

# On-Board Type EMI Suppression Filters

## High Current Ferrite Chip Bead HCB Series

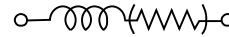
### HCB Series

Ferrite Chip Bead Offer High Frequency Noise Suppression in High Current DC Power Lines.

鐵氧磁體晶片磁珠提供在大電流電路中高頻雜訊的抑制。



### Equivalent Circuit Diagram



(Resistance element becomes dominant at high frequency)

### Features

1. Closed magnetic circuit structure allows high density mounting while preventing crosstalk.
2. Extremely high reliability due to entirely monolithic construction.
3. Low DC resistance structure of electrode to prevent wasteful electric power consumption.
4. High Current rating up to 6A.
5. The products contain no lead and also support lead-free soldering.

### Applications

Personal computers, communication equipment, digital telephone, electronic games machines, CRTs, hard disk drives, cellular phones, PDAs, printers High current DC lines and other computer peripheral products.

### 應用

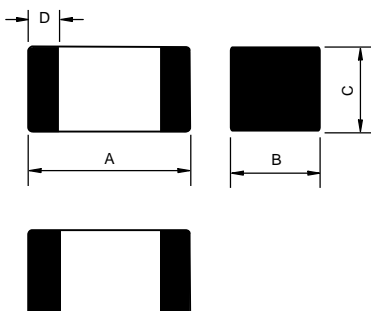
個人電腦、通訊設備、數位電話、電子遊戲機、陰極射線管、硬式磁碟機、行動電話、個人數位助理、列表機、高直流電流線和其他電腦周邊設備。

### Lead Free Part Numbering

HCB
2012
K
F
—
121
T
30

A : Series  
 B : Dimension            A x B  
 C : Material              Lead Free  
 D : Lead Free Code  
 E : Impedance            121=120  
 F : Packaging              T=Taping and Reel, B=Bulk(Bags)  
 G : Rated Current        30=3000mA

