Multi-Aperture Cores

Multi-aperture cores are used in balun (balance-unbalance) transformers and find wide application as broadband transformers in communication and CATV circuits. They are also employed in auto air bag circuits to guard against accidental activation.

- *All multi-aperture cores are supplied burnished.*
- *For additional technical information on the use of these cores, see section "Use of Ferrites in Broadband Transformers" found on page 170.*
- *Multi-aperture cores are controlled for impedance limits only. They are tested for impedance with a single turn through two holes, using the Hewlett Packard HP 4193A Vector Impedance Meter.*
- *For impedance vs. frequency curves for these parts, see Figures 4-37.*
- *For any multi-aperture core requirement not listed in the catalog, please contact our customer service group for availability and pricing.*

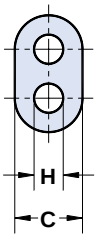
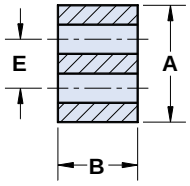


Figure 1



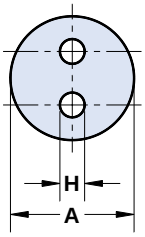
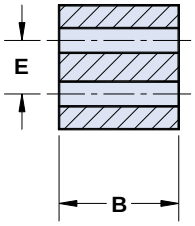
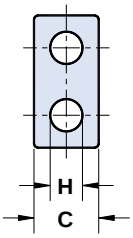


Figure 2





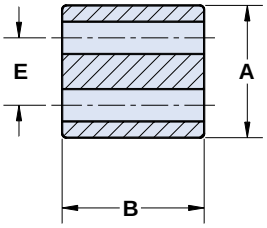


Figure 3

Dimensional letter designations have been changed from the 13th edition catalog and are now in accordance to the MMPA SFG-96.

Dimensions (**Bold numbers are in millimeters**, light numbers are nominal in inches.)

Part Number**	Fig.	A	B*	C	E	H	Wt (g)	Typical Impedance(Ω) [1]		Z, R_s, X_L vs. Frequency Curve
								25 MHz	100 MHz	
2873002302	1	**3.45±0.25** .136	**2.35±0.25** .093	**2.0±0.15** .079	**1.45±0.1** .057	**0.75+0.25** .034	.1	44	–	Figure 4
2843002302	1	**3.45±0.25** .136	**2.35±0.25** .093	**2.0±0.15** .079	**1.45±0.1** .057	**0.75+0.25** .034	.1	–	44	Figure 5
2861002302	1	**3.45±0.25** .136	**2.35±0.25** .093	**2.0±0.15** .079	**1.45±0.1** .057	**0.75+0.25** .034	.1	–	38	Figure 6
2873002702	1	**7.0±0.25** .276	**3.1±0.25** .122	**4.2 - 0.25** .160	**2.9±0.1** .114	**1.7+ 0.2** .071	.3	38	–	Figure 7
2843002702	1	**7.0±0.25** .276	**3.1±0.25** .122	**4.2 - 0.25** .160	**2.9±0.1** .114	**1.7+ 0.2** .071	.3	–	50	Figure 8
2861002702	1	**7.0±0.25** .276	**3.1±0.25** .122	**4.2 - 0.25** .160	**2.9±0.1** .114	**1.7+ 0.2** .071	.3	–	44	Figure 9
2873002402	1	**7.0±0.25** .276	**6.2±0.25** .244	**4.2 - 0.25** .160	**2.9±0.1** .114	**1.7+ 0.2** .071	.5	75	–	Figure 10
2843002402	1	**7.0±0.25** .276	**6.2±0.25** .244	**4.2 - 0.25** .160	**2.9±0.1** .114	**1.7+ 0.2** .071	.5	–	100	Figure 11
2861002402	1	**7.0±0.25** .276	**6.2±0.25** .244	**4.2 - 0.25** .160	**2.9±0.1** .114	**1.7+ 0.2** .071	.5	–	88	Figure 12
2873001802	2	**6.35±0.25** .250	**6.15±0.25** .242	–	**2.75±0.2** .108	**1.1 + 0.3** .050	.8	106	–	Figure 13
2843001802	2	**6.35±0.25** .250	**6.15±0.25** .242	–	**2.75±0.2** .108	**1.1 + 0.3** .050	.8	–	131	Figure 14

** This dimension may be modified to suit specific applications.*

*** Bold part numbers designate preferred parts.*

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Multi-Aperture Cores

Dimensions (**Bold numbers are in millimeters**, light numbers are nominal in inches.)

