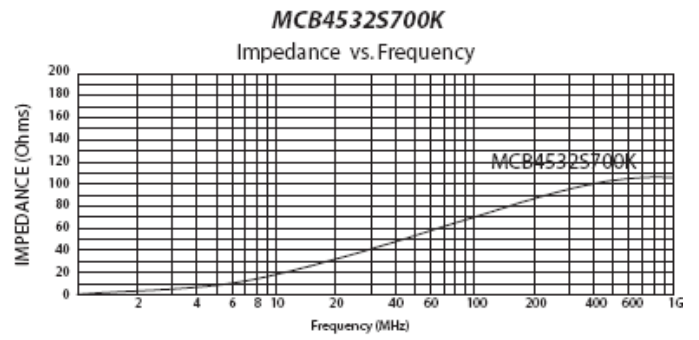
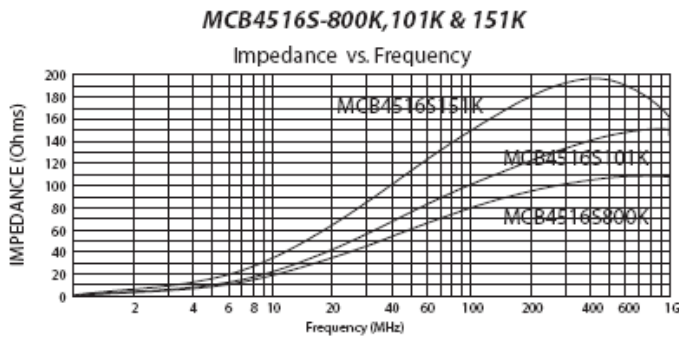
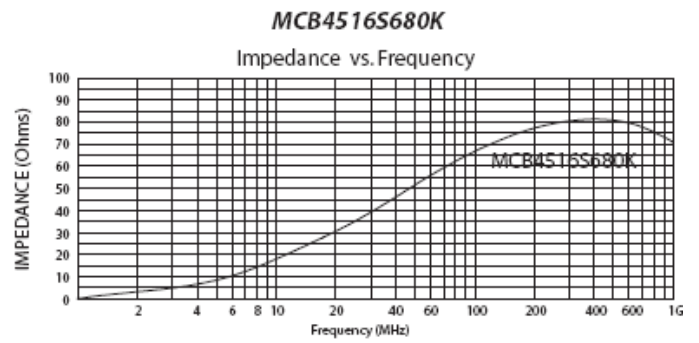
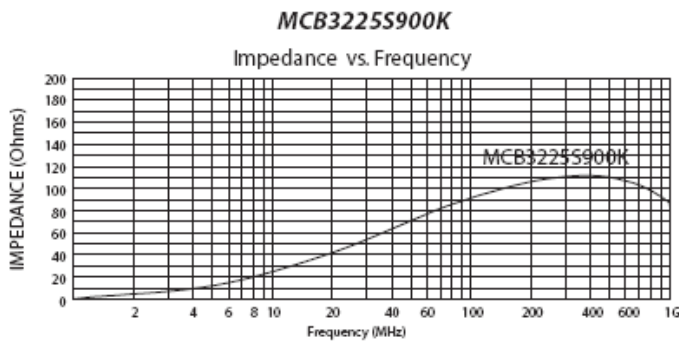
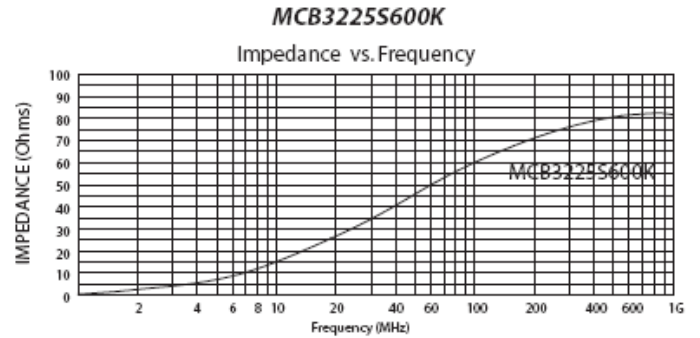
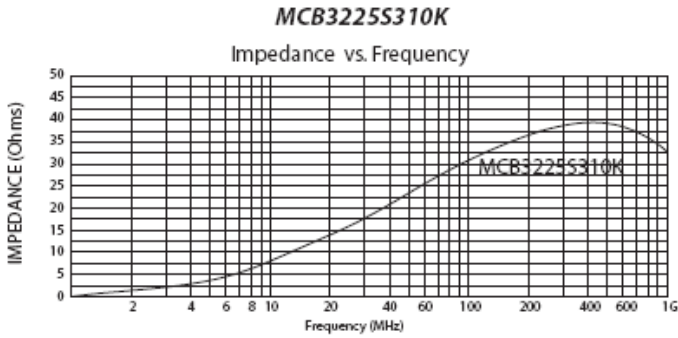
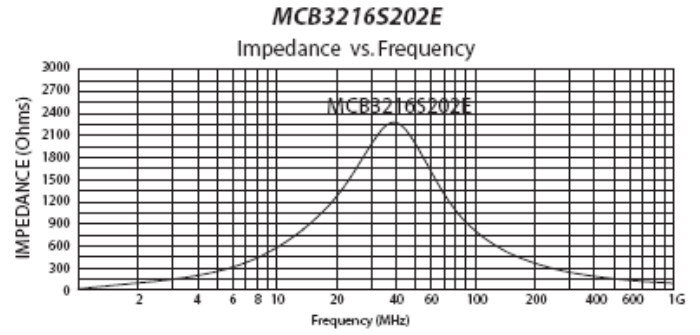
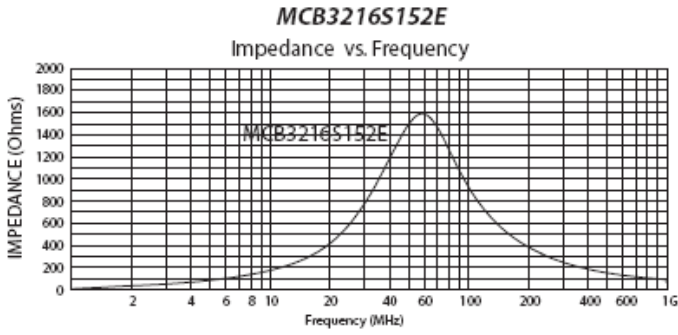


**MCB2012S-601H & 701F**









◆ Package

Size (EIA)	0603 (0201)	1005 (0402)	1608 (0603)	201209 (0805)	201212 (0805)
Standard packing Quantity(pcs/reel)	15,000	10,000	4,000	4,000	3,000

Size (EIA)	3216 (1206)	3225 (1210)	4516 (1806)	4532 (1812)
Standard packing Quantity(pcs/reel)	3,000	2,000	2,000	1,000