

EMC Components

Ferrite Beads

SMD

MMZ Series MMZ1005, 1608, 2012 Types

FEATURES

- Chip bead(impeder), MMZ series offers 4 construction materials and 3 sizes (1×0.5, 1.6×0.8, and 2×1.3mm).
- Size standardized for use by automatic assembly equipment. No preferred orientation.
- Either flow or reflow soldering methods can be used due to electroplating of the terminal electrodes.
- High reliability due to an entirely monolithic structure.
- Closed magnetic circuit structure allows high-density installation while preventing crosstalk between circuits.
- Low DC resistance structure of electrode prevents wasteful electric power consumption.

MATERIAL CHARACTERISTICS

R material: For wide frequency applications calling for broad impedance characteristics.

For digital signal line applications calling requiring good waveform integrity. Impedance values selected for effectiveness at 10 to 200MHz.

S material: Standard type that features impedance characteristics similar to those of a typical ferrite core.

For signal line applications in which the blocking region is near 100MHz. Impedance values selected for effectiveness at 40 to 300MHz.

Y material: High frequency range type intended for the 100MHz region and above.

For signal line applications in which the signal frequency is far from the cutoff frequency. Impedance values selected for effectiveness at 80 to 400MHz.

D material: For applications calling for low insertion loss at low frequencies and sharply increasing impedance at high frequencies. Designed for high impedance at high frequencies (200 to 500MHz) for signal line applications.

APPLICATIONS

PCs, CRTs, liquid crystal display panels, printers, hard disk drives, game machines, cellular phones, etc.

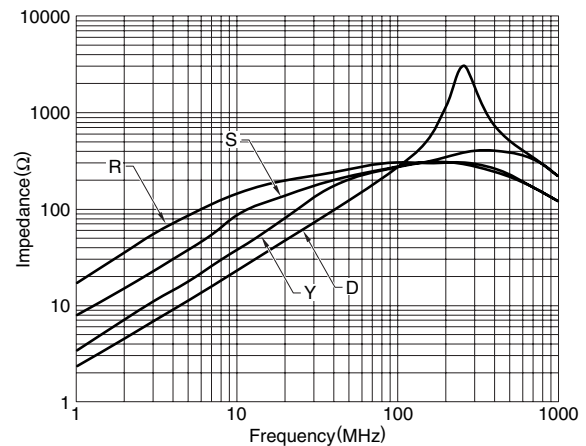
PRODUCT IDENTIFICATION

MMZ	1608	R	121	A	T
(1)	(2)	(3)	(4)	(5)	(6)

- (1) Series name (4) Nominal impedance 121:120Ω at 100MHz
(2) Dimensions L×W (5) Characteristic type
(3) Material code (6) Packaging style T:Taping

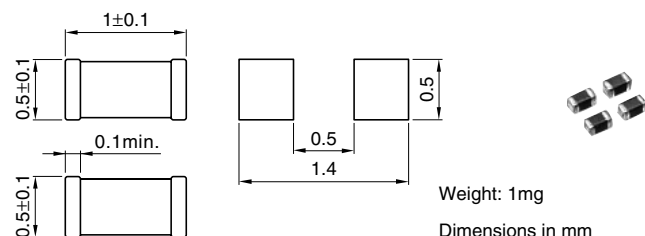
TYPICAL MATERIAL CHARACTERISTICS

MMZ1608(300Ω)



MMZ1005 TYPE

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



TEMPERATURE RANGE

Operating -55 to +125°C

ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω)±25% [100MHz]	DC resistance(Ω)		Rated current (mA)max.
		max.	typ.	
MMZ1005S241A	240	0.4	0.18	200
MMZ1005S601A	600	0.6	0.3	100
MMZ1005S800A	80	0.2	0.08	200
MMZ1005S121A	120	0.3	0.12	200

