

## MLB A-SERIES

### Ferrite Chip Beads For General Applications

#### • FEATURES

##### • Effective EMI Protection

A-Series chip beads have a monolithic inorganic material construction that minimizes the effect of electromagnetic interference.

##### • Wide Frequency Characteristics

A-series chip beads can generate impedances over a wide range of frequencies.

##### • High Soldering Heat Resistance

A-series chip beads have high quality termination that allows the applications of both flow and reflow soldering methods.

##### • Multiple Size Availability

A- series chip beads are available in eight compact sizes: 100505, 160808, 201209, 321611, 321616, 322513, 451616, and 453215.

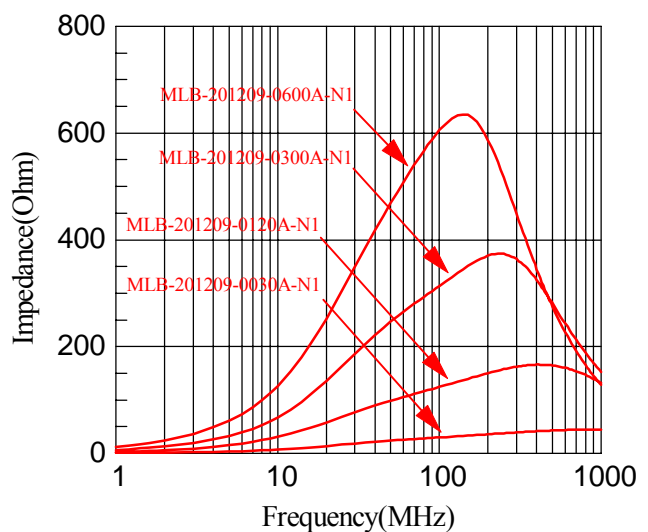
#### • APPLICATIONS

A-series chip beads can be used in a variety of electronics including:

- Computers
- Motherboards
- Printers
- Modems
- Hard Drives
- CD-ROMs
- Audio Equipment
- Digital Televisions

#### ◆ TYPICAL ELECTRICAL CHARACTERISTIC CURVES

Typical electrical characteristic curves for MLB A-series chip beads. The A-series covers a wide frequency range and has wide impedance characteristics.



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Ferrite Chip Beads For General Applications

### • PRODUCT SPECIFICATIONS

#### 100505 (0402) SIZES

Part Number	Impedance ( $\Omega$ ) at 100 MHz	R <sub>DC</sub> ( $\Omega$ ) Max.	I <sub>DC</sub> (mA) Max.	Operating Temp. Range ( $^{\circ}$ C)
MLB-100505-0030A-N2	30 $\pm$ 25%	0.20	400	-55 ~ +125
MLB-100505-0060A-N2	60 $\pm$ 25%	0.20	300	
MLB-100505-0120A-N2	120 $\pm$ 25%	0.30	300	
MLB-100505-0240A-N2	240 $\pm$ 25%	0.40	200	
MLB-100505-0300A-N2	300 $\pm$ 25%	0.50	200	
MLB-100505-0470A-N2	470 $\pm$ 25%	0.60	200	
MLB-100505-0600A-N2	600 $\pm$ 25%	0.80	200	
MLB-100505-1000A-N2	1000 $\pm$ 25%	1.0	150	

#### 160808 (0603)-SIZES

Part Number	Impedance ( $\Omega$ ) at 100 MHz	R <sub>DC</sub> ( $\Omega$ ) Max.	I <sub>DC</sub> (mA) Max.	Operating Temp. Range ( $^{\circ}$ C)
MLB-160808-0030A-N2	30 $\pm$ 25%	0.20	400	-55 ~ +125
MLB-160808-0040A-N2	40 $\pm$ 25%		300	
MLB-160808-0060A-N2	60 $\pm$ 25%			
MLB-160808-0080A-N2	80 $\pm$ 25%	0.40	250	
MLB-160808-0100A-N2	100 $\pm$ 25%		200	
MLB-160808-0120A-N2	120 $\pm$ 25%			
MLB-160808-0180A-N2	180 $\pm$ 25%			
MLB-160808-0220A-N2	220 $\pm$ 25%			
MLB-160808-0240A-N2	240 $\pm$ 25%			
MLB-160808-0300A-N2	300 $\pm$ 25%	0.50	150	
MLB-160808-0450A-N2	450 $\pm$ 25%			
MLB-160808-0600A-N1	600 $\pm$ 25%		0.70	
MLB-160808-0600A-N2				
MLB-160808-1000A-N2	1000 $\pm$ 25%	1.00	100	

#### 201209 (0805)-SIZES

Part Number	Impedance ( $\Omega$ ) at 100 MHz	R <sub>DC</sub> ( $\Omega$ ) Max.	I <sub>DC</sub> (mA) Max.	Operating Temp. Range ( $^{\circ}$ C)
MLB-201209-0010A-N1	10 $\pm$ 25%	0.10	600	-55 ~ +125
MLB-201209-0017A-N2	17 $\pm$ 25%		500	
MLB-201209-0030A-N1	30 $\pm$ 25%			
MLB-201209-0080A-N4	80 $\pm$ 25%	0.30	400	
MLB-201209-0120A-N1	120 $\pm$ 25%		300	

