

Multilayer High Current Ferrite Chip Bead (for Power Line)

積層式大電流鐵氧體晶片磁珠（電源線用）

ZCDS Series for DC Power Line ZCDS 系列適用於電源線

Rated Current (耐電流) : 1-3A (安培)



INTRODUCTION 產品介紹

Multilayer high current chip beads are SMD components that possess a low DC resistance. Their impedance mainly comprises resistive part. Therefore, when this component is inserted in series with a noise high current conduction path, the noise content can be attenuated.

積層式大電流晶片磁珠係表面黏著式晶片，具低直流電阻。其阻抗主要由電阻性組成，所以當元件被安裝於一有雜訊的大電流傳導路徑上，其雜訊可被衰減。

FEATURE 特色

The ZCDS series can be used on high current circuits due to its low DC resistance. It can deal with DC-3A maximum on the power line .

由於 ZCDS 系列產品的低直流電阻之特性，使其適用於大電流電路，適合最高 3 安培直流電之電源線。

APPLICATION 適用產品

This series is suitable for EMI suppression of the high DC current power line. For example: 此系列產品適用於大電流電源線之雜訊抑制，例如：

1. Various power lines of electronic equipment.
各式電子設備電源線。
2. Mother board, tablet PC, notebook, desktop computers and peripheral equipment.
主機板、平板電腦、筆記型電腦、桌上型電腦及其週邊設備。
3. DSC, DVC, LCD Television, Set Top Box.
數位相機、數位攝影機、液晶電視機、數位機上盒。
4. Digital communication equipment.
數位通訊設備。
5. Various automotive electronics.
各式汽車設備。

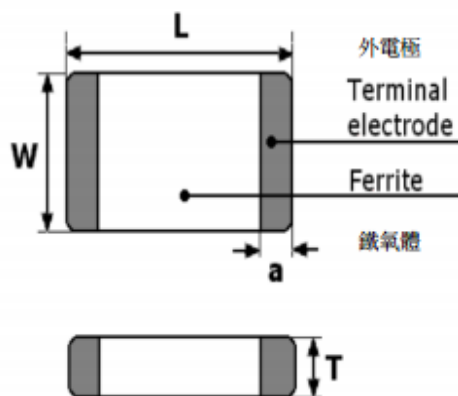
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SIZE AND DIMENSION 尺寸及邊長



SIZE 尺寸	L 長 mm	W 寬 mm	T 厚 mm	a 銀寬 mm
100505 (0402)	1.0±0.05	0.5±0.05	0.5±0.05	0.1~0.3
160808 (0603)	1.6±0.15	0.8±0.15	0.8±0.15	0.2~0.6
201209 (0805)	2.0±0.2	1.25±0.2	0.9+0.15/-0.2	0.2~0.8
321611 (1206)	3.2±0.2	1.6±0.2	1.1±0.2	0.4~1.0
321616 (1206H)	3.2±0.2	1.6±0.2	1.6±0.2	0.4~1.0
322513 (1210)	3.2±0.2	2.5±0.2	1.3±0.2	0.6~1.0
451616 (1806)	4.5±0.2	1.6±0.2	1.6±0.2	0.6~1.0
453215 (1812)	4.5±0.2	3.2±0.2	1.5±0.2	0.6~1.0

PART NUMBER SYSTEM 編碼系統

ZCD S 201209 A 121



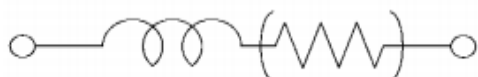
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EQUIVALENT CIRCUIT DIAGRAM 等效電路圖



Electrical Characteristics 電氣特性

Part Number 產品料號	Impedance 阻抗 $\Omega \pm 25\%$ 歐姆 @ 100MHz	DC Resistance 直流電阻 Ω (Max.) 歐姆	Rated Current 耐電流 mA (Max.)
1005 系列			
ZCDS 100505A100 2A	10	0.03	2000
ZCDS 100505A300	30	0.03	3000
ZCDS 100505A121 RDC09	120	0.09	1200
ZCDS 100505A121 2A	120	0.055	2000
1608 系列			
ZCDS 160808A300	30	0.04	3000
ZCDS 160808A600	60	0.04	3000
ZCDS 160808A121 2A	120	0.05	2000
ZCDS 160808A221 2A	220	0.08	2000
ZCDS 160808A601 1A	600	0.3	1000
ZCDS 160808A601 2A	600	0.1	2000
2012 系列			
ZCDS 201209A170	17	0.03	3000
ZCDS 201209A310	31	0.03	3000
ZCDS 201209A470	47	0.03	3000
ZCDS 201209A520	52	0.03	3000
ZCDS 201209A600	60	0.04	3000
ZCDS 201209A800	80	0.04	3000
ZCDS 201209A101	100	0.04	3000
ZCDS 201209A121	120	0.05	3000
ZCDS 201209A221	220	0.05	3000
ZCDS 201209A301	300	0.05	3000
ZCDS 201209A601 2A	600	0.10	2000