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	10000 pieces/reel

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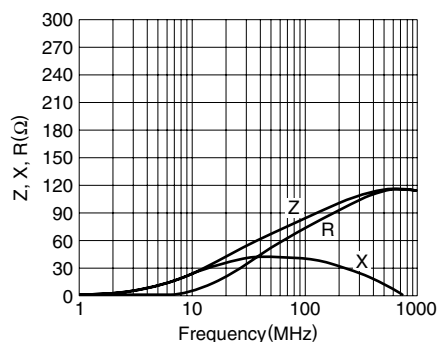
MMZ Series MMZ1005, 1608, 2012 Types

MMZ1005 TYPE

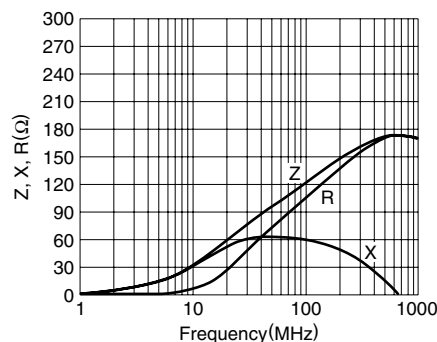
TYPICAL ELECTRICAL CHARACTERISTICS

Z, X, R vs. FREQUENCY CHARACTERISTICS

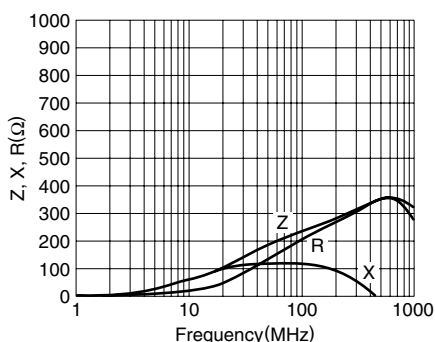
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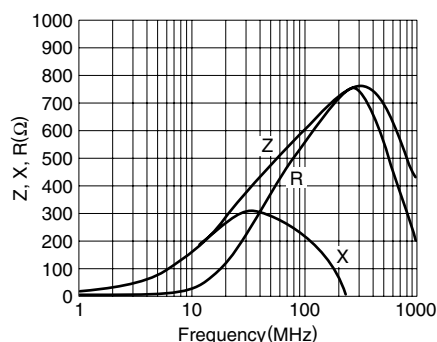
MMZ1005S121A



MMZ1005S241A

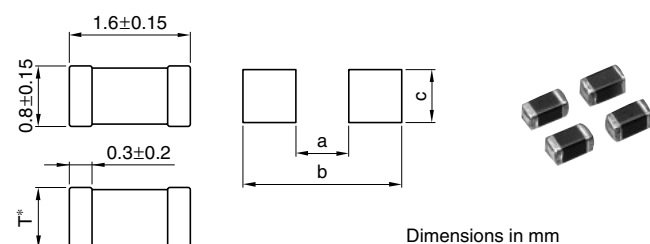


MMZ1005S601A



MMZ1608 TYPE

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



T*	a	b	c	Weight(mg)
0.6±0.15	0.6	2.2	0.8	3
0.8±0.15	0.7	2.1	0.7	4

* 0.6mm: Only for MMZ1608B
0.8mm: Others

TEMPERATURE RANGE

Operating -55 to +125°C

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	4000 pieces/reel

ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω)±25% [100MHz]	DC resistance(Ω)		Rated current (mA)max.
		max.	typ.	
MMZ1608R121A	120	0.2	0.1	500
MMZ1608R301A	300	0.3	0.12	500
MMZ1608R601A	600	0.4	0.22	500
MMZ1608R102A	1000	0.5	0.34	400
MMZ1608S800A	80	0.2	0.07	500
MMZ1608S121A	120	0.2	0.1	500
MMZ1608S181A	180	0.2	0.1	500
MMZ1608S301A	300	0.3	0.15	500
MMZ1608S601A	600	0.4	0.2	500
MMZ1608S102A	1000	0.5	0.3	400
MMZ1608Y121B	120	0.2	0.1	500
MMZ1608Y301B	300	0.3	0.15	500
MMZ1608Y601B	600	0.4	0.22	500
MMZ1608Y102B	1000	0.5	0.34	400
MMZ1608Y152B	1500	0.6	0.4	300
MMZ1608D800B	80	0.4	0.2	500
MMZ1608D121B	120	0.5	0.25	400
MMZ1608D301B	300	0.7	0.45	300