Part Number	Impedance ( $\Omega$ ) at 100 MHz	$R_{DC}$ ( $\Omega$ ) Max.	$I_{DC}$ (mA) Max.	Operating Temp. Range ( $^{\circ}$ C)
MLB-201209-0120A-N2	120 $\pm$ 25%	0.30	300	-55 ~ +125
MLB-201209-0120A-N4				
MLB-201209-0150A-N1	150 $\pm$ 25%	0.50	250	
MLB-201209-0220A-N4	220 $\pm$ 25%			
MLB-201209-0300A-N1	300 $\pm$ 25%	0.60	200	
MLB-201209-0400A-N2	400 $\pm$ 25%			
MLB-201209-0600A-N1	600 $\pm$ 25%	0.80	100	
MLB-201209-0600A-N2				
MLB-201209-0600A-N4				
MLB-201209-1000A-N4	1000 $\pm$ 25%	1.00	100	
MLB-201209-1200A-N4	1200 $\pm$ 25%			
MLB-201209-1500A-N4	1500 $\pm$ 25%	1.50	100	
MLB-201209-2000A-N4	2000 $\pm$ 25%			
MLB-201209-2200A-N4	2200 $\pm$ 25%	1.50	100	
MLB-201209-2700A-N4	2700 $\pm$ 25%			

### 321611 (1206)-SIZES

Part Number	Impedance ( $\Omega$ ) at 100 MHz * 50 MHz ** 30 MHz	$R_{DC}$ ( $\Omega$ ) Max.	$I_{DC}$ (mA) Max.	Operating Temp. Range ( $^{\circ}$ C)
MLB-321611-0026A-N1	26 $\pm$ 25%	0.20	600	-55 ~ +125
MLB-321611-0031A-N2	31 $\pm$ 25%			
MLB-321611-0050A-N2	50 $\pm$ 25%			
MLB-321611-0070A-N2	70 $\pm$ 25%			
MLB-321611-0090A-N2	90 $\pm$ 25%	0.30	500	
MLB-321611-0120A-N4	120 $\pm$ 25%			
MLB-321611-0150A-N4	150 $\pm$ 25%	0.40	400	
MLB-321611-0220A-N4	220 $\pm$ 25%			
MLB-321611-0400A-N4	400 $\pm$ 25%			
MLB-321611-0500A-N1	500 $\pm$ 25%	0.50	250	
MLB-321611-0600A-N1	600 $\pm$ 25%			
MLB-321611-0600A-N2				
MLB-321611-1200A-N2	*1200 $\pm$ 25%	0.70	200	
MLB-321611-1500A-N2	*1500 $\pm$ 25%	1.00		
MLB-321611-2000A-N1	**2000 $\pm$ 25%	1.50	150	
MLB-321611-2000A-N2				

**321616 (1206)-SIZES**

Part Number	Impedance ( $\Omega$ ) at 100 MHz	$R_{DC}$ ( $\Omega$ ) Max.	$I_{DC}$ (mA) Max.	Operating Temp. Range ( $^{\circ}$ C)
MLB-321616-0050A-N2	$50 \pm 25\%$	0.30	300	-55 ~ +125
MLB-321616-0070A-N1	$70 \pm 25\%$			

**322513 (1210)-SIZES**

Part Number	Impedance ( $\Omega$ ) at 100 MHz	$R_{DC}$ ( $\Omega$ ) Max.	$I_{DC}$ (mA) Max.	Operating Temp. Range ( $^{\circ}$ C)
MLB-322513-0052A-N1	$52 \pm 25\%$	0.30	300	-55 ~ +125
MLB-322513-0060A-N2	$60 \pm 25\%$			

**451616 (1806)-SIZES**

Part Number	Impedance ( $\Omega$ ) at 100 MHz	$R_{DC}$ ( $\Omega$ ) Max.	$I_{DC}$ (mA) Max.	Operating Temp. Range ( $^{\circ}$ C)
MLB-451616-0052A-N1	$52 \pm 25\%$	0.30	300	-55 ~ +125
MLB-451616-0060A-N2	$60 \pm 25\%$			
MLB-451616-0080A-N1	$80 \pm 25\%$			
MLB-451616-0125A-N2	$125 \pm 25\%$	0.50		
MLB-451616-0150A-N2	$150 \pm 25\%$			