* TEST EQUIPMENT: E4991A IMPEDANCE ANALYZER 量測儀器：E4991A 阻抗分析儀

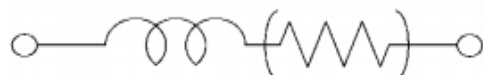
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Part Number 產品料號	Impedance 阻抗 $\Omega \pm 25\%$ 歐姆 @ 100MHz	DC Resistance 直流電阻 Ω (Max.) 歐姆	Rated Current 耐電流 mA (Max.)
2012 系列			
ZCDS 201209A102 1A	1000	0.30	1000
ZCDS 201209A152 1A	1500	0.30	1000
ZCDS 201209B121	120	0.04	3000
3216 系列			
ZCDS 321611A190	19	0.03	3000
ZCDS 321611A310	31	0.03	3000
ZCDS 321611A520	52	0.03	3000
ZCDS 321611A700	70	0.04	3000
ZCDS 321611A101	100	0.04	3000
ZCDS 321611A151	150	0.05	3000
ZCDS 321611A301	300	0.06	3000
ZCDS 321611A501 2.5A	500	0.07	2500
ZCDS 321611A601 2A	600	0.08	2000
ZCDS 321611A102 1A	1000	0.30	1000
ZCDS 321611I310 1.5A	31	0.045	1500
3225 系列			
ZCDS 322513A520	52	0.03	3000
ZCDS 322513A600	60	0.03	3000
ZCDS 322514I600 1.5A	60	0.035	1500
4516 系列			
ZCDS 451616A600	60	0.04	3000

* TEST EQUIPMENT: E4991A IMPEDANCE ANALYZER 量測儀器：E4991A 阻抗分析儀

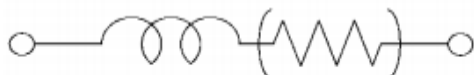
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Part Number 產品料號	Impedance 阻抗 $\Omega \pm 25\%$ 歐姆 @ 100MHz	DC Resistance 直流電阻 Ω (Max.) 歐姆	Rated Current 耐電流 mA (Max.)
4516 系列			
ZCDS 451616A800	80	0.04	3000
ZCDS 451616A101	100	0.04	3000
ZCDS 451616A181	180	0.04	3000
ZCDS 451616A851 RDC1	850	0.1	1500
ZCDS 451616A102 RDC09	1000	0.09	1500
4532 系列			
ZCDS 453215A121	120	0.04	3000
ZCDS 453215A151	150	0.04	3000
ZCDS 453215K601	600	0.04	3000
ZCDS 453215K781	780	0.04	3000

* TEST EQUIPMENT: E4991A IMPEDANCE ANALYZER 量測儀器：E4991A 阻抗分析儀

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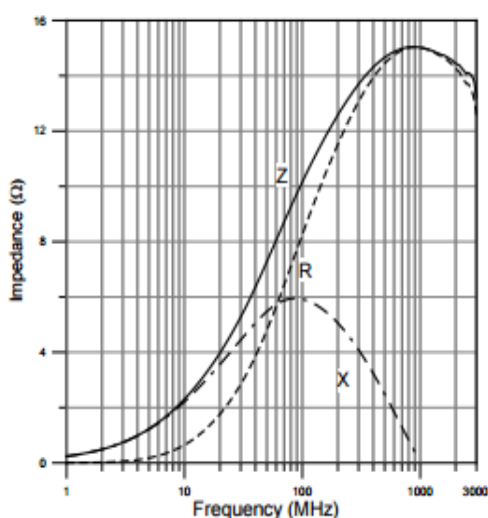
ZCDS Series for DC Power Line ZCDS 系列適用於電源線

Rated Current (耐電流) : 1-3A (安培)

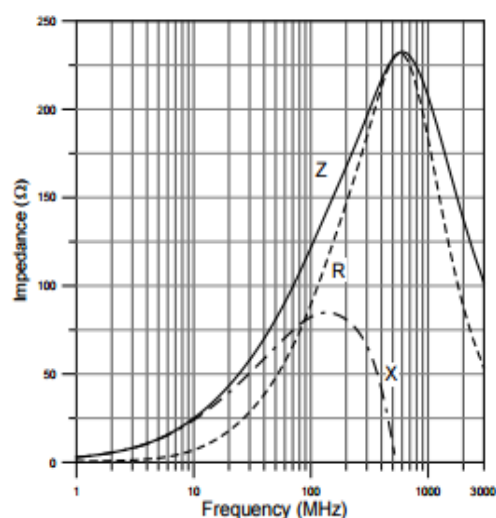
TYPICAL ELECTRICAL CHARACTERISTICS 典型電氣特性