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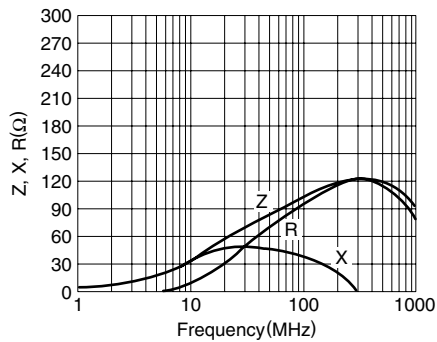
MMZ Series MMZ1005, 1608, 2012 Types

MMZ1608 TYPE

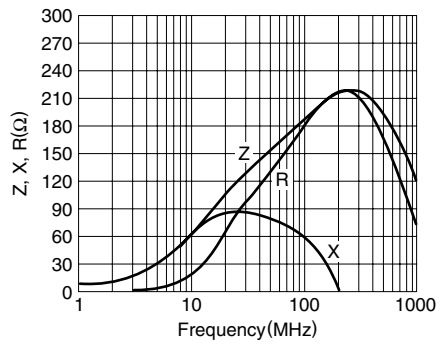
TYPICAL ELECTRICAL CHARACTERISTICS

Z, X, R vs. FREQUENCY CHARACTERISTICS

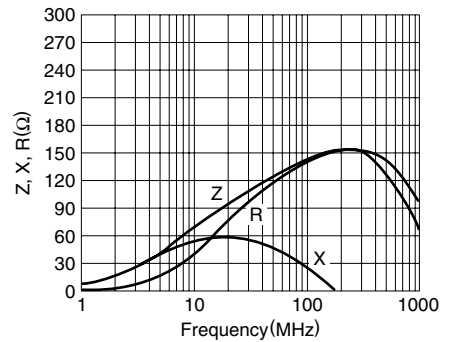
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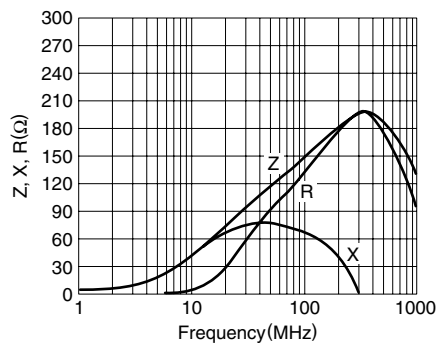
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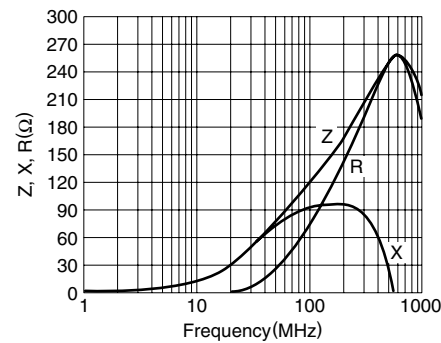
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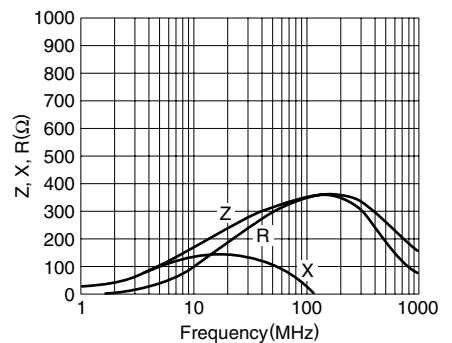
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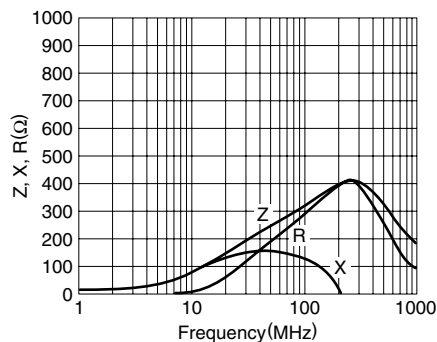
