Multilayer Ferrite Chip Beads
CI Series (Large Current)

Features

- ✱ High density packaging with a pitch of 2.54 mm（0.1 inch）max. is possible. This series requires less space and has greater EMI suppression effects.
- ✱ Different types with the same shape are available.
- ✱ Excellent in physical properties, such as terminal strength, flexure strength, soldering resistance and solderability.
- ✱ Applicable to both flow and reflow soldering.
- ✱ High impedance cover wide frequency ranges.
- ✱ CI series can be used in high current circuits due to its low DC resistance.

Applications

- ✱ Computers and peripheral devices, personal computers, VCR and cameras.
- ✱ Noise suppression in digital equipments, car stereo, car engines controllers and OA electronic instruments.
- ✱ Communication equipment.

Product Identifications

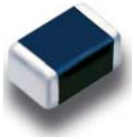
□CI	□□□□□□	□□□	U
(1)(2)	(3)	(4)	(5)

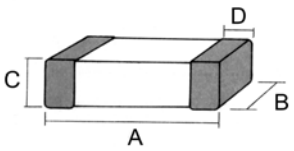
(1) Material Code
(2) Product Symbol: Multilayer Chip Beads
(3) Dimensions: Length (A) × Width (B) × Thickness (C)
(4) Impedance
(5) RoHS Part

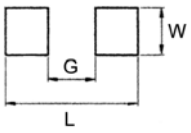
Material Characteristics for CB Type

Item	Unit	Standard Value				
Material Code	/	12	16	18	20	27
Initial Permeability (μiac)	/	45	110	25	200	500
Maximum Permeability (μm)	/	125	250	125	450	900
Saturation Flux Density at 10 Oe	Gauss	2000	1700	2000	1400	1500
Curie Temperature	℃	>200	>130	>200	>130	>100
Valume Resistivity	Ω-m	10^5	10^5	10^5	10^5	10^5
Temperature Coefficient	10^{-6}/℃	10	12	10	13	5
Density	g/cm^3	4.8	4.8	4.8	4.8	4.8

Shapes and Dimensions / Recommended PC Board Pattern







Dimensions in mm (inch)

TYPE	A	B	C	D	L	W	G
100505	1.0±0.1 (0.040±0.004)	0.5±0.1 (0.020±0.004)	0.5±0.1 (0.020±0.004)	0.1 (MIN.) (0.004)	2.20 (0.086)	0.70 (0.028)	0.40 (0.016)
160808	1.6±0.2 (0.063±0.008)	0.8±0.2 (0.031±0.008)	0.8±0.2 (0.031±0.008)	0.3±0.2 (0.012±0.008)	2.80 (0.110)	1.00 (0.039)	0.60 (0.024)
201209	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	0.9±0.2 (0.035±0.008)	0.5±0.3 (0.020±0.012)	3.20 (0.126)	1.50 (0.059)	0.60 (0.024)
321611	3.2±0.2 (0.126±0.008)	1.6±0.2 (0.063±0.008)	1.1±0.2 (0.043±0.008)	0.5±0.3 (0.020±0.012)	4.40 (0.173)	1.80 (0.071)	1.20 (0.047)
322513	3.2±0.2 (0.126±0.008)	2.5±0.2 (0.098±0.008)	1.3±0.2 (0.051±0.008)	0.5±0.3 (0.020±0.012)	4.40 (0.173)	2.70 (0.106)	1.20 (0.047)
451616	4.5±0.2 (0.177±0.008)	1.6±0.2 (0.063±0.008)	1.6±0.2 (0.063±0.008)	0.5±0.3 (0.020±0.012)	5.80 (0.228)	1.80 (0.071)	2.00 (0.079)
453215	4.5±0.2 (0.177±0.008)	3.2±0.2 (0.126±0.008)	1.5±0.2 (0.059±0.008)	0.5±0.3 (0.020±0.012)	5.80 (0.228)	3.40 (0.134)	2.00 (0.079)