Z, R, X vs. FREQUENCY CHARACTERISTICS 阻抗、電阻、感抗對頻率特性

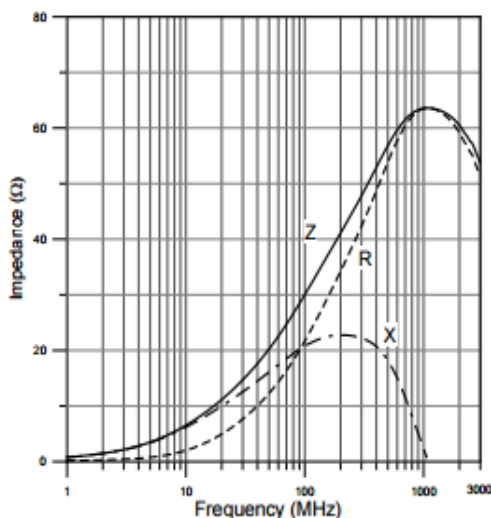
ZCDS 100505A100 2A



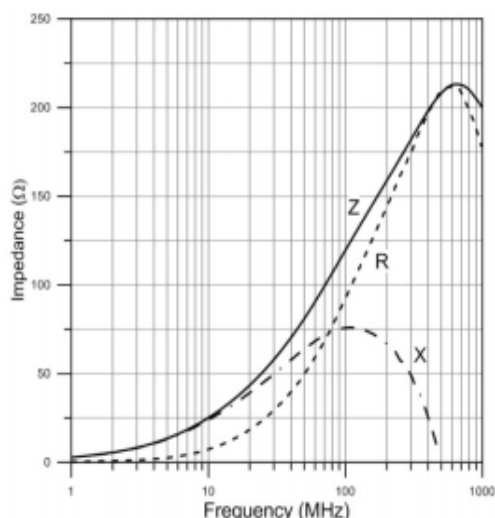
ZCDS 100505A121 RDC09



ZCDS 100505A300



ZCDS 100505A121 2A



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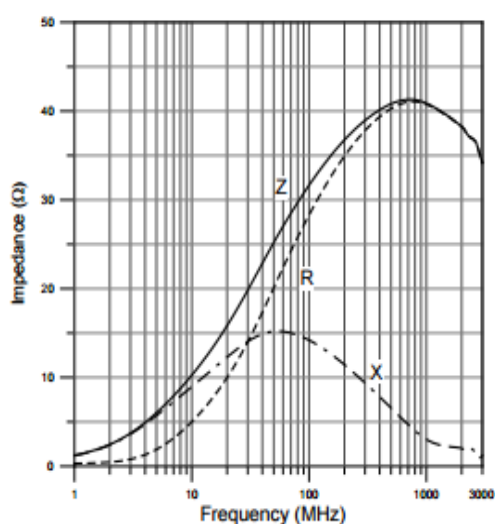
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Rated Current (耐電流) : 1-3A (安培)

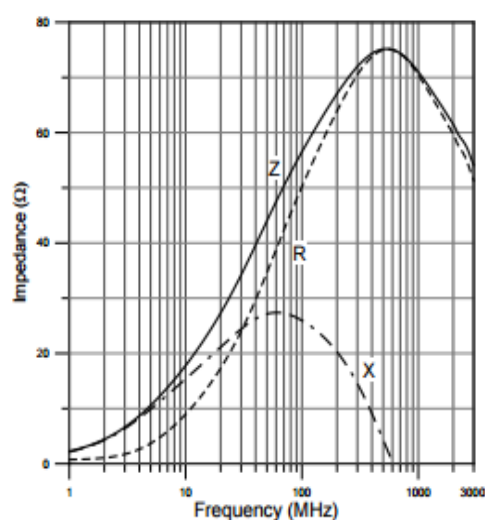
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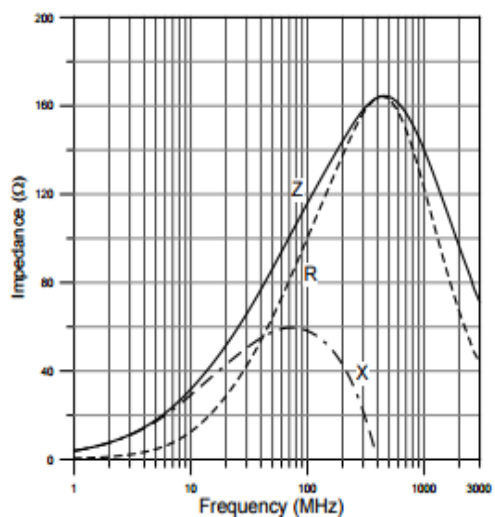
ZCDS 160808A300