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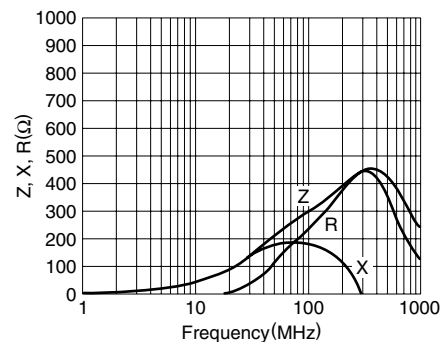
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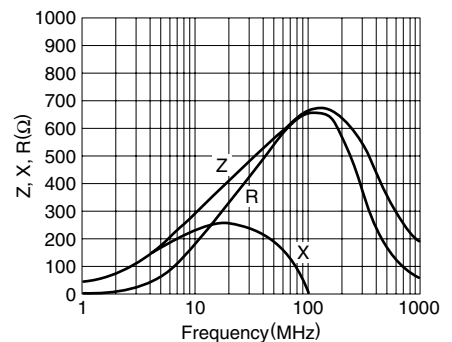
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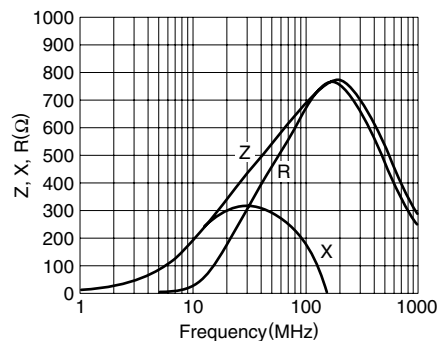
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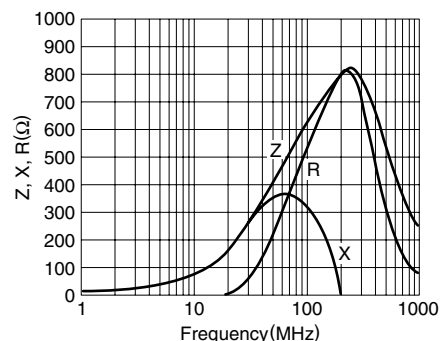
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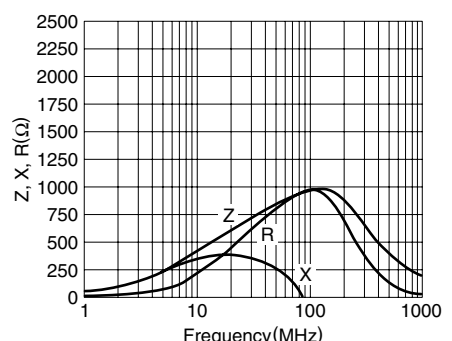
MMZ1608S601A



MMZ1608Y601B



MMZ1608R102A



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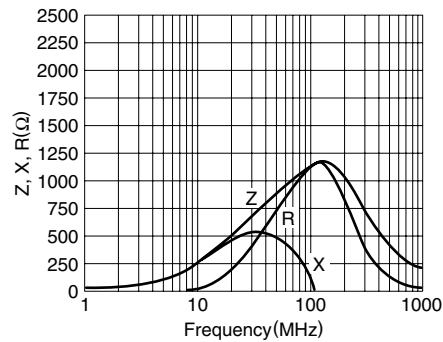
MMZ Series MMZ1005, 1608, 2012 Types