### Dimensions

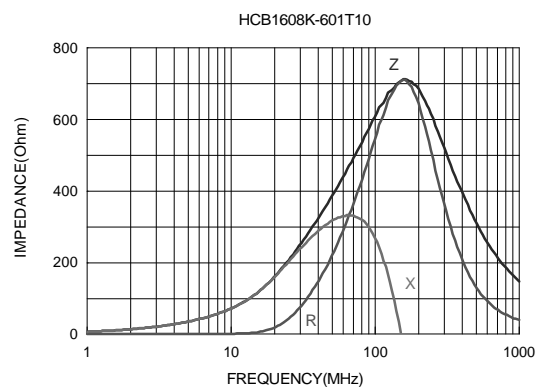
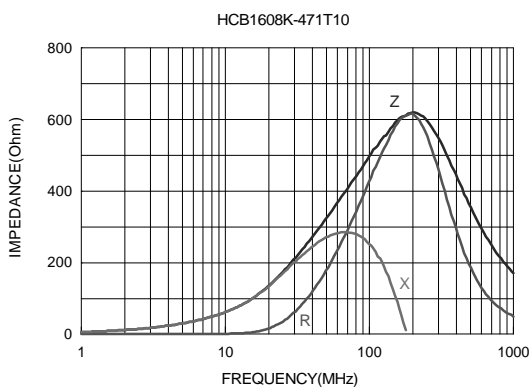
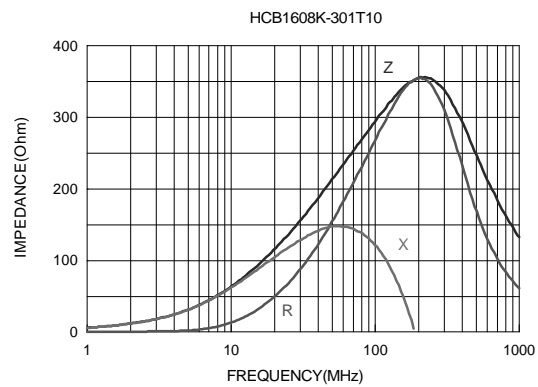
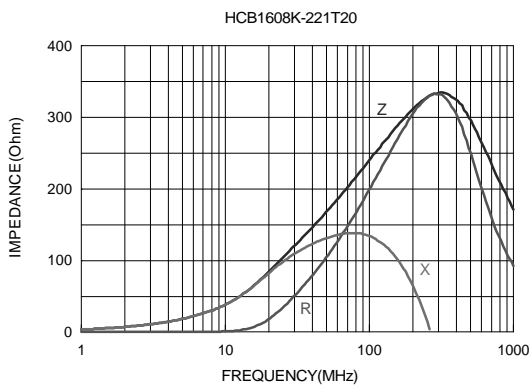
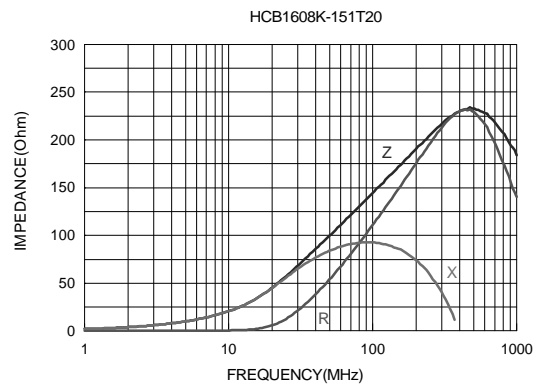
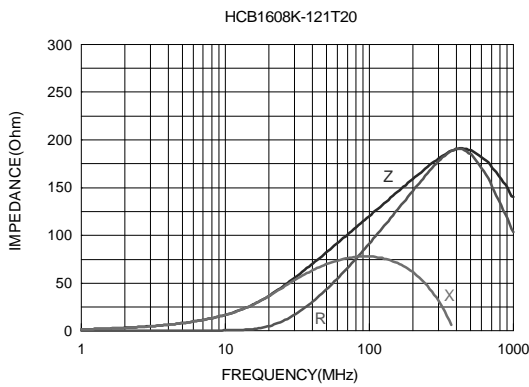
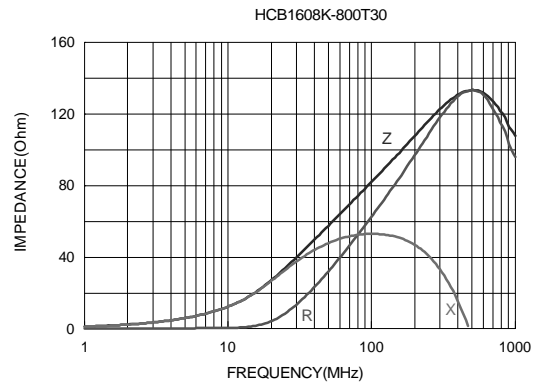
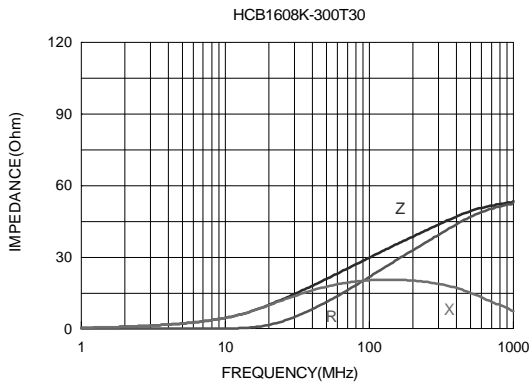


Chip size				
Size	A(mm)	B(mm)	C(mm)	D(mm)
1608	1.6 ± 0.15	0.8 ± 0.15	0.8 ± 0.15	0.3 ± 0.2
2012	2.0 ± 0.2	1.25 ± 0.2	0.85 ± 0.2	0.5 ± 0.3
3216	3.2 ± 0.2	1.6 ± 0.2	1.1 ± 0.2	0.5 ± 0.3
3225	3.2 ± 0.2	2.5 ± 0.2	1.3 ± 0.2	0.5 ± 0.3
4516	4.5 ± 0.2	1.6 ± 0.2	1.6 ± 0.2	0.5 ± 0.3
4532	4.5 ± 0.2	3.2 ± 0.2	1.5 ± 0.2	0.5 ± 0.3
5750	5.7 ± 0.2	5.0 ± 0.3	1.8 ± 0.2	0.5 ± 0.3