Electrical Characteristics — All Type

Part Number	Impedance (Ω) ±25% At 100MHz	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
20CI 160808 -100U	10	0.030	4.0
20CI 160808 -300U	30	0.050	3.0
20CI 160808 -600U	60	0.050	3.0
20CI 160808 -121U	120	0.100	2.0
20CI 160808 -221U	220	0.150	1.5
20CI 160808 -301U	300	0.150	1.5
20CI 160808 -601U	600	0.300	1.0
20CI 201209 -110U	11	0.010	6.0
20CI 201209 -170U	17	0.010	6.0
20CI 201209 -220U	22	0.010	6.0
20CI 201209 -300U	30	0.030	4.0
20CI 201209 -600U	60	0.050	3.0
20CI 201209 -121U	120	0.080	2.5
20CI 201209 -221U	220	0.100	2.0
20CI 201209 -301U	300	0.100	2.0
20CI 201209 -601U	600	0.300	1.0
20CI 201209 -102U	1000	0.300	1.0
12CI 201209 -070U	7	0.050	3.0
27CI 321611 -260U	26	0.010	6.0
20CI 321611 -310U	31	0.010	6.0
20CI 321611 -500U	50	0.025	3.0
20CI 321611 -121U	120	0.080	2.5
20CI 321611 -301U	300	0.080	2.5
20CI 321611 -601U	600	0.100	2.0
20CI 321611 -102U	1000	0.200	1.5
16CI 321611 -800U	80	0.050	3.0
16CI 321611 -101U	100	0.050	3.0
16CI 321611 -601U	600	0.300	1.0
12CI 321611 -190U	19	0.040	3.0
20CI 322513 -300U	30	0.050	3.0
20CI 322513 -520U	52	0.050	3.0
20CI 322513 -650U	65	0.050	3.0
20CI 451616 -600U	60	0.010	6.0
20CI 451616 -750U	75	0.050	3.0
20CI 451616 -800U	80	0.050	3.0
20CI 451616 -471U	470	0.090	2.0
27CI 453215 -121U	120	0.050	3.0
20CI 453215 -700U	70	0.030	6.0
20CI 453215 -121U	120	0.050	3.0

Electrical Charts — All Type

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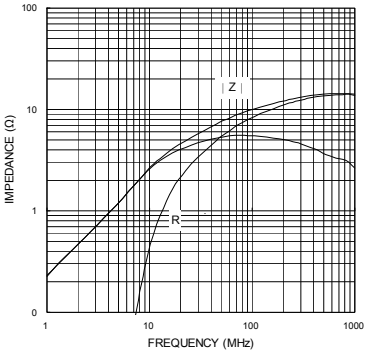

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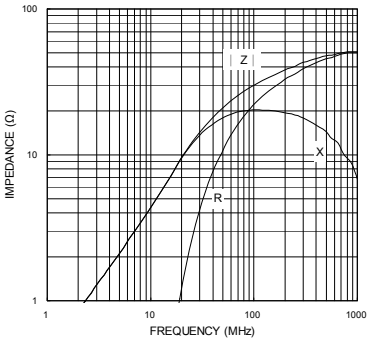

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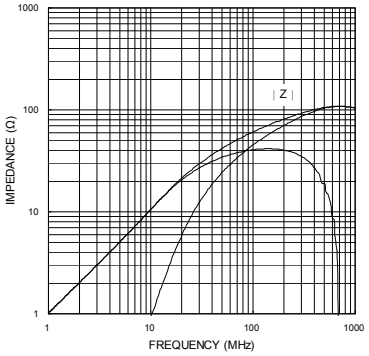

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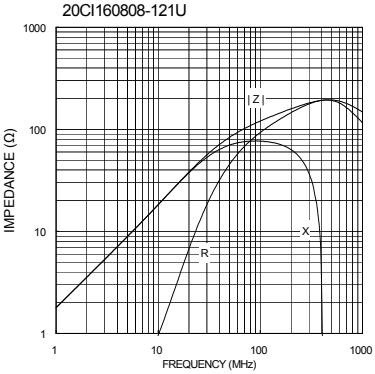