MMZ1608 TYPE

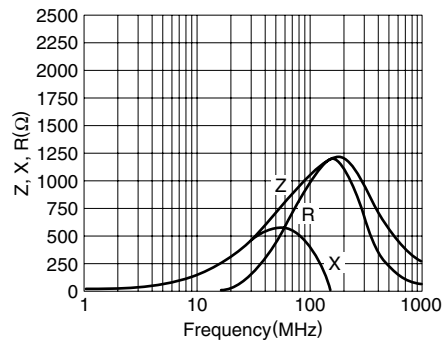
TYPICAL ELECTRICAL CHARACTERISTICS

Z, X, R vs. FREQUENCY CHARACTERISTICS

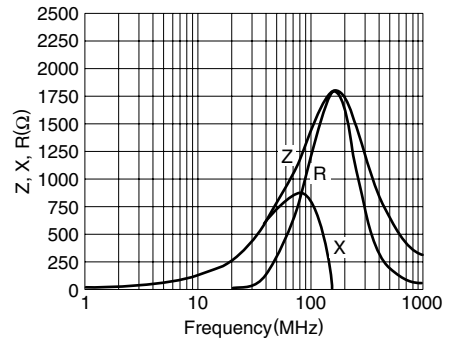
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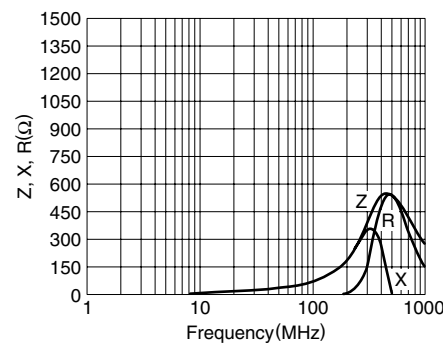
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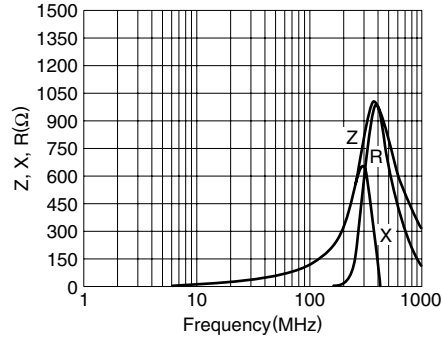
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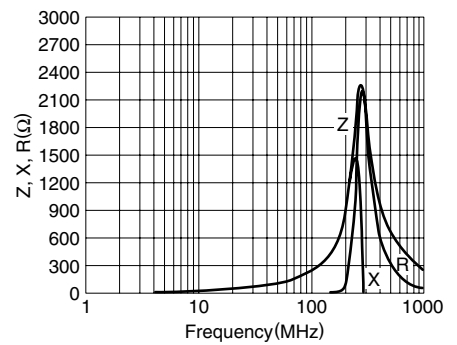
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MMZ1608D121B



MMZ1608D301B



EMC Components

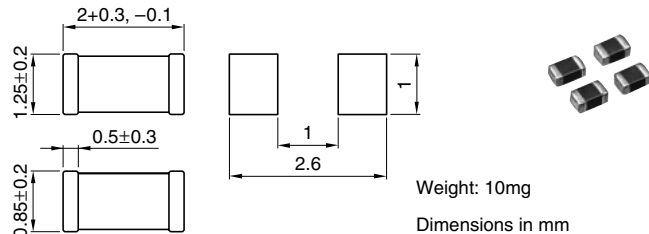
Ferrite Beads

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MMZ Series MMZ1005, 1608, 2012 Types