Part Number**	Fig.	A	B*	C	E	H	Wt (g)	Typical Impedance(Ω) [1]		Z, R_S, X_L vs. Frequency Curve
								25 MHz	100 MHz	
2861001802	2	**6.35±0.25** .250	**6.15±0.25** .242	–	**2.75±0.2** .108	**1.1 + 0.3** .050	.8	–	119	Figure 15
2873001702	2	**6.35±0.25** .250	**12.0±0.35** .471	–	**2.75±0.2** .108	**1.1 + 0.3** .050	1.6	200	–	Figure 16
2843001702	2	**6.35±0.25** .250	**12.0±0.35** .471	–	**2.75±0.2** .108	**1.1 + 0.3** .050	1.6	–	256	Figure 17
2861001702	2	**6.35±0.25** .250	**12.0±0.35** .471	–	**2.75±0.2** .108	**1.1 + 0.3** .050	1.6	–	230	Figure 18
2873001502	1	**13.3±0.6** .525	**6.6±0.25** .260	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	1.7	50	–	Figure 19
2843001502	1	**13.3±0.6** .525	**6.6±0.25** .260	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	1.7	–	88	Figure 20
2861001502	1	**13.3±0.6** .525	**6.6±0.25** .260	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	1.7	–	69	Figure 21
2873000302	1	**13.3±0.6** .525	**10.3±0.3** .407	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	2.6	75	–	Figure 22
2843000302	1	**13.3±0.6** .525	**10.3±0.3** .407	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	2.6	–	130	Figure 23
2861000302	1	**13.3±0.6** .525	**10.3±0.3** .407	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	2.6	–	106	Figure 24
2873000102	1	**13.3±0.6** .525	**13.4±0.3** .528	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	3.5	94	–	Figure 25
2843000102	1	**13.3±0.6** .525	**13.4±0.3** .528	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	3.5	–	175	Figure 26
2861000102	1	**13.3±0.6** .525	**13.4±0.3** .528	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	3.5	–	138	Figure 27
2873000202	1	**13.3±0.6** .525	**14.35±0.5** .565	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	3.7	106	–	Figure 28
2843000202	1	**13.3±0.6** .525	**14.35±0.5** .565	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	3.7	–	180	Figure 29
2861000202	1	**13.3±0.6** .525	**14.35±0.5** .565	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	3.7	–	150	Figure 30
2873006802	1	**13.3±0.6** .525	**27.0±0.75** 1.062	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	7.0	180	–	Figure 31
2843006802	1	**13.3±0.6** .525	**27.0±0.75** 1.062	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	7.0	–	300	Figure 32
2861006802	1	**13.3±0.6** .525	**27.0±0.75** 1.062	**7.5±0.35** .295	**5.7±0.25** .225	**3.8±0.25** .150	7.0	–	280	Figure 33
2843010402	3	**19.45±0.4** .765	**12.7±0.5** .500	**9.5±0.25** .375	**9.9±0.25** .390	**4.75±0.2** .187	7.5	–	200	Figure 34
2843010302	3	**19.45±0.4** .765	**25.4±0.7** 1.000	**9.5±0.25** .375	**9.9±0.25** .390	**4.75±0.2** .187	18	–	400	Figure 35
2843009902	3	**28.7±0.6** 1.130	**28.7±0.7** 1.130	**14.25±0.3** .560	**14.0±0.3** .550	**6.35±0.15** .250	48	–	500	Figure 36
2861010002	3	**30.2±0.6** 1.190	**28.7±0.7** 1.130	**15.0±0.4** .590	**14.6±0.4** .575	**6.8±0.2** .268	46	–	600	Figure 37