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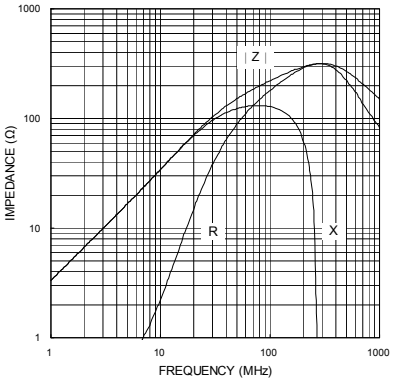

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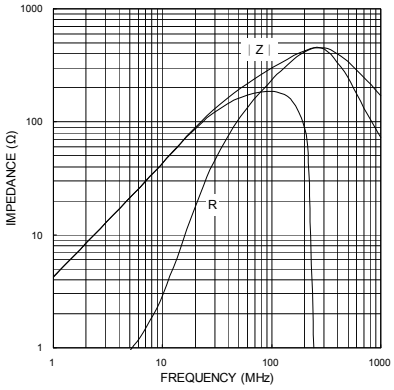

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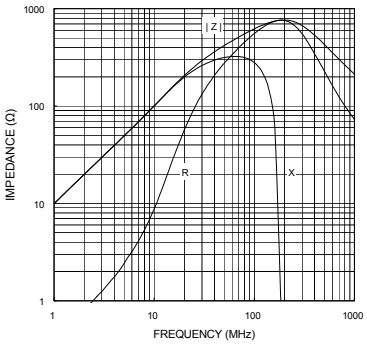

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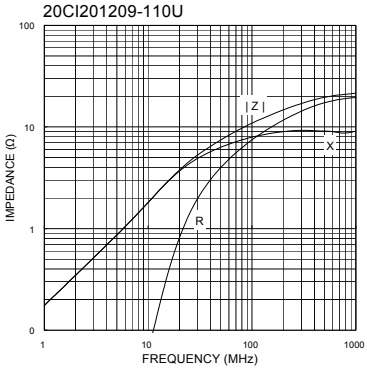

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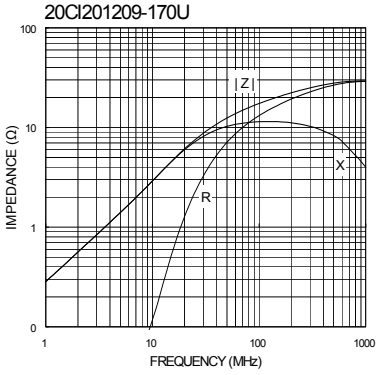

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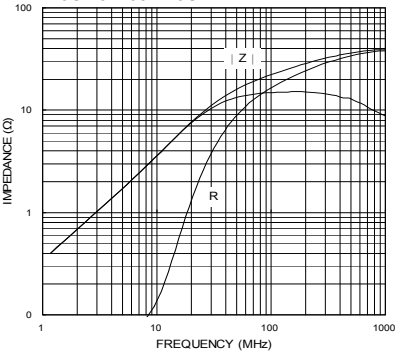

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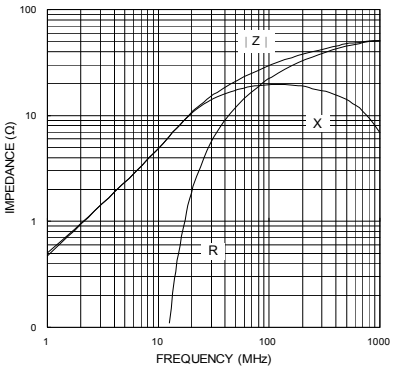

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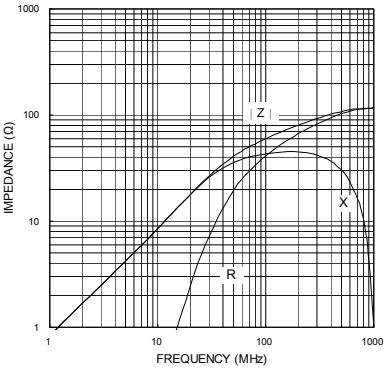