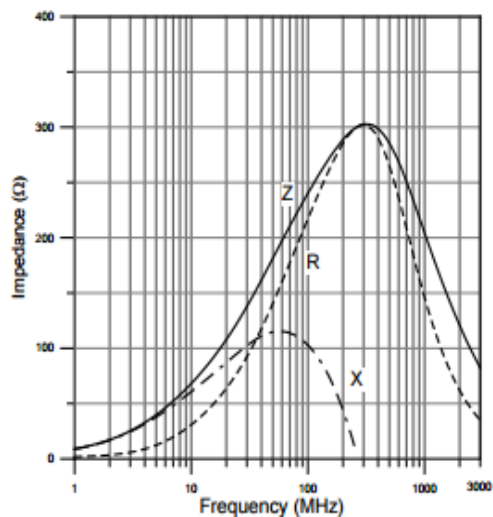
ZCDS 160808A600



ZCDS 160808A121 2A



ZCDS 160808A221 2A



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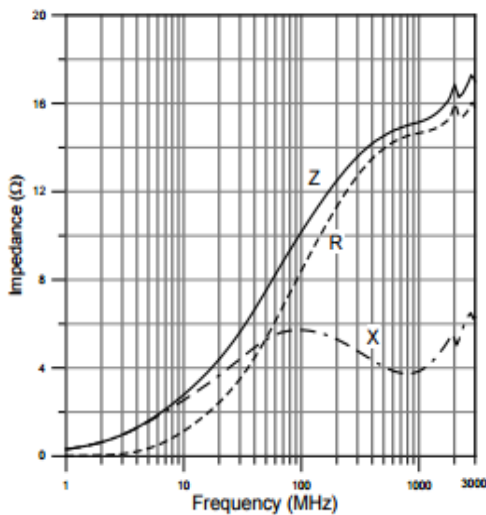
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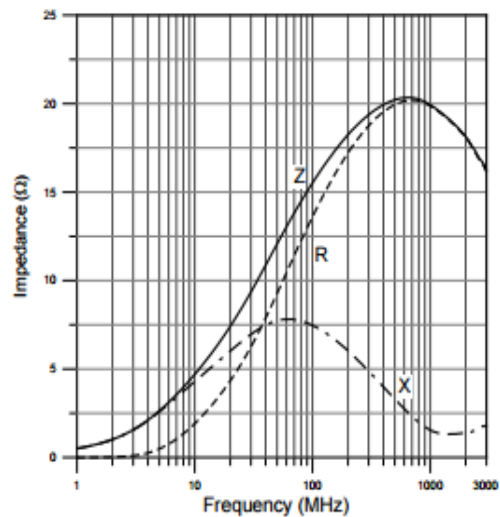
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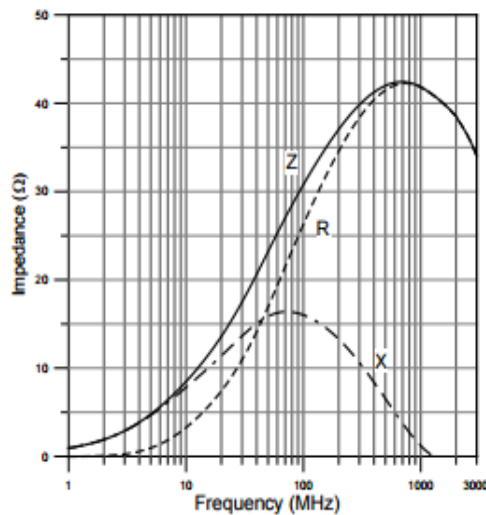
ZCDS 201209A110



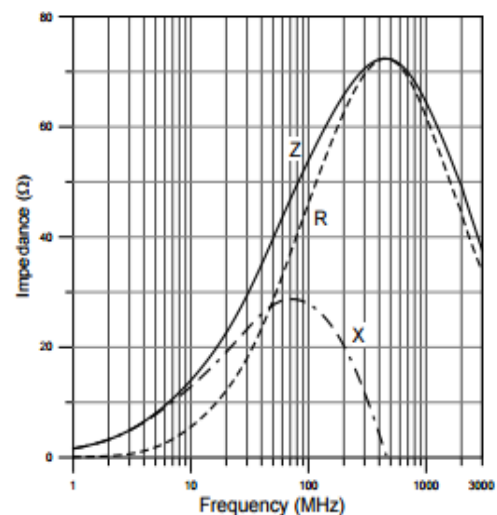
ZCDS 201209A170



ZCDS 201209A310



ZCDS 201209A520



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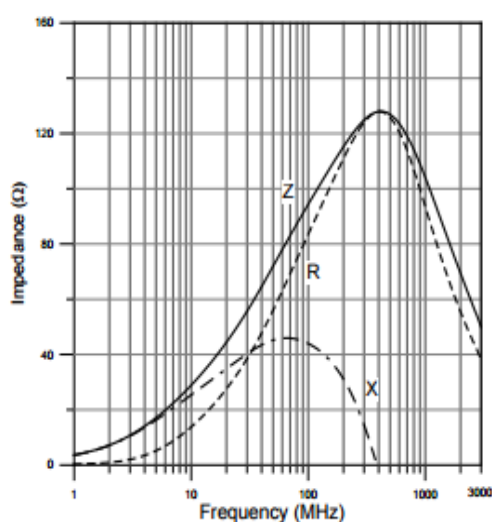
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Rated Current (耐電流) : 1-3A (安培)