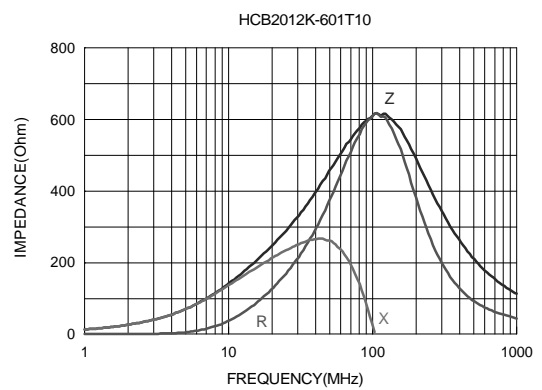
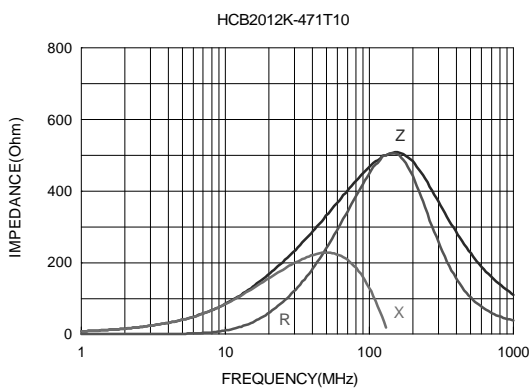
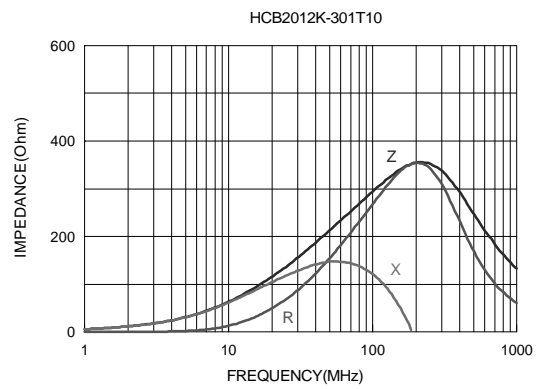
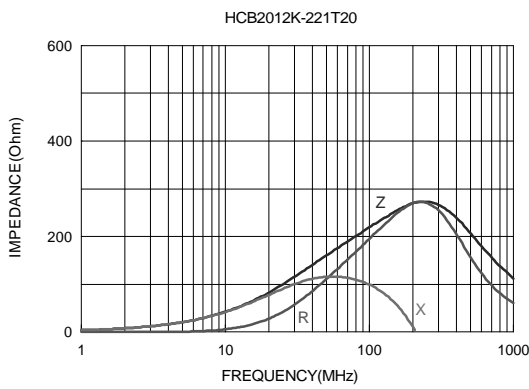
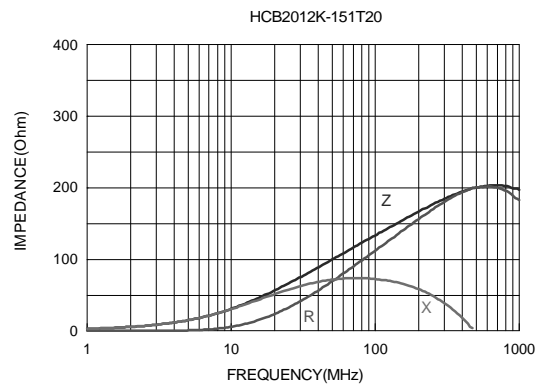
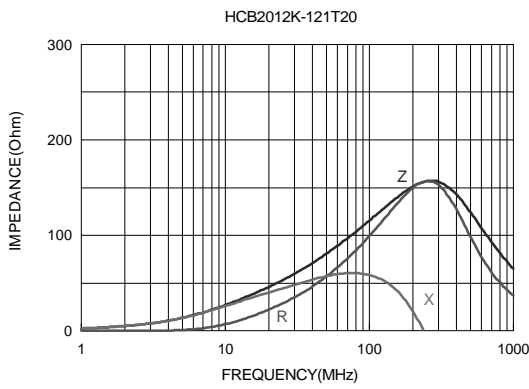
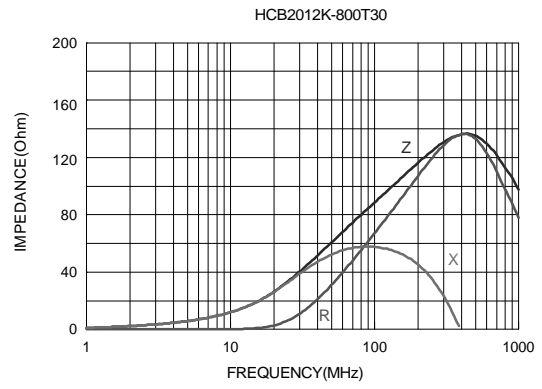
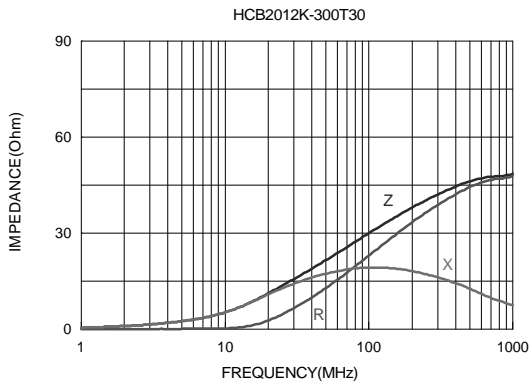
**HC**B Series for IC's Power Line