MMZ2012 TYPE

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



TEMPERATURE RANGE

Operating -55 to $+125^{\circ}\text{C}$

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	4000 pieces/reel

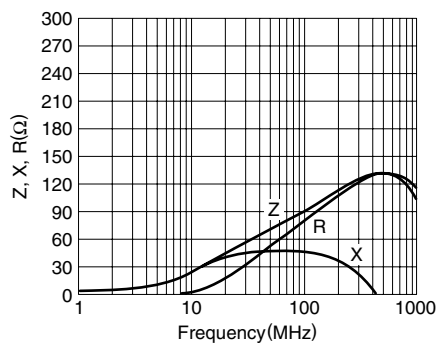
ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω) $\pm 25\%$ [100MHz]	DC resistance(Ω)		Rated current (mA)max.
		max.	typ.	
MMZ2012R121A	120	0.15	0.05	500
MMZ2012R301A	300	0.2	0.07	500
MMZ2012R601A	600	0.3	0.1	500
MMZ2012R102A	1000	0.35	0.18	500
MMZ2012S800A	80	0.1	0.05	500
MMZ2012S121A	120	0.15	0.05	500
MMZ2012S181A	180	0.15	0.05	500
MMZ2012S301A	300	0.2	0.07	500
MMZ2012S601A	600	0.3	0.1	500
MMZ2012S102A	1000	0.35	0.15	500
MMZ2012Y121B	120	0.15	0.05	500
MMZ2012Y301B	300	0.2	0.07	500
MMZ2012Y601B	600	0.3	0.1	500
MMZ2012Y102B	1000	0.35	0.15	500
MMZ2012Y152B	1500	0.4	0.22	500
MMZ2012Y202B	2000	0.5	0.28	400
MMZ2012D800B	80	0.3	0.12	500
MMZ2012D121B	120	0.4	0.14	500
MMZ2012D301B	300	0.5	0.24	400

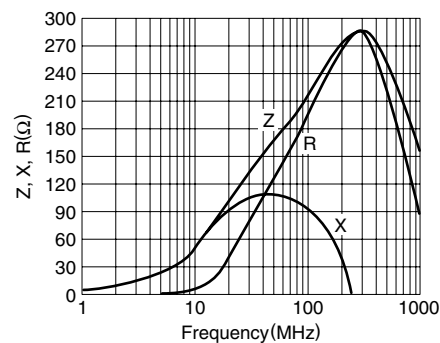
TYPICAL ELECTRICAL CHARACTERISTICS

Z, X, R vs. FREQUENCY CHARACTERISTICS

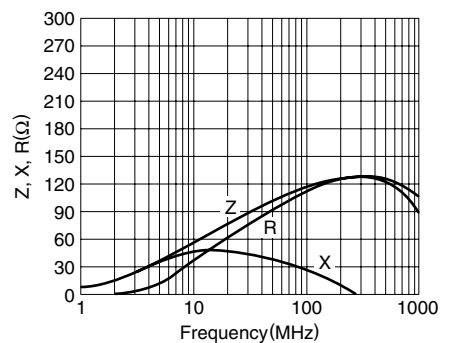
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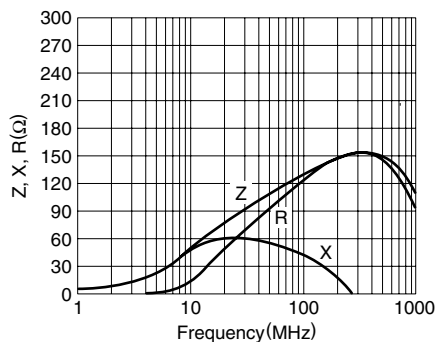
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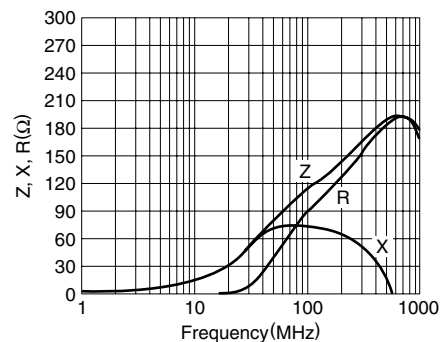
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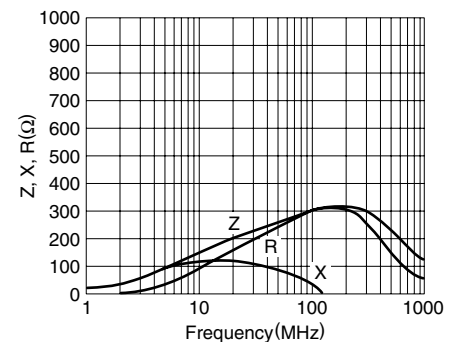
MMZ2012S121A