Electrical Charts — All Type

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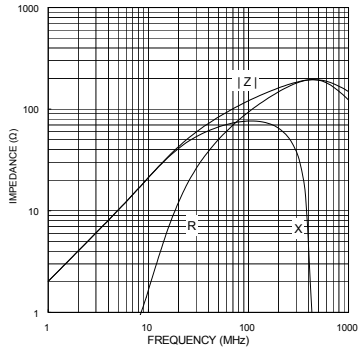

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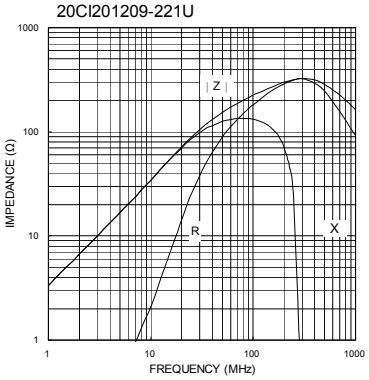

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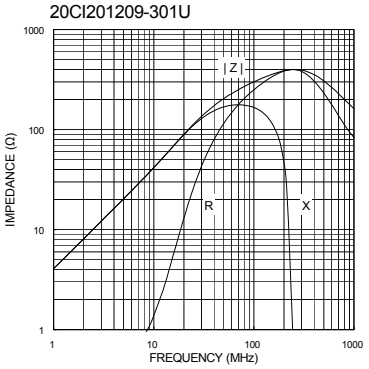

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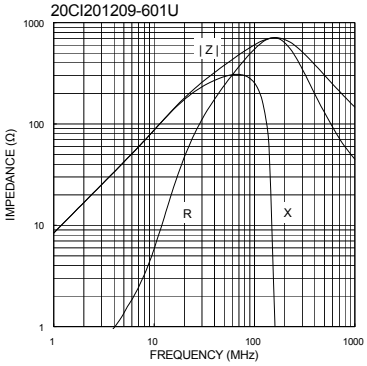

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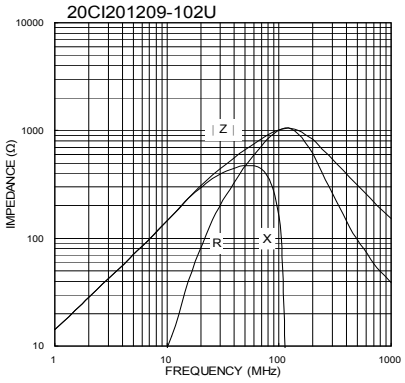

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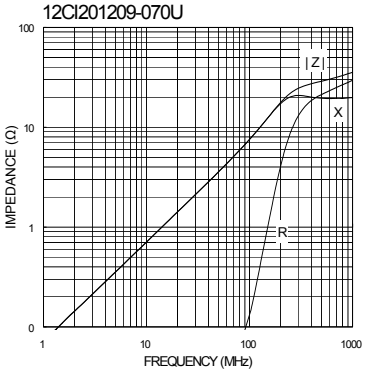

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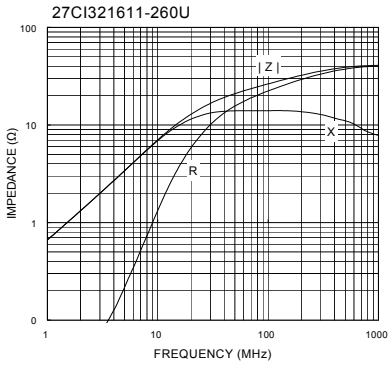

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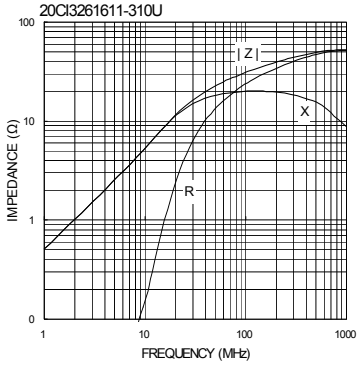

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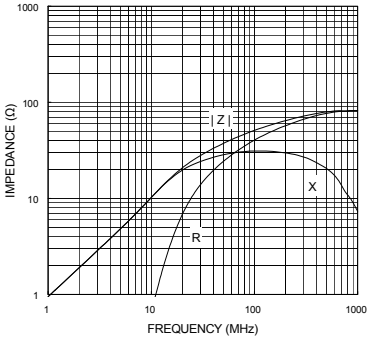