Part Number	Impedance (Ohm)	Test Frequency (MHz)	Rated Current (mA) max.	DCR (Ohm) max.
HC	30 ± 25%	100	3000	0.04
HC	80 ± 25%	100	3000	0.04
HC	120 ± 25%	100	2000	0.10
HC	150 ± 25%	100	2000	0.10
HC	220 ± 25%	100	2000	0.10
HC	300 ± 25%	100	1000	0.20
HC	470 ± 25%	100	1000	0.20
HC	600 ± 25%	100	1000	0.20
HC	30 ± 25%	100	3000	0.04
HC	80 ± 25%	100	3000	0.04
HC	120 ± 25%	100	2000	0.10
HC	150 ± 25%	100	2000	0.10
HC	220 ± 25%	100	2000	0.10
HC	300 ± 25%	100	1000	0.20
HC	470 ± 25%	100	1000	0.20
HC	600 ± 25%	100	1000	0.20

### Typical Impedance v.s. Frequency Curve



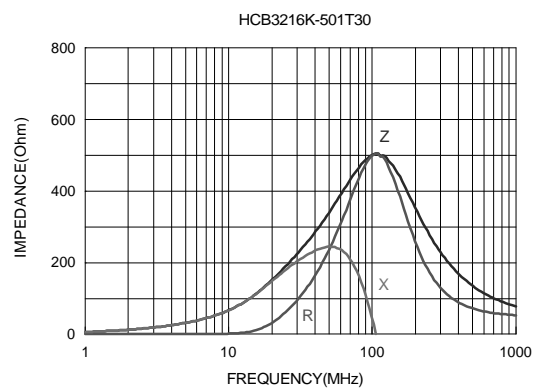
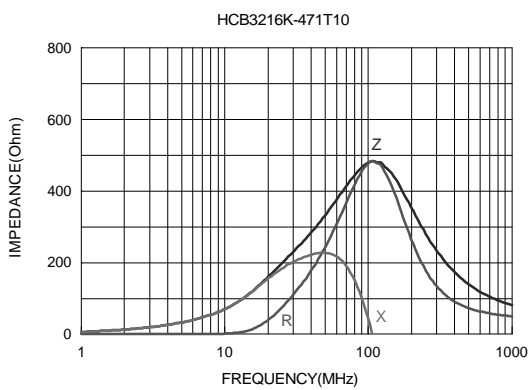