**453215 (1812)-SIZES**

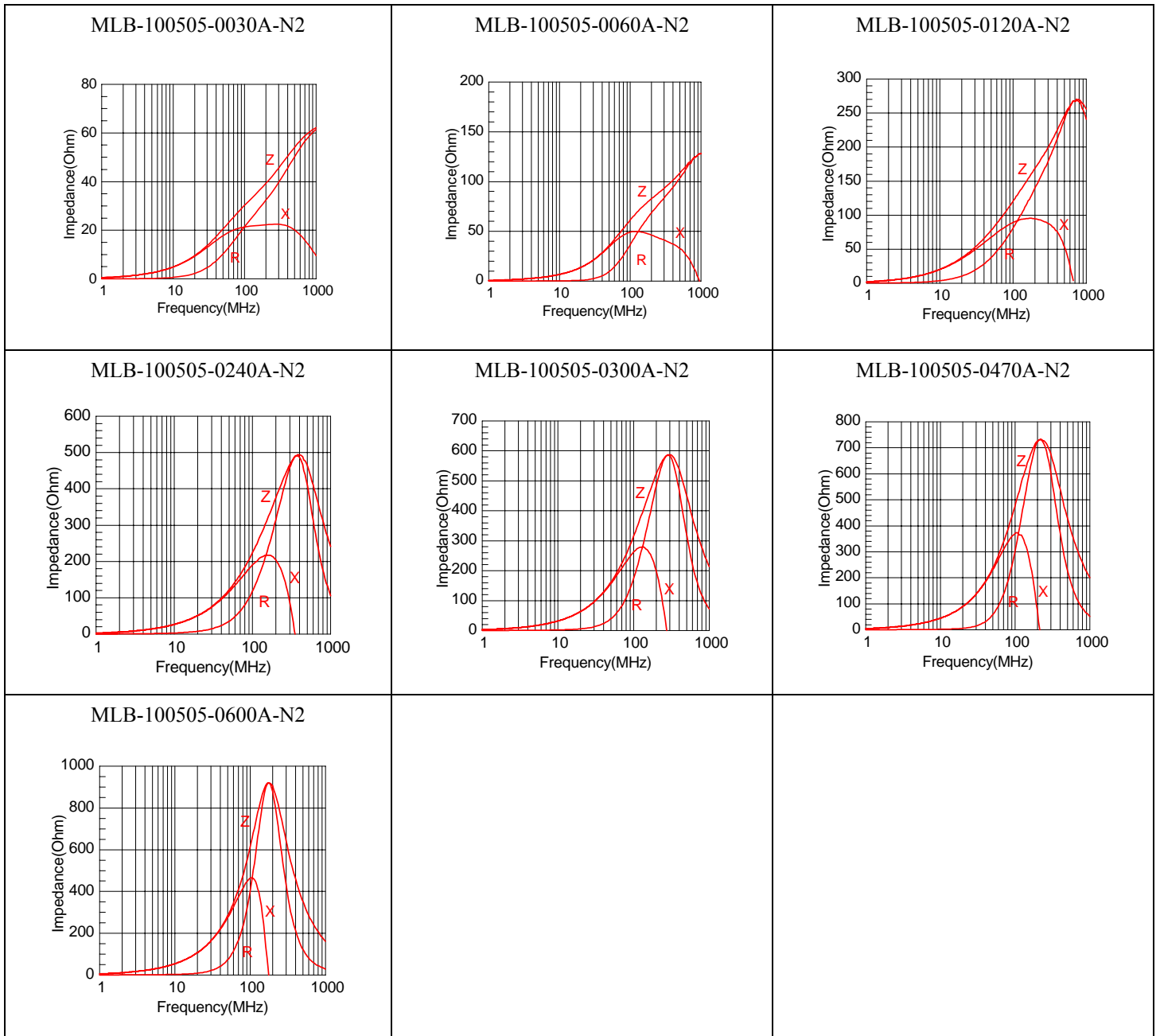
Part Number	Impedance ( $\Omega$ ) at 100 MHz	$R_{DC}$ ( $\Omega$ ) Max.	$I_{DC}$ (mA) Max.	Operating Temp. Range ( $^{\circ}$ C)
MLB-453215-0120A-N1	$120 \pm 25\%$	0.50	300	-55 ~ +125
MLB-453215-0125A-N2	$125 \pm 25\%$			

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## Ferrite Chip Beads For General Applications