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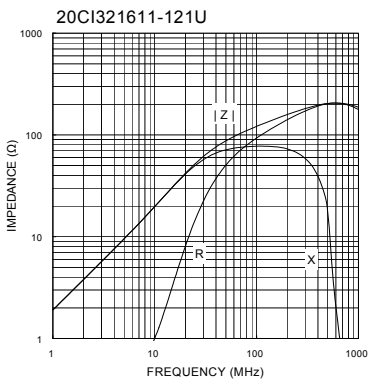

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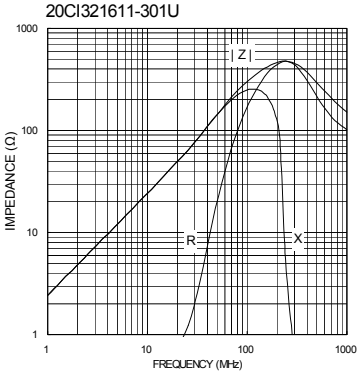

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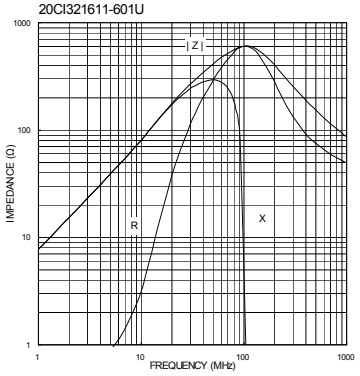

Electrical Charts — All Type

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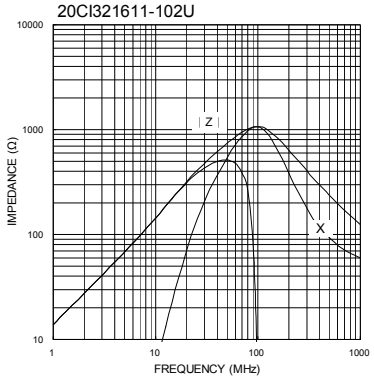

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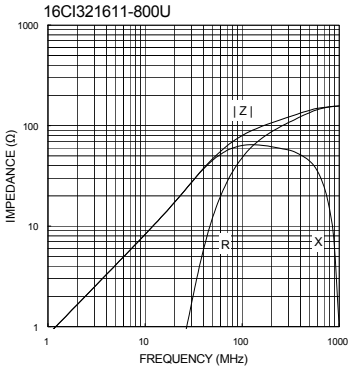

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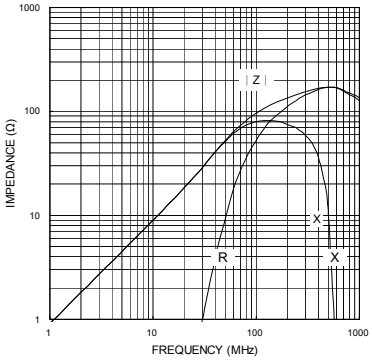

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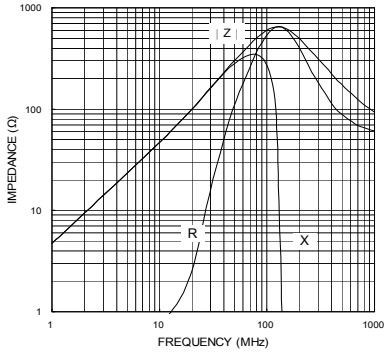

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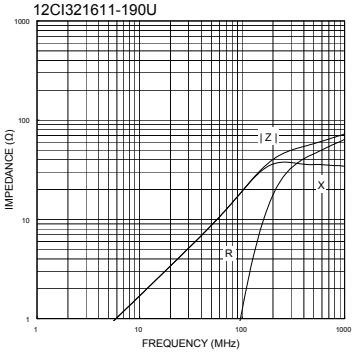