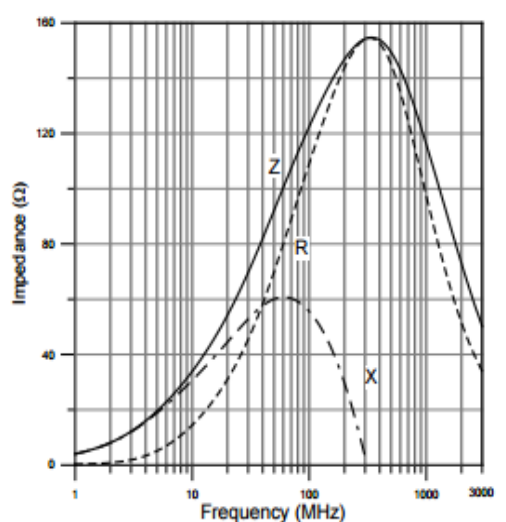
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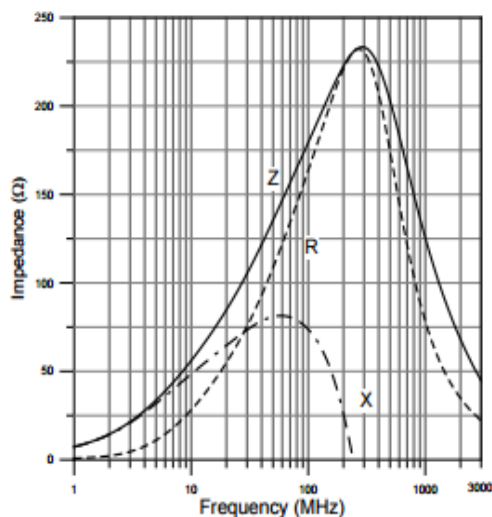
ZCDS 201209A101



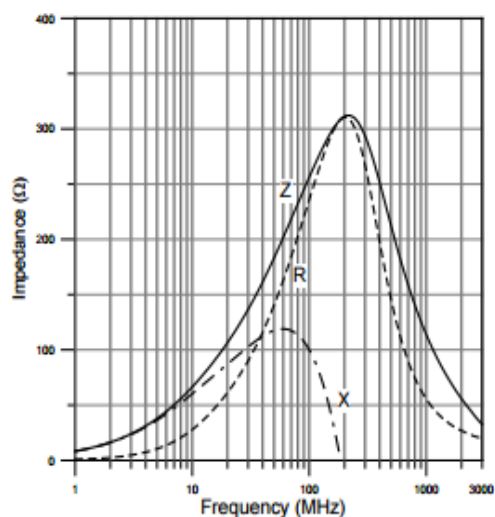
ZCDS 201209A121



ZCDS 201209A221



ZCDS 201209A301



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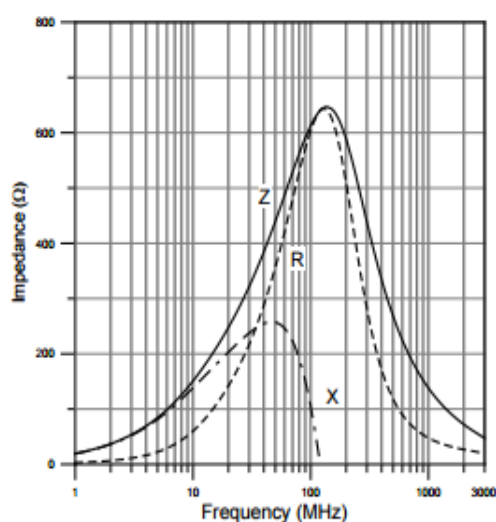
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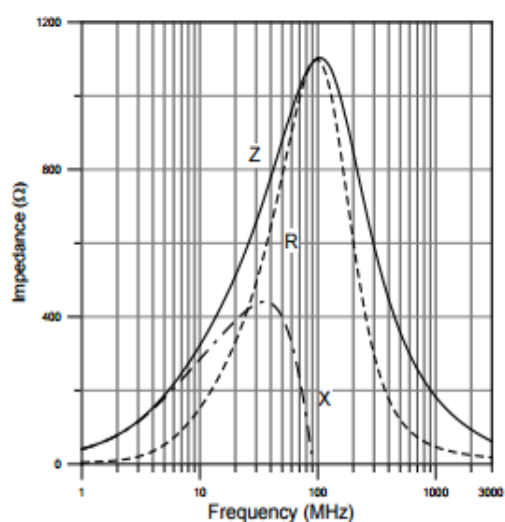
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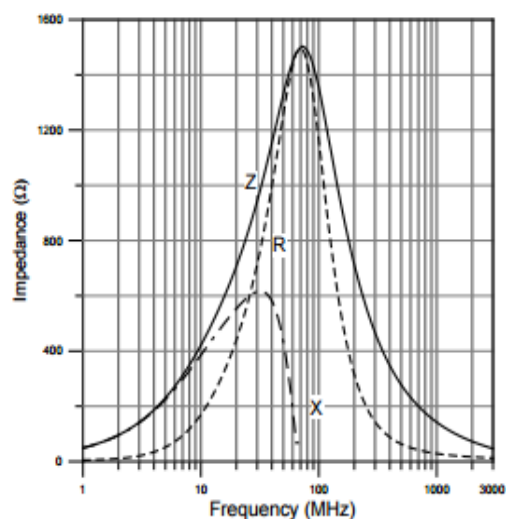
ZCDS 201209A601 2A