** This dimension may be modified to suit specific applications.*

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Multi-Aperture Cores

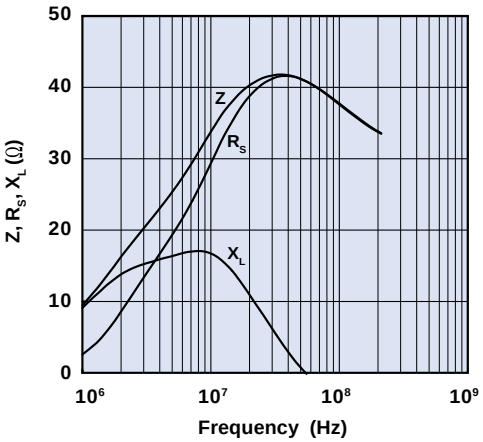

Figure 4 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2873002302.

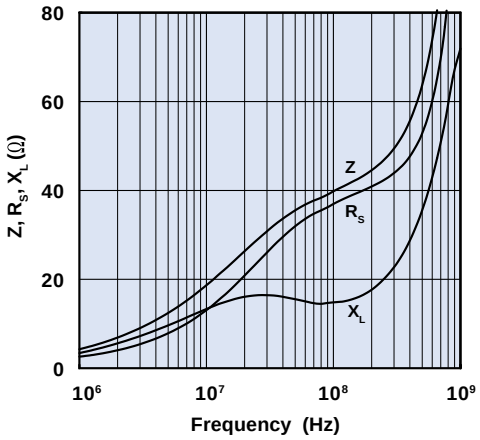

Figure 5 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843002302.

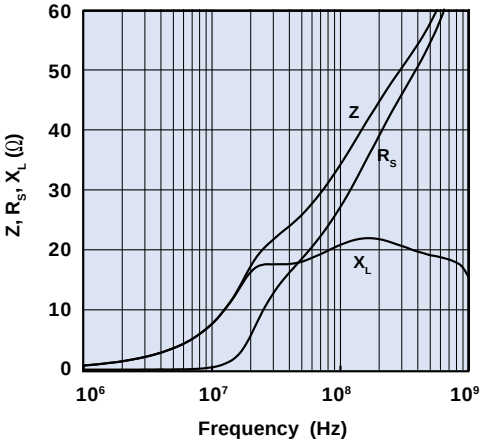

Figure 6 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861002302.

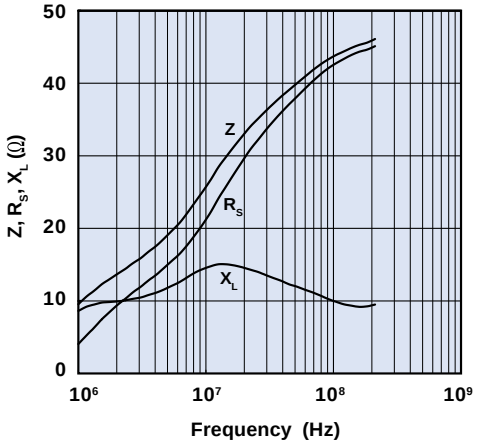

Figure 7 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2873002702.

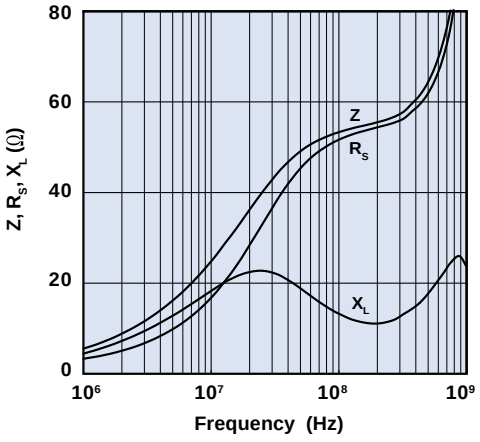

Figure 8 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843002702.