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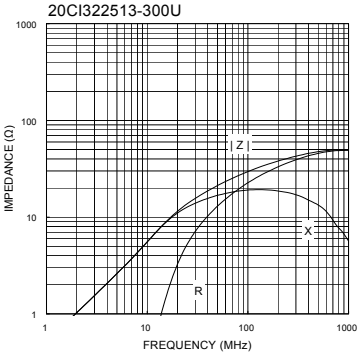

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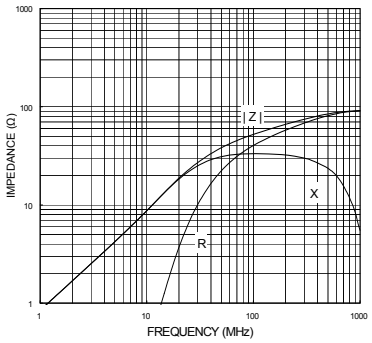

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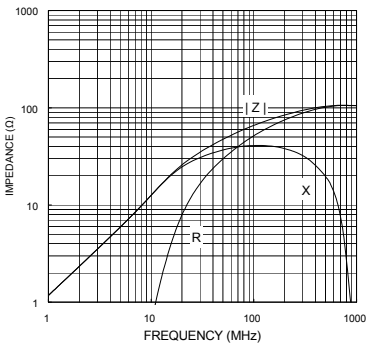

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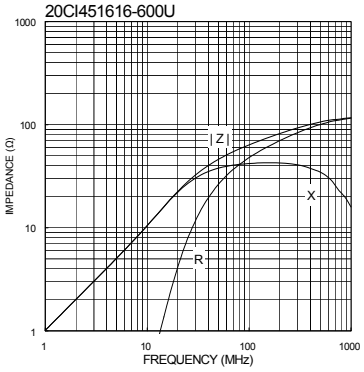

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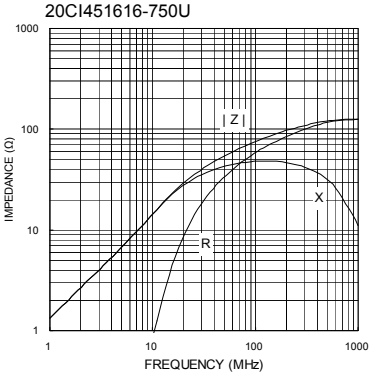

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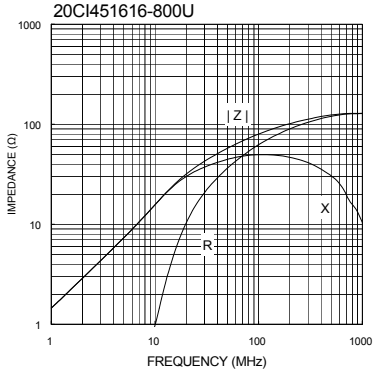

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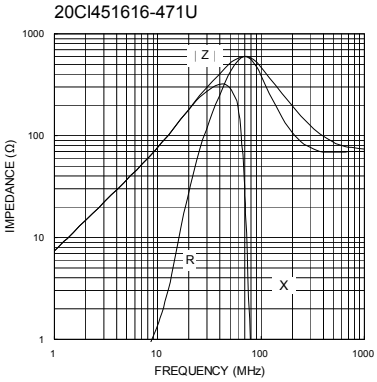

Electrical Charts — All Type

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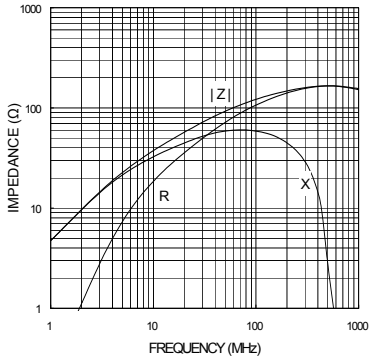

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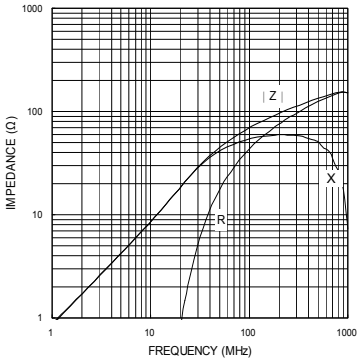

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