### • TYPICAL ELECTRICAL CHARACTERISTIC CURVES

#### • SIZE: 100505

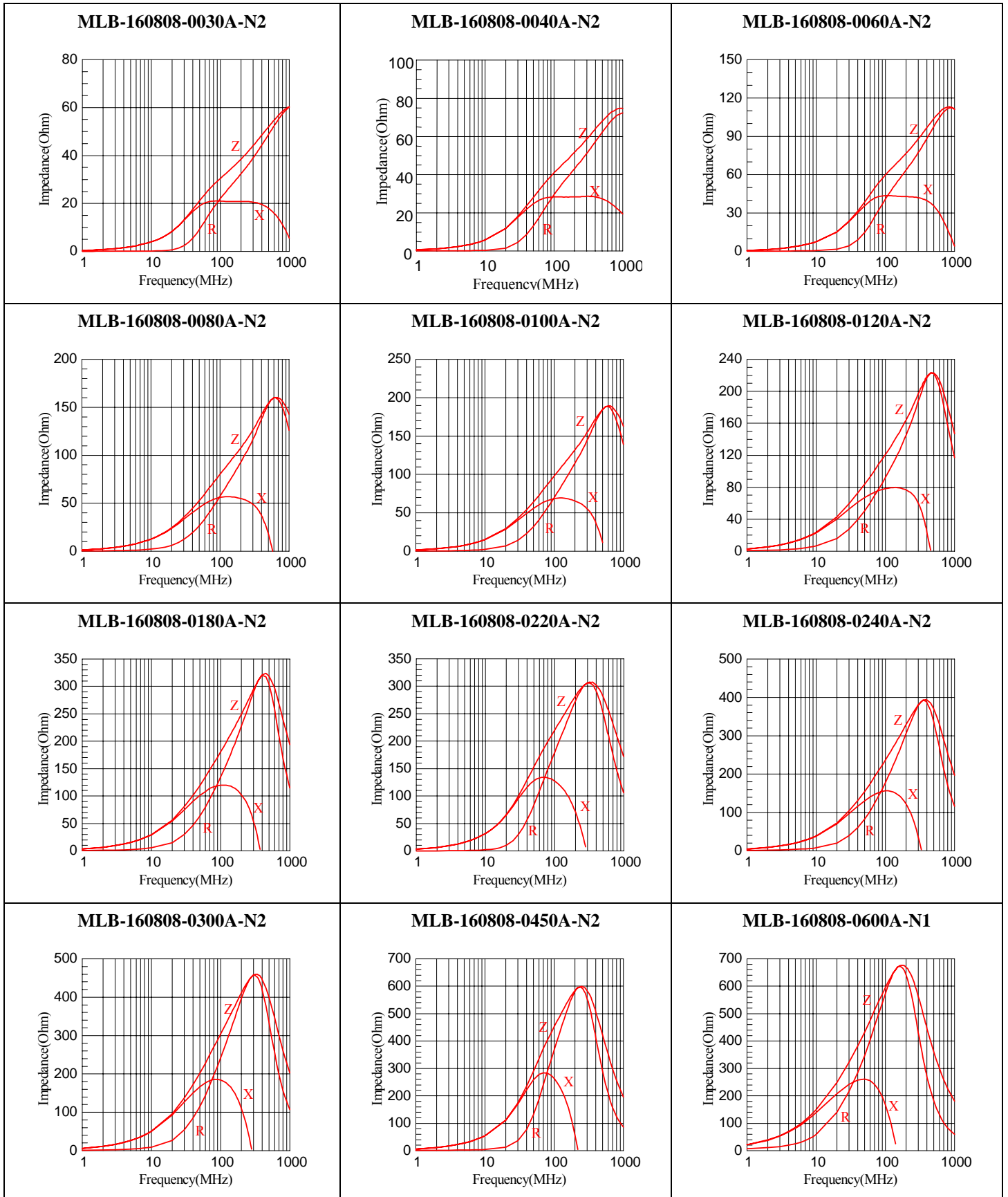


# MLB A-SERIES

## Ferrite Chip Beads For General Applications

### ◆ TYPICAL