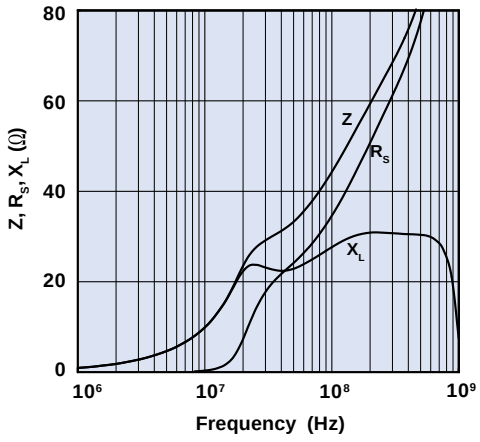

Figure 9 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861002702.

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Multi-Aperture Cores

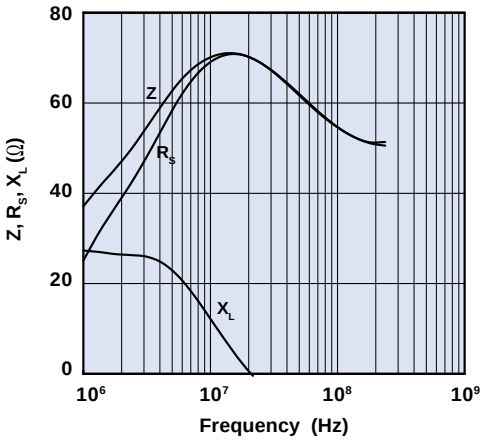

Figure 10 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2873002402.

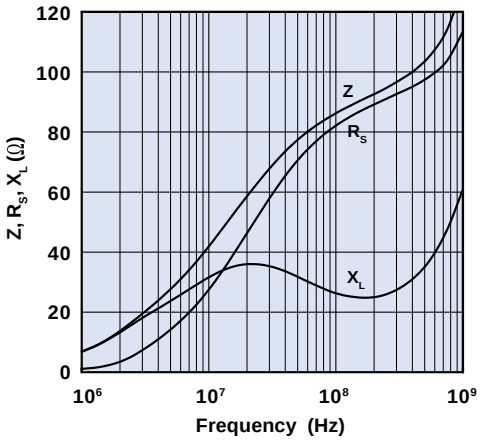

Figure 11 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843002402.

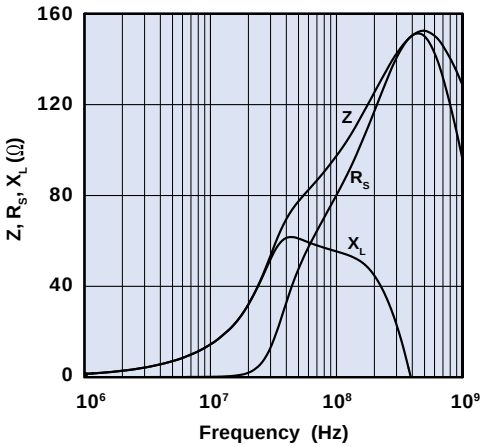

Figure 12 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861002402.

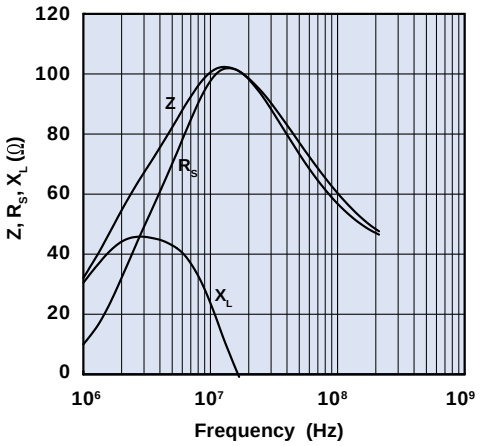

Figure 13 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2873001802.