MMZ2012Y121B



MMZ2012R301A



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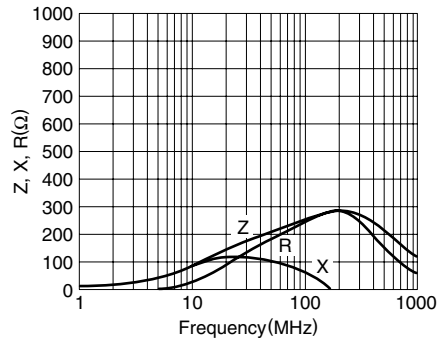
MMZ Series MMZ1005, 1608, 2012 Types

MMZ2012 TYPE

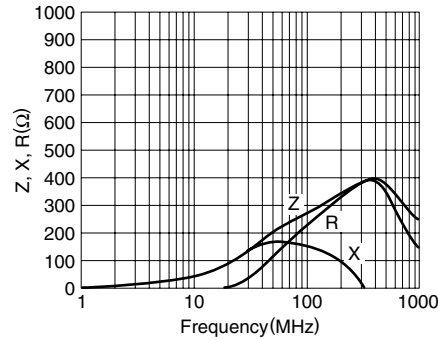
TYPICAL ELECTRICAL CHARACTERISTICS

Z, X, R vs. FREQUENCY CHARACTERISTICS

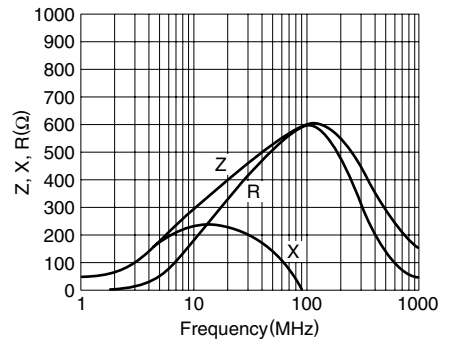
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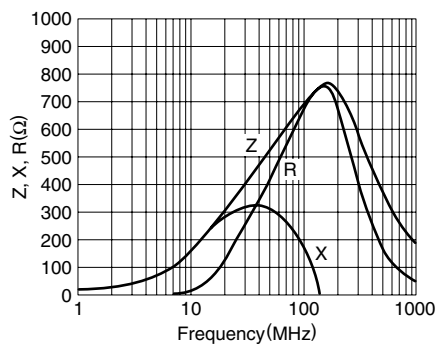
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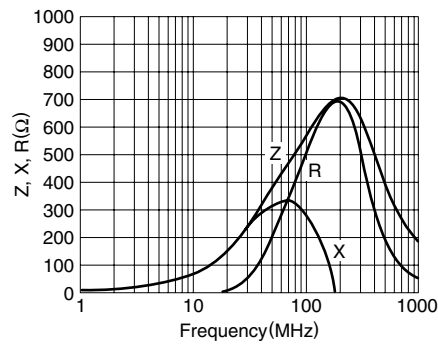
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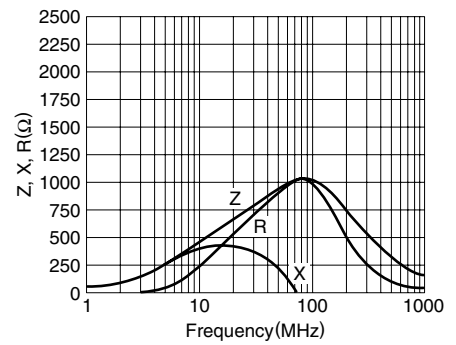
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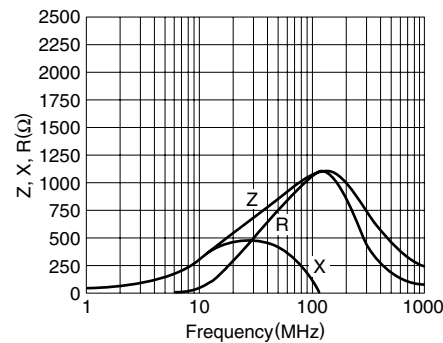