ELECTRICAL CHARACTERISTIC CURVES

SIZE : 160808

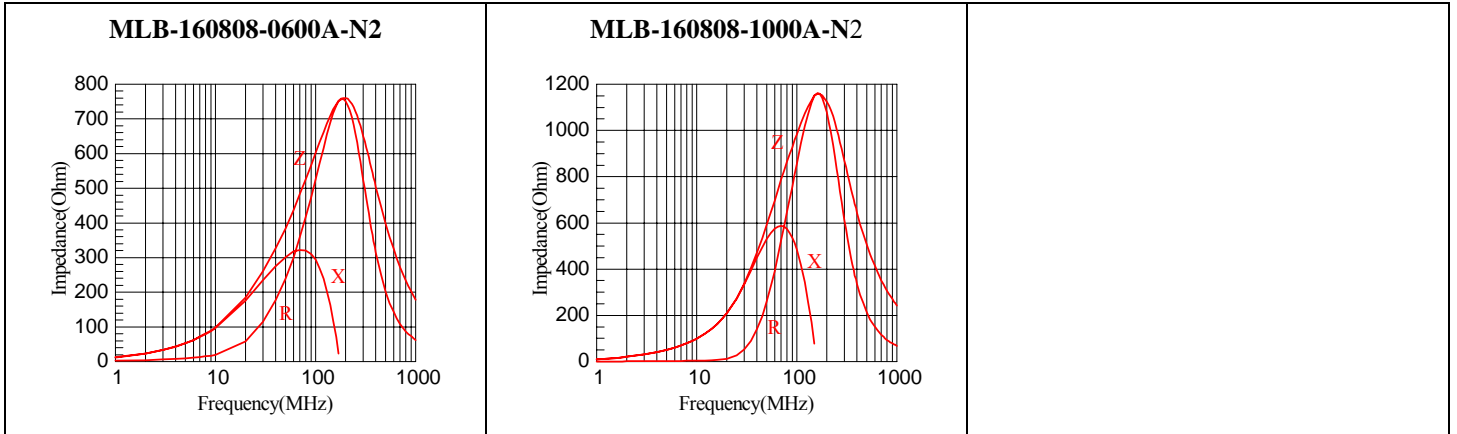


# MLB A-SERIES

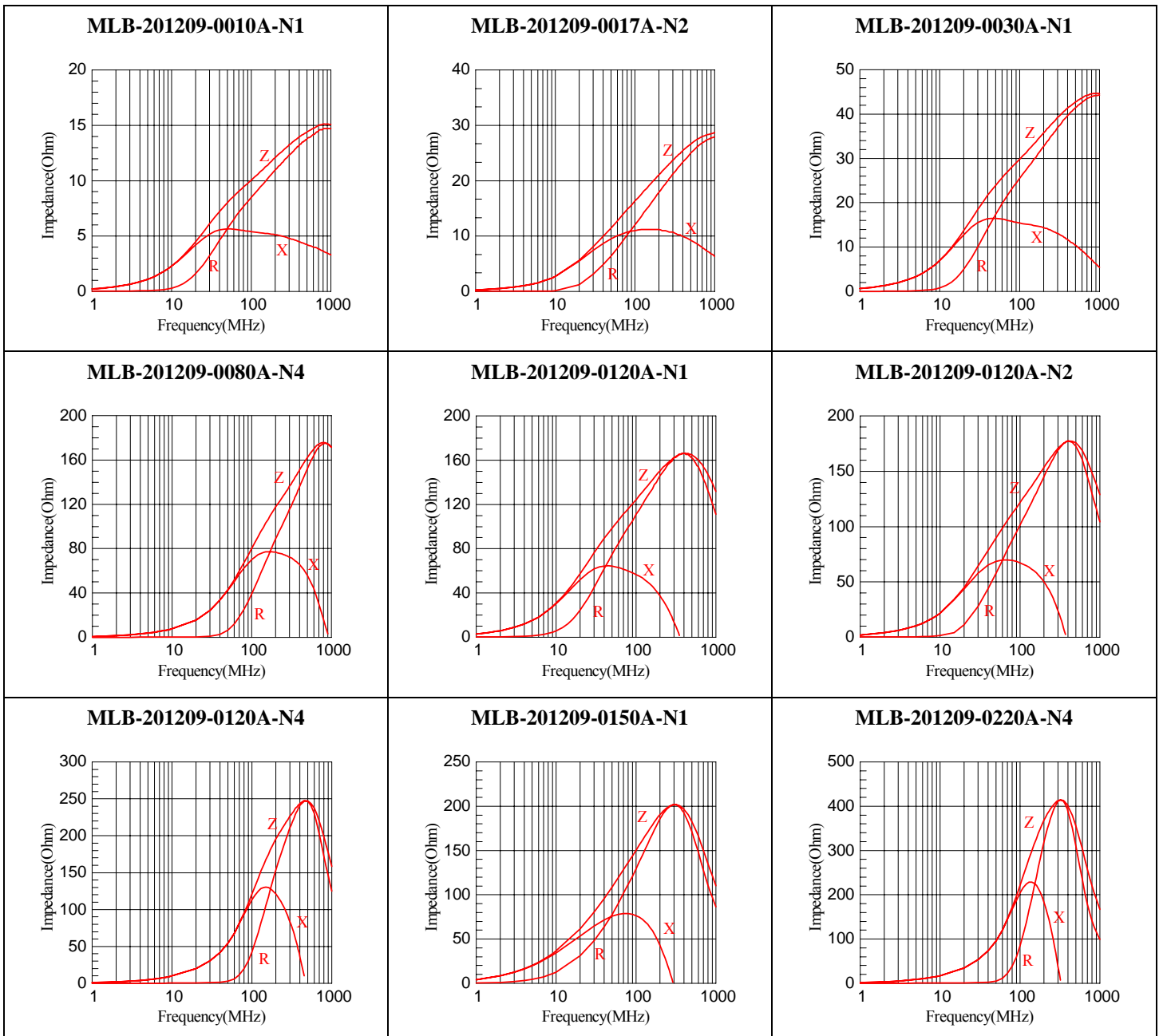
## Ferrite Chip Beads For General Applications