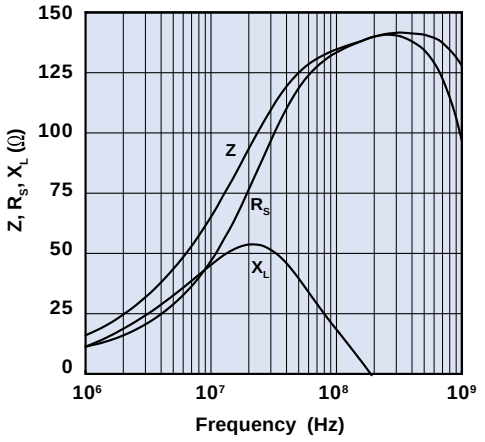

Figure 14 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843001802.

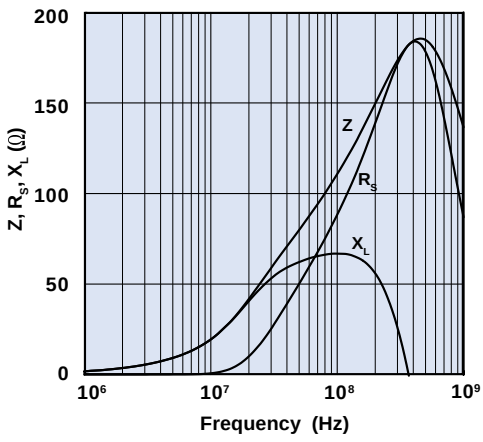

Figure 15 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861001802.

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Multi-Aperture Cores

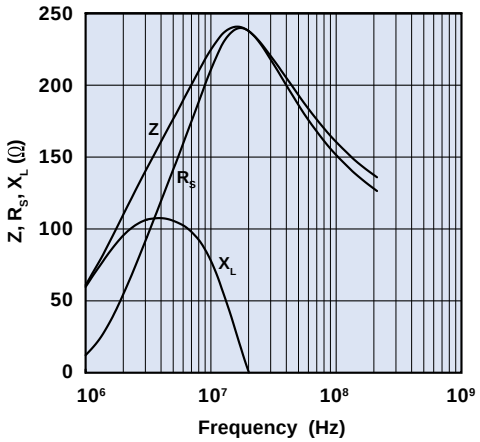

Figure 16 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2873001702.

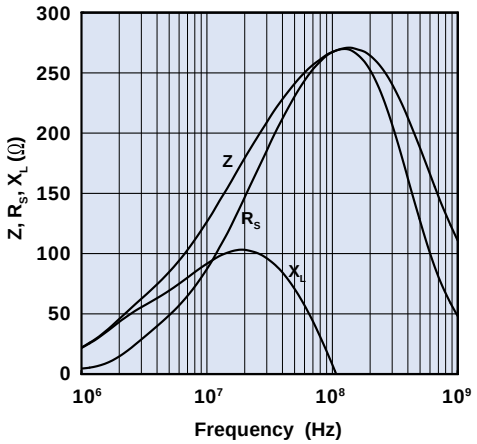

Figure 17 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843001702.

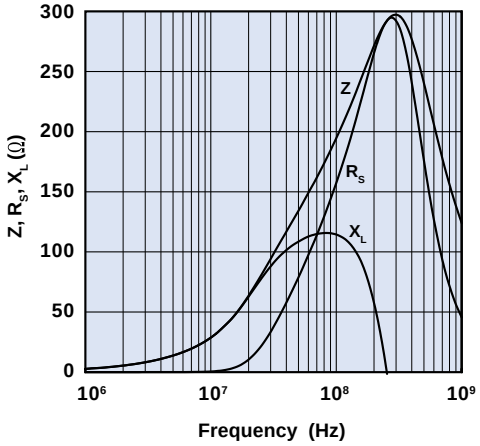

Figure 18 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861001702.