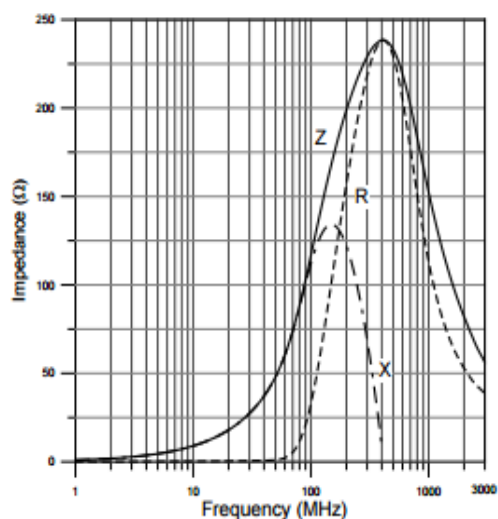
ZCDS 201209A102 1A



ZCDS 201209A152 1A



ZCDS 201209B121



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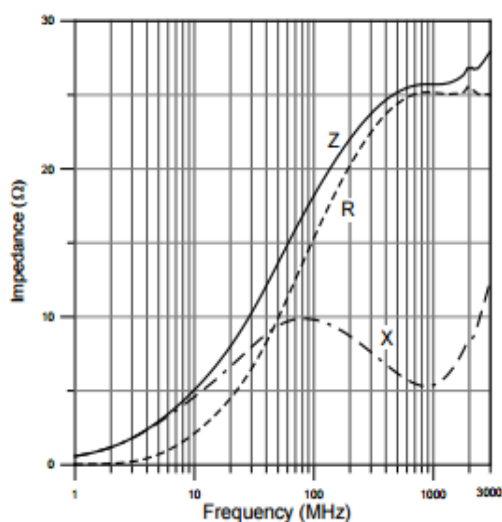
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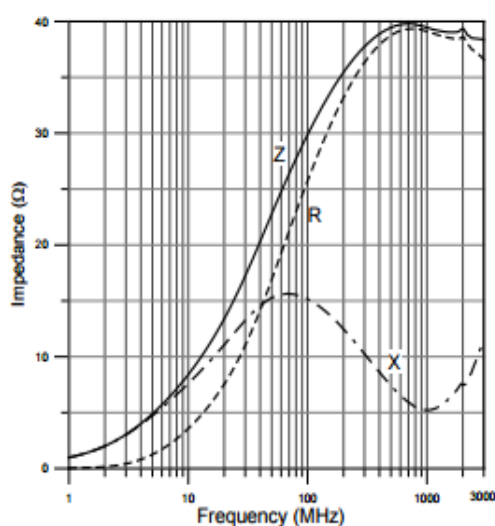
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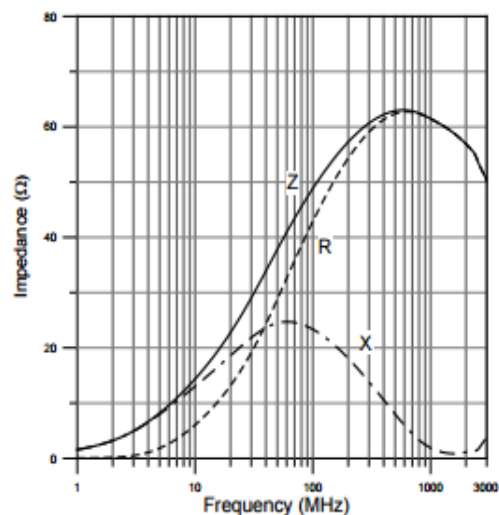
ZCDS 321611A190