### ◆ TYPICAL ELECTRICAL CHARACTERISTIC CURVES

SIZE : 160808



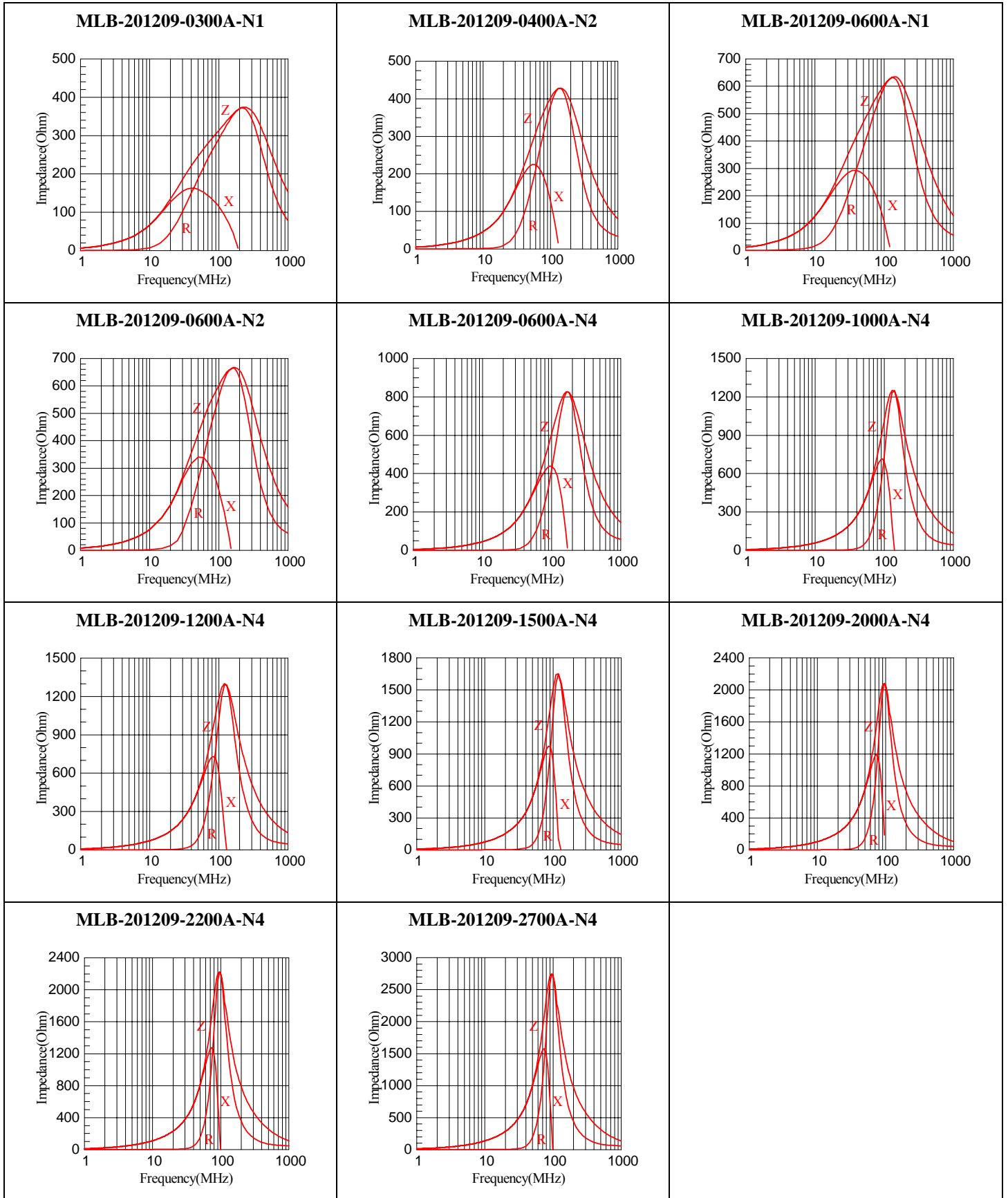
SIZE : 201209



# MLB A-SERIES

## Ferrite Chip Beads For General Applications

SIZE : 201209

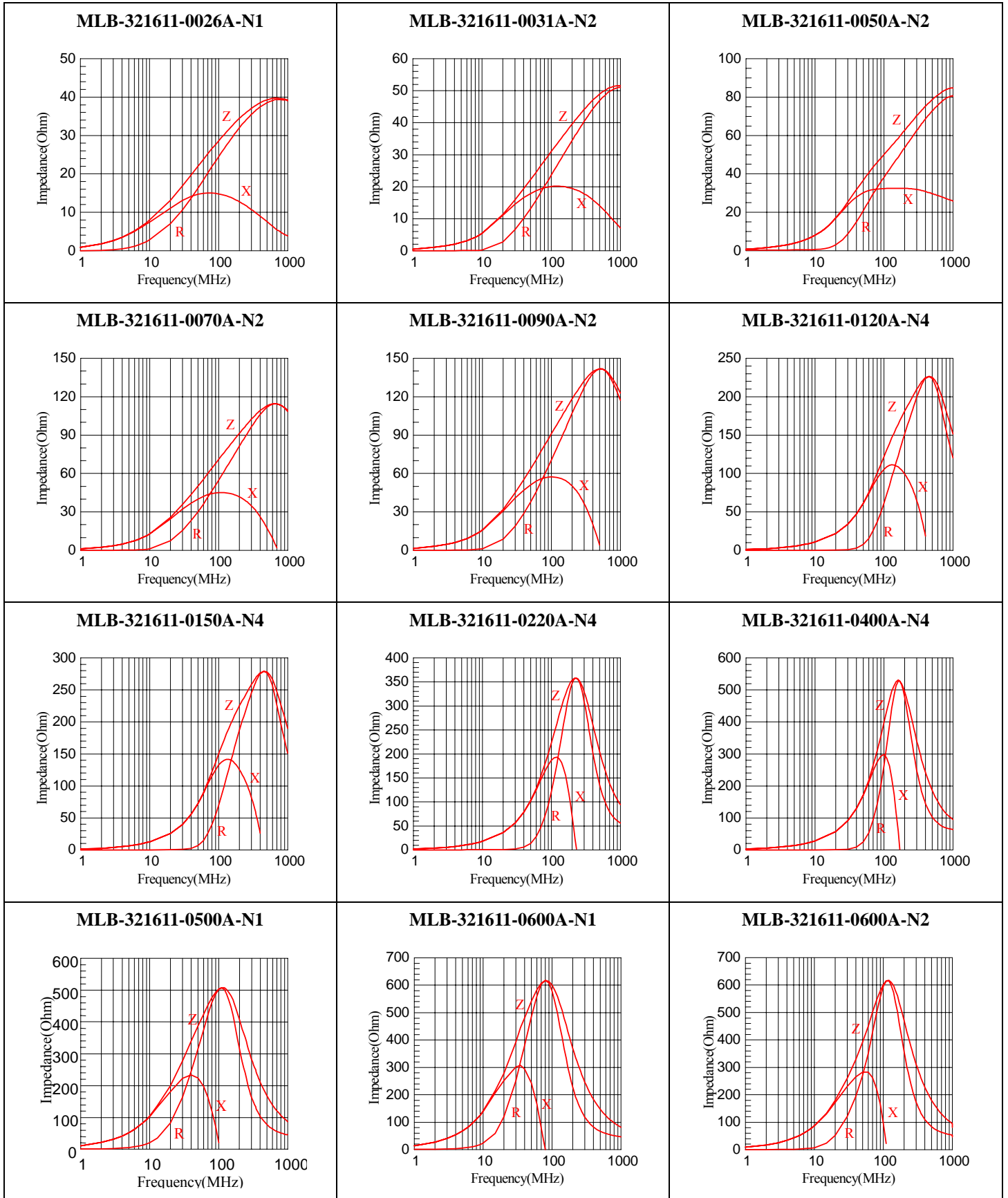




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## Ferrite Chip Beads For General Applications