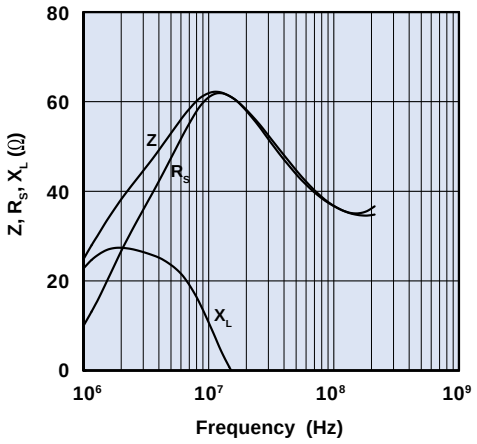

Figure 19 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2873001502.

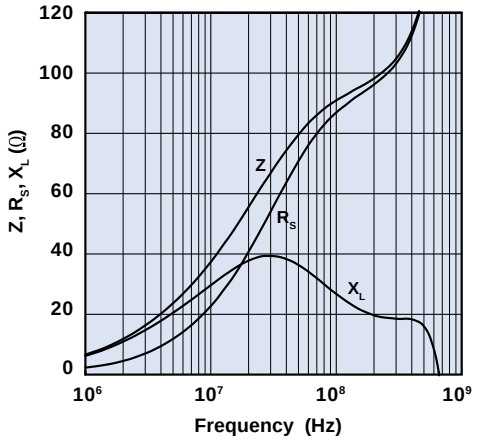

Figure 20 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843001502.

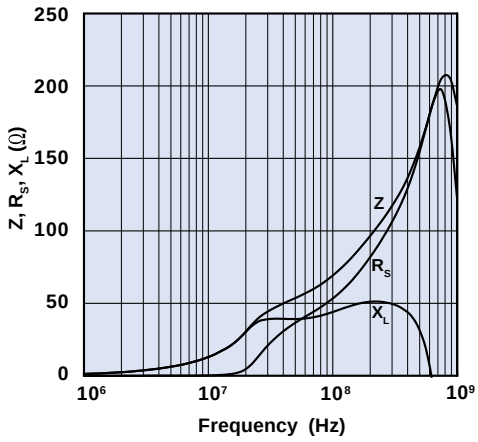

Figure 21 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861001502.

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Multi-Aperture Cores

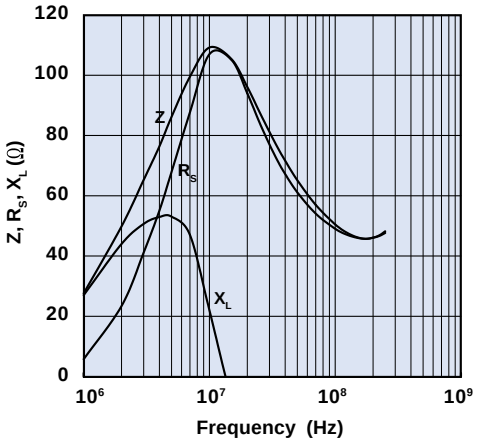

Figure 22 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2873000302.

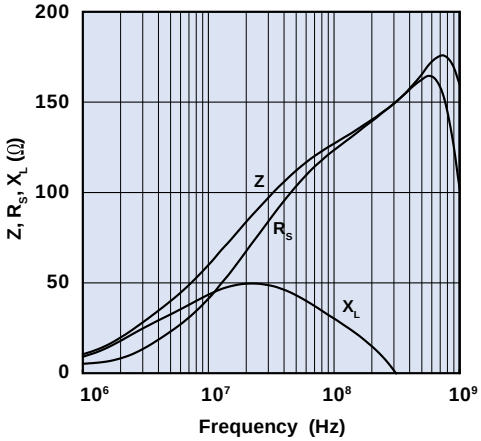

Figure 23 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843000302.

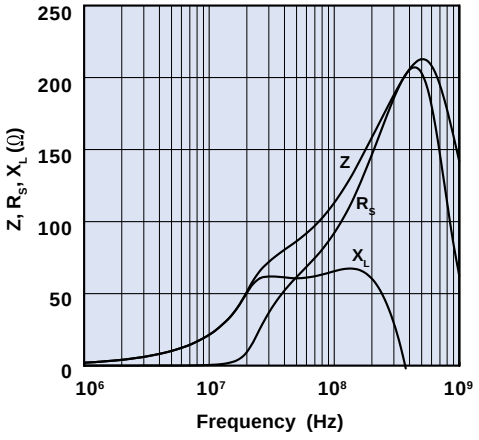

Figure 24 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861000302.