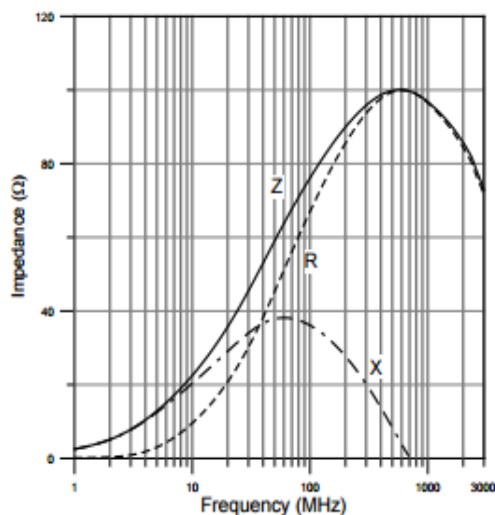
ZCDS 321611A310



ZCDS 321611A520



ZCDS 321611A700



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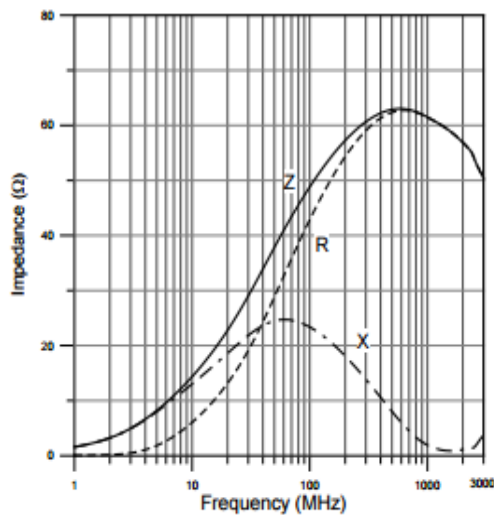
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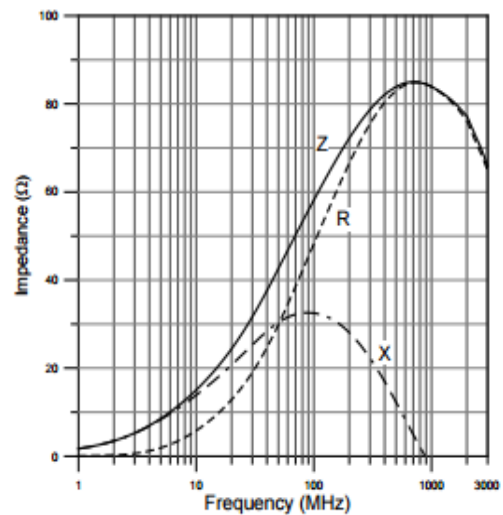
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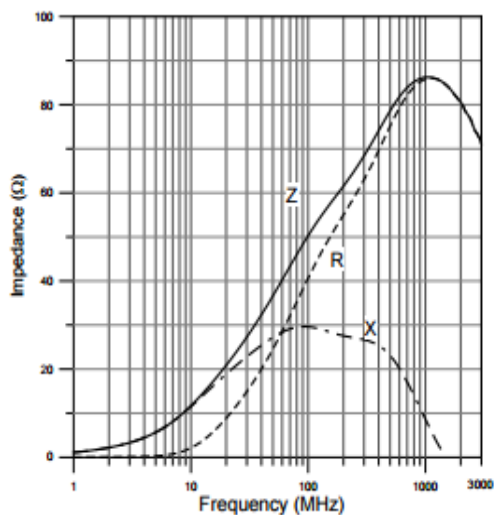
ZCDS 322513A520



ZCDS322513A600



ZCDS322513I600 1.5A



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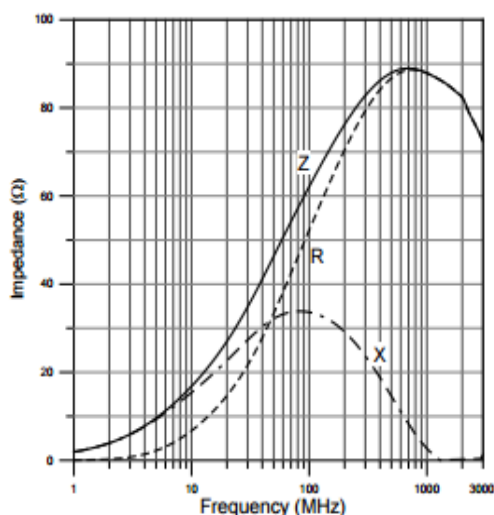
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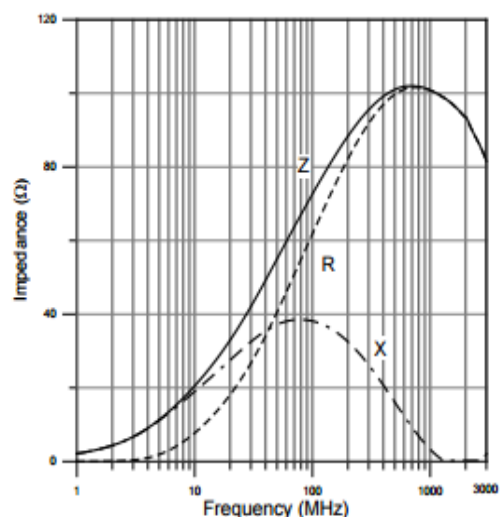
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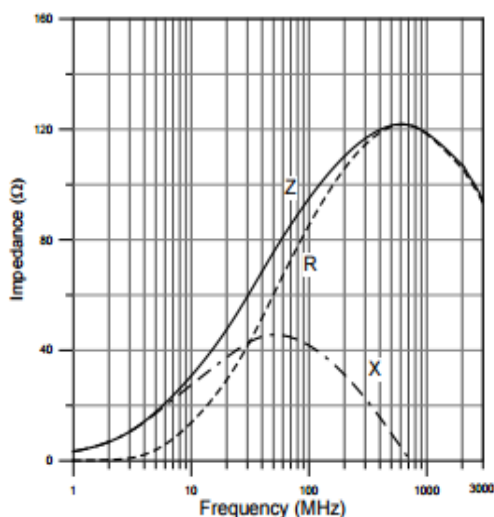
ZCDS451616A600