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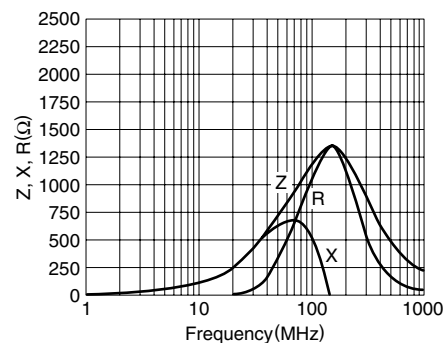
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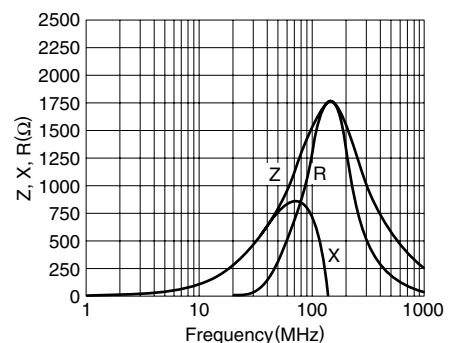
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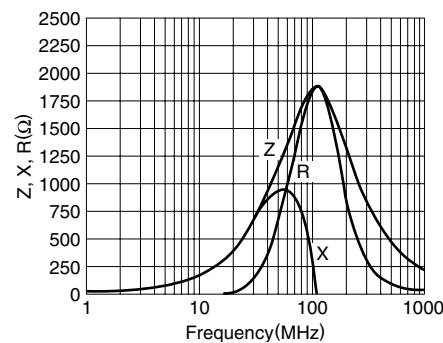
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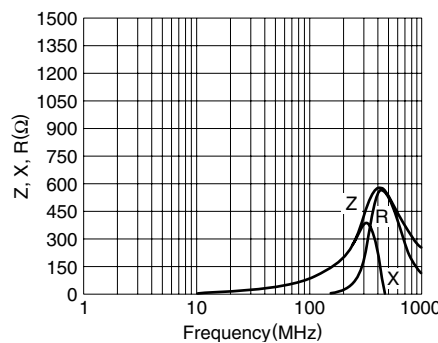
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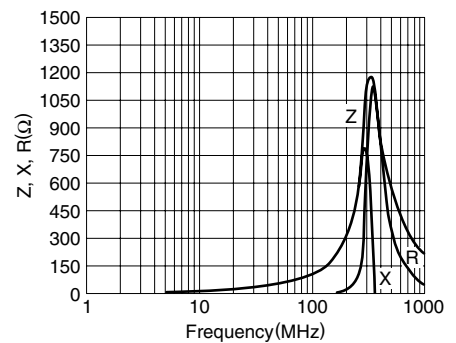
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MMZ2012D800B



MMZ2012D121B



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MMZ2012 TYPE

TYPICAL ELECTRICAL CHARACTERISTICS

Z, X, R vs. FREQUENCY CHARACTERISTICS

MMZ2012D301B