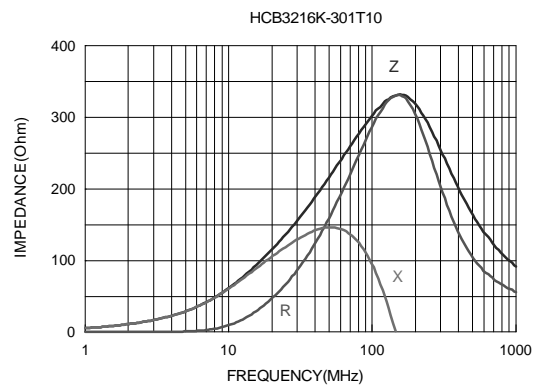
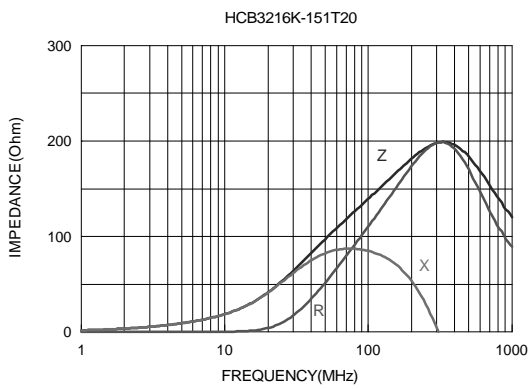
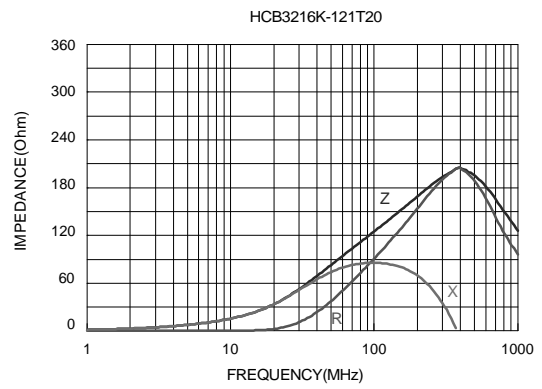
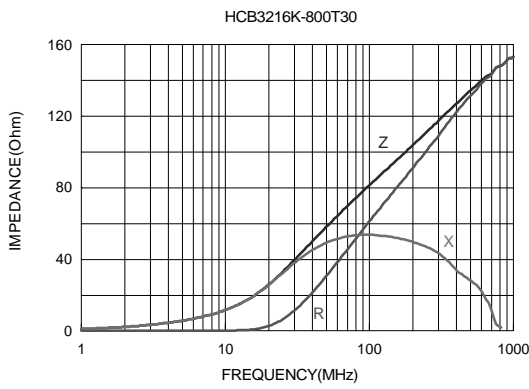
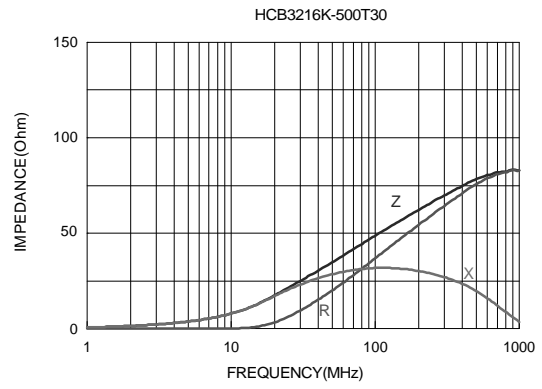
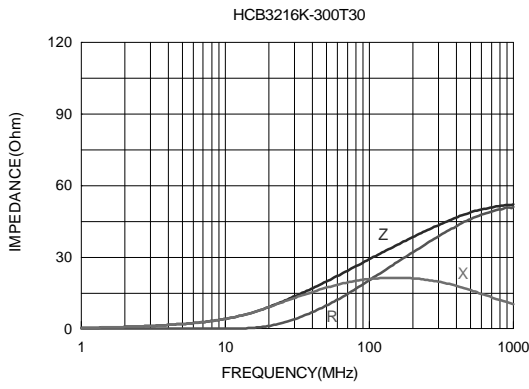
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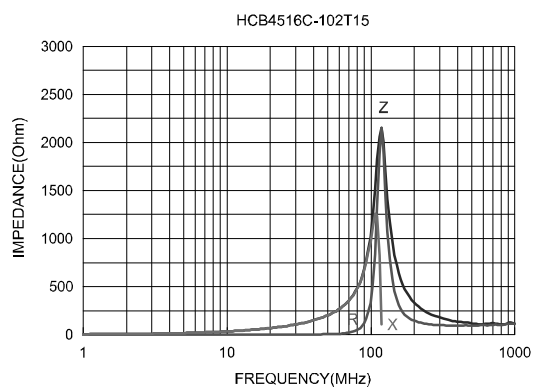
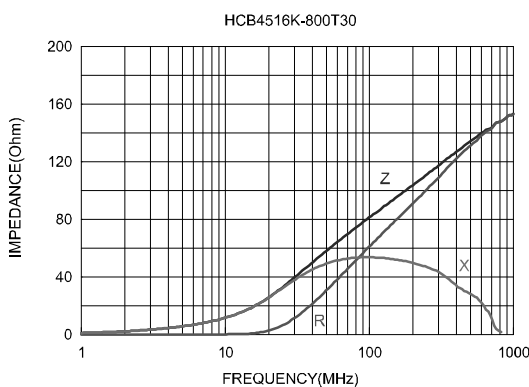
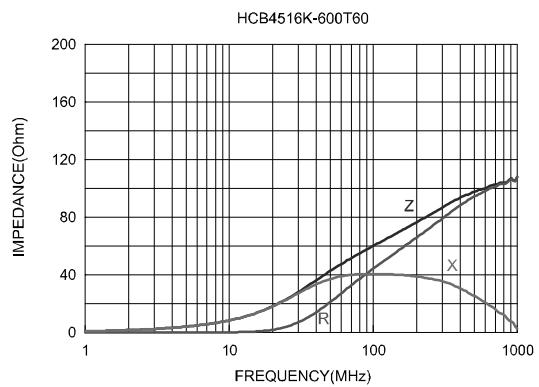
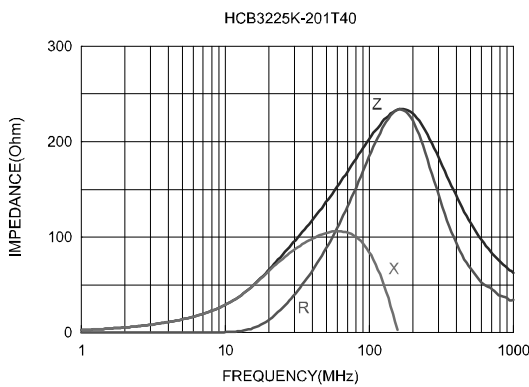
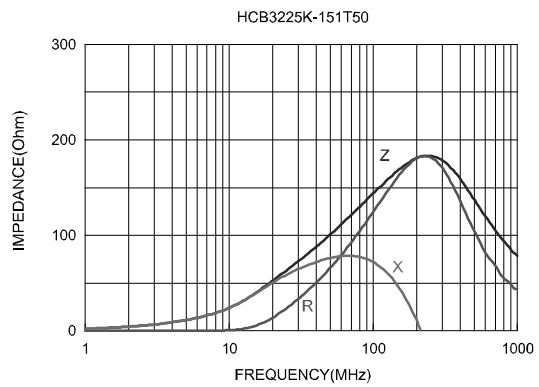
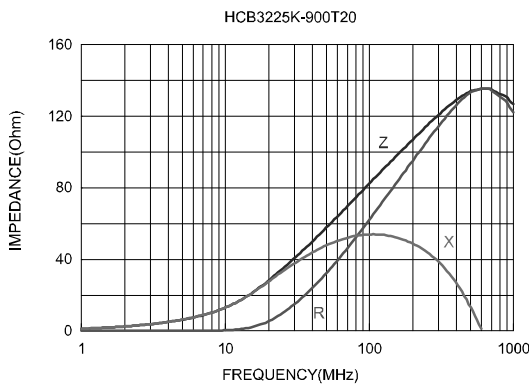
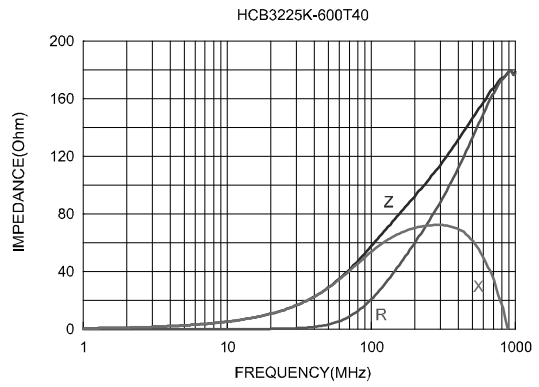
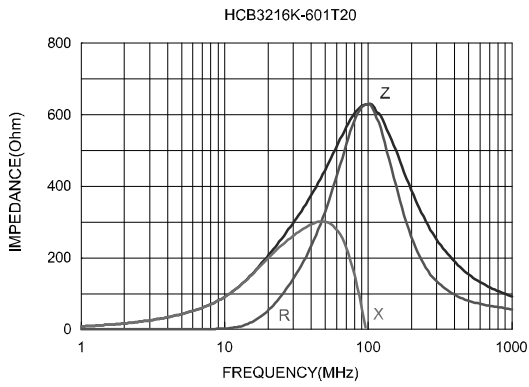
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HC	50 ± 25%	100	3000	0.04
HC	80 ± 25%	100	3000	0.04
HC	120 ± 25%	100	2000	0.10
HC	150 ± 25%	100	2000	0.10
HC	300 ± 25%	100	1000	0.20
HC	470 ± 25%	100	1000	0.20
HC	500 ± 25%	100	3000	0.04
HC	600 ± 25%	100	2000	0.10
HC	60 ± 25%	100	4000	0.03
HC	90 ± 25%	100	2000	0.10
HC	150 ± 25%	100	5000	0.02
HC	200 ± 25%	100	4000	0.03
HC	60 ± 25%	100	6000	0.01
HC	80 ± 25%	100	3000	0.04
HC	1000 ± 25%	100	1500	0.15
HC	80 ± 25%	100	6000	0.01
HC	130 ± 25%	100	3000	0.04
HC	150 ± 25%	100	5000	0.02
HC	680 ± 25%	100	4000	0.03
HC	1300 ± 25%	60	3000	0.06
HC	1300 ± 25%	100	3000	0.06
HC	100 ± 25%	100	6000	0.01
HC	150 ± 25%	100	3000	0.04
HC	180 ± 25%	100	3000	0.04
HC	600 ± 25%	100	3000	0.04