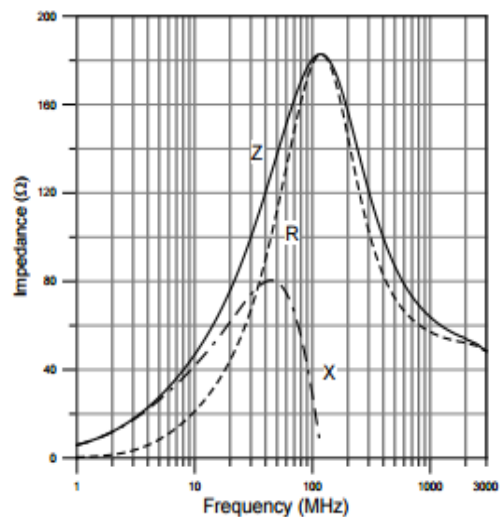
ZCDS451616A800



ZCDS451616A101



ZCDS451616A181



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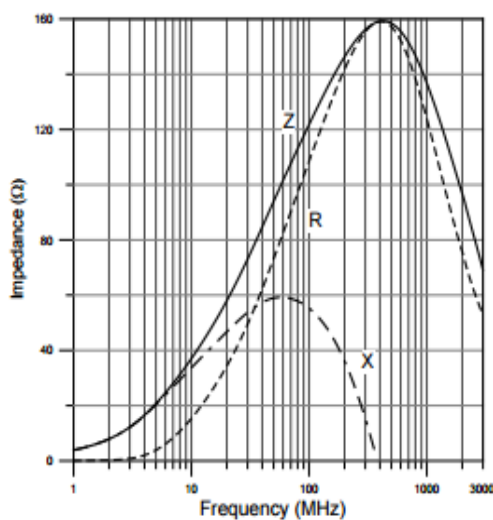
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Rated Current (耐電流) : 1-3A (安培)

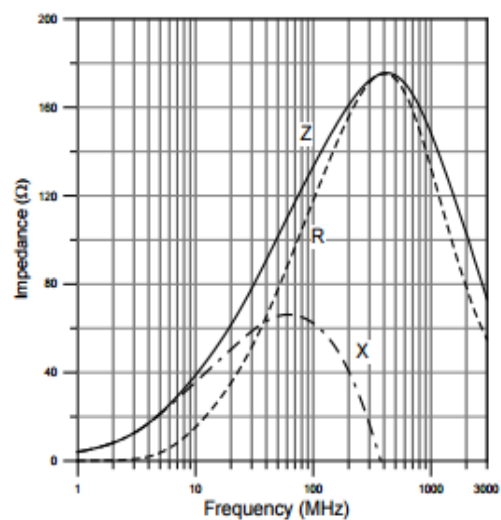
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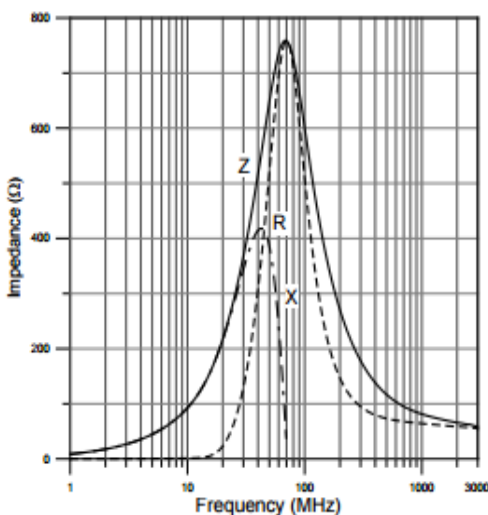
ZCDS 453215A121



ZCDS 453215A151



ZCDS 453215K601



ZCDS 453215K781