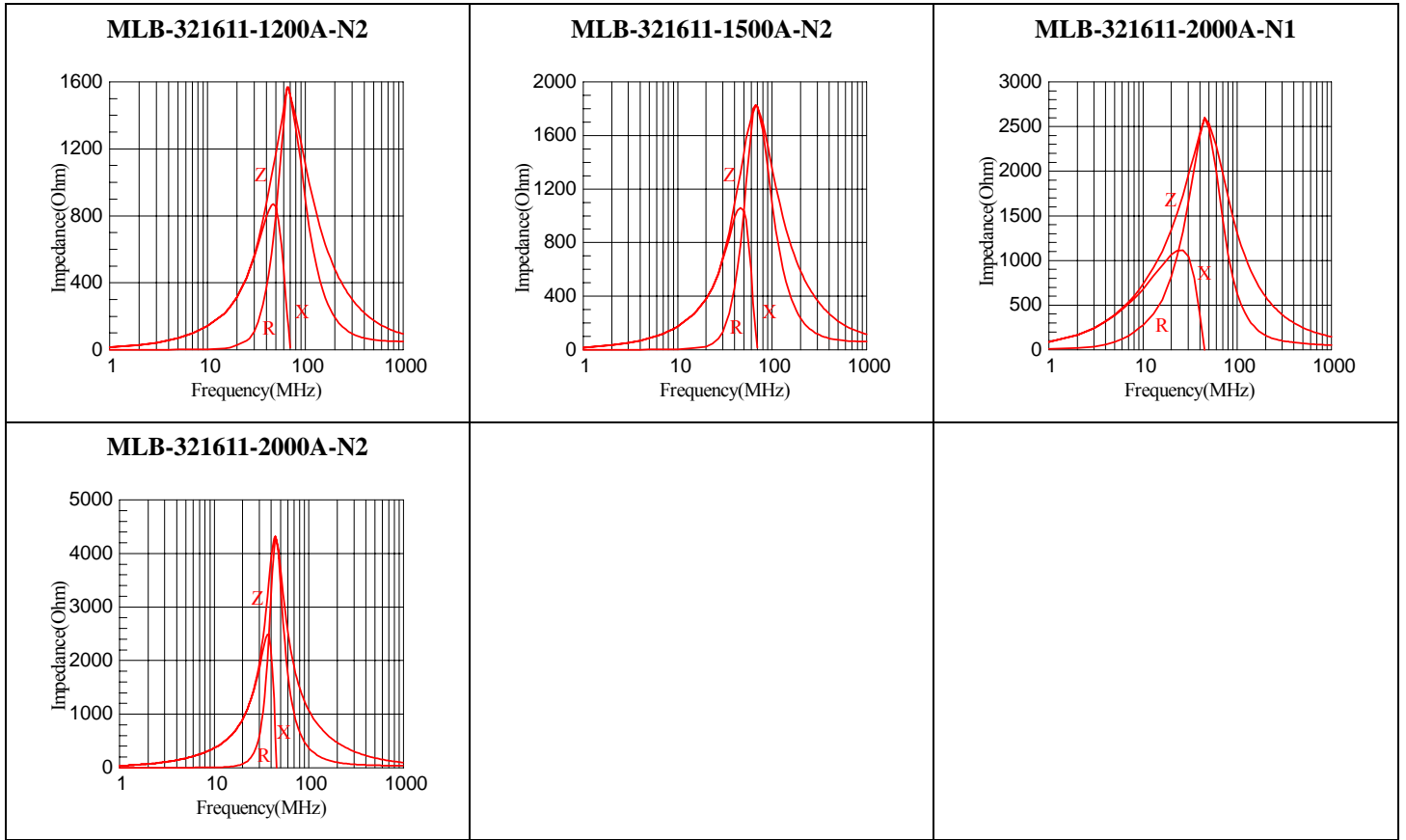
**SIZE : 321611**



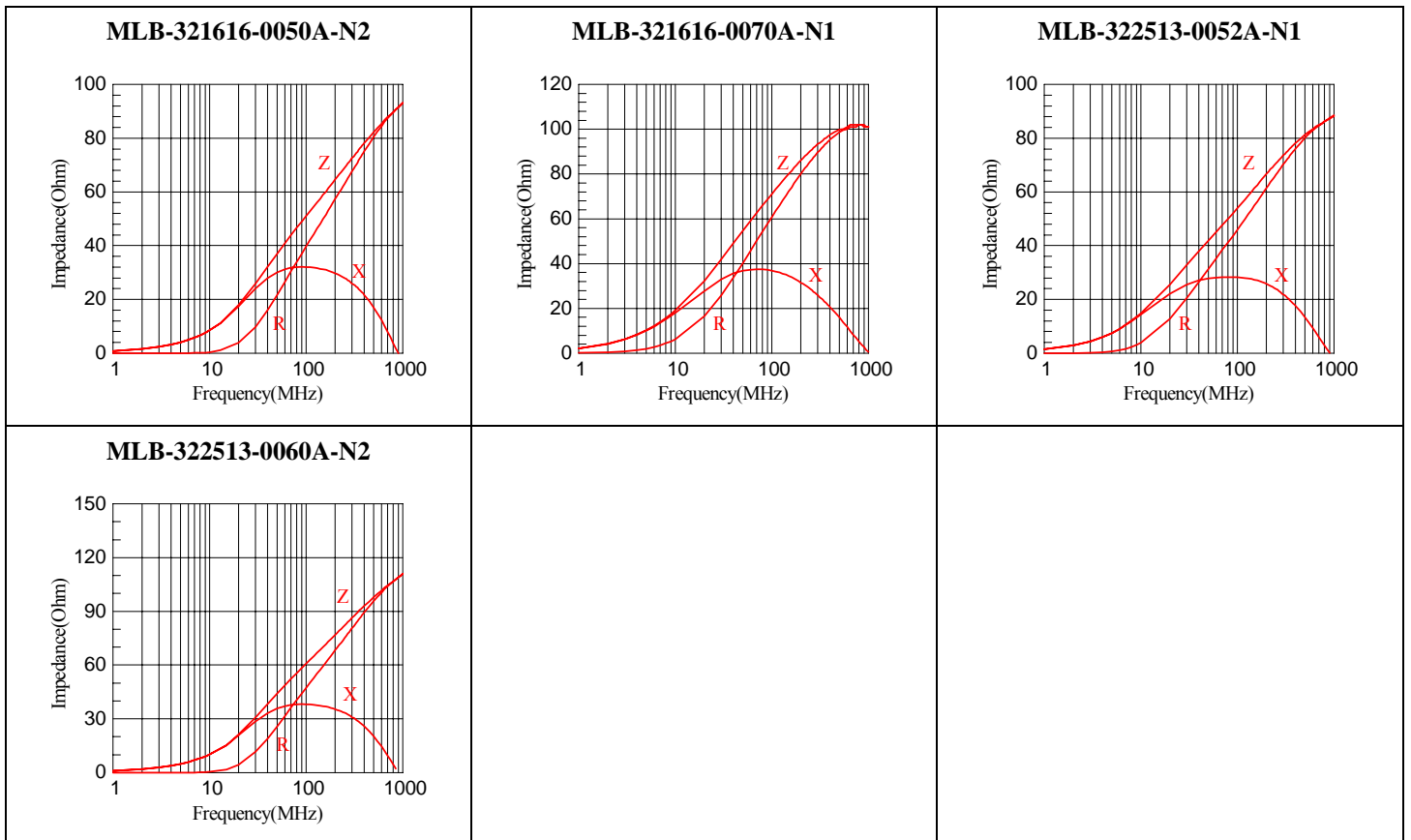
# MLB A-SERIES

## Ferrite Chip Beads For General Applications

### SIZE : 321611