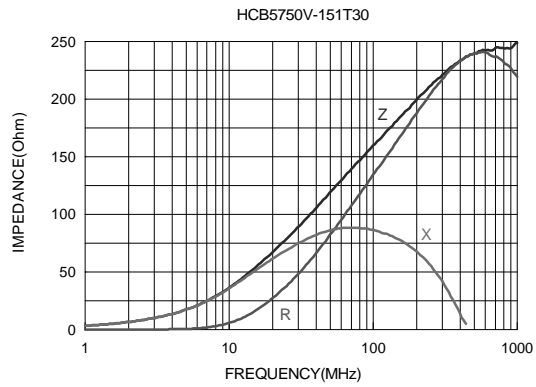
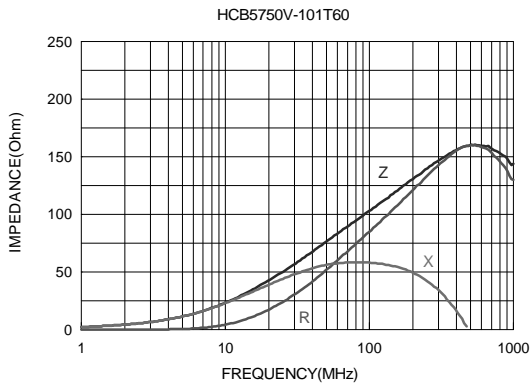
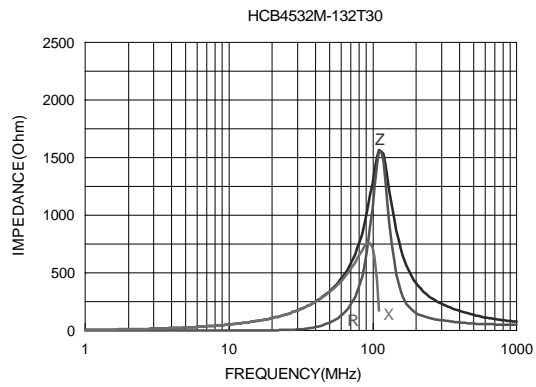
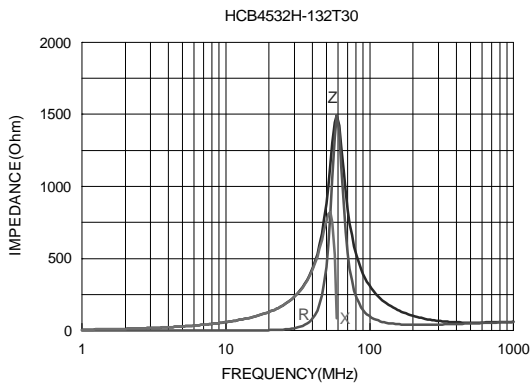
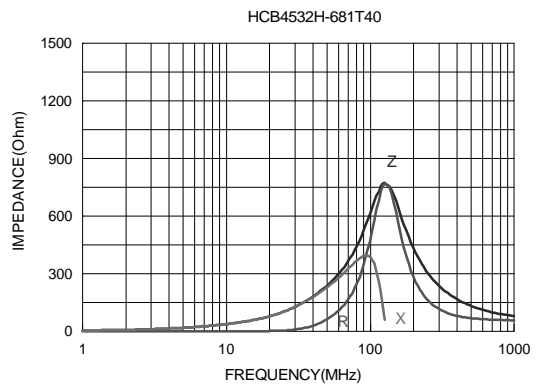
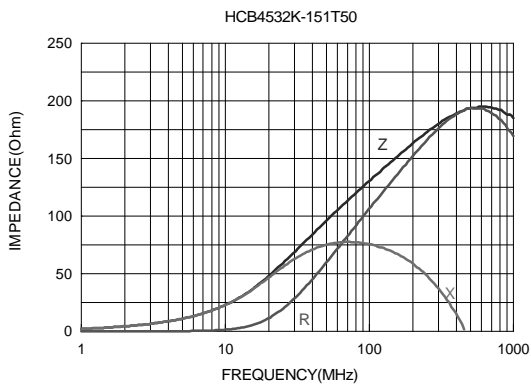
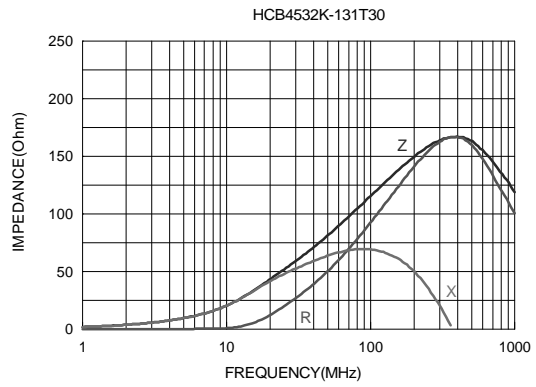
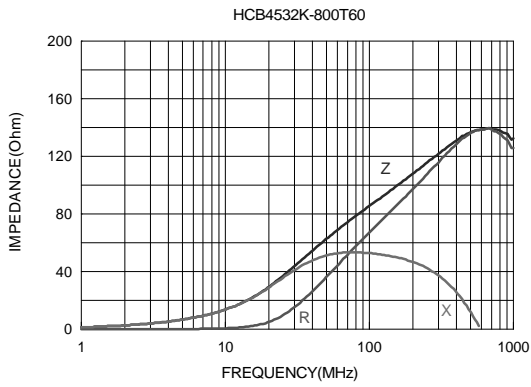
### Typical Impedance v.s. Frequency Curve



■ Typical Impedance v.s. Frequency Curve



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### Typical Impedance v.s. Frequency Curve