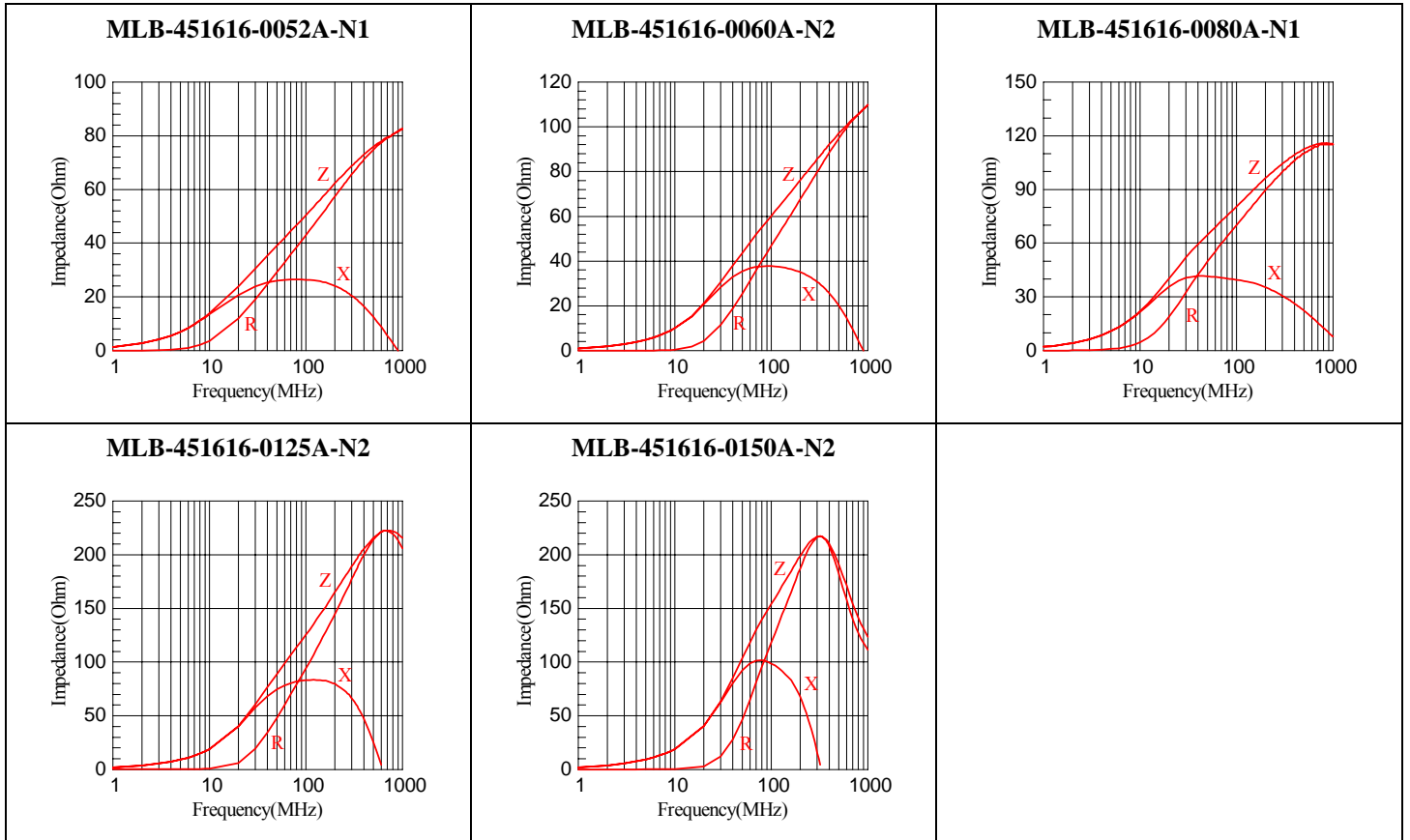
### SIZE : 321616/322513



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## Ferrite Chip Beads For General Applications

### SIZE : 451616



### SIZE : 453215