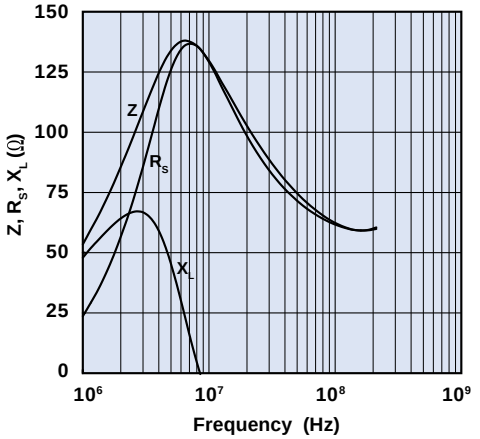

Figure 25 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2873000102.

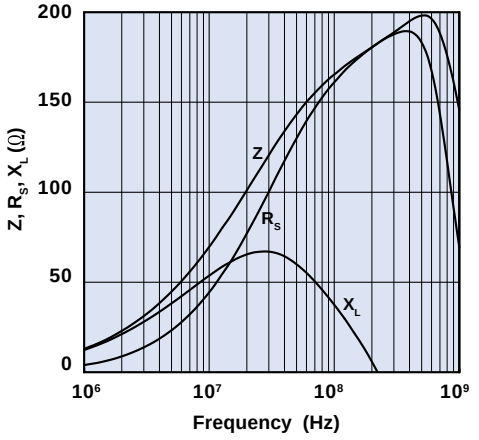

Figure 26 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843000102.

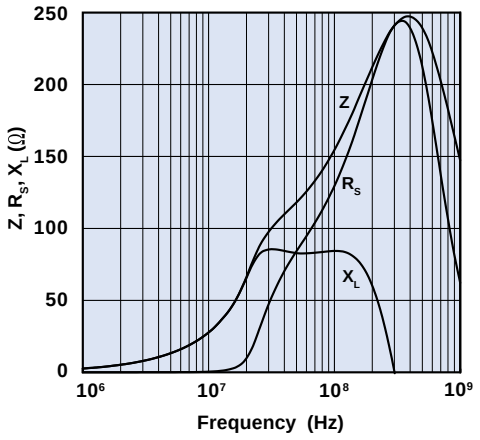

Figure 27 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861000102.

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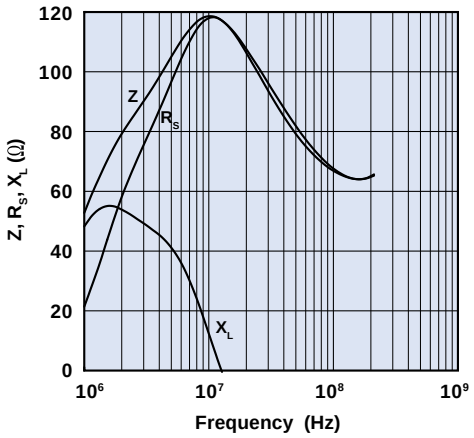

Figure 28 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2873000202.

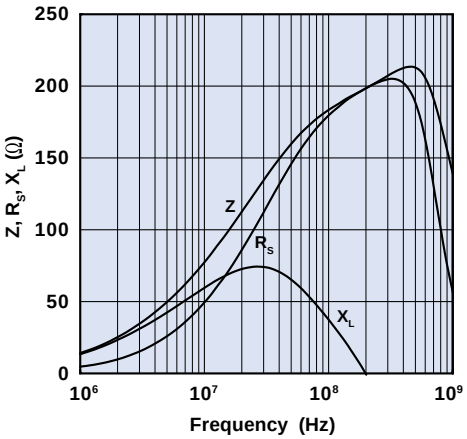

Figure 29 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843000202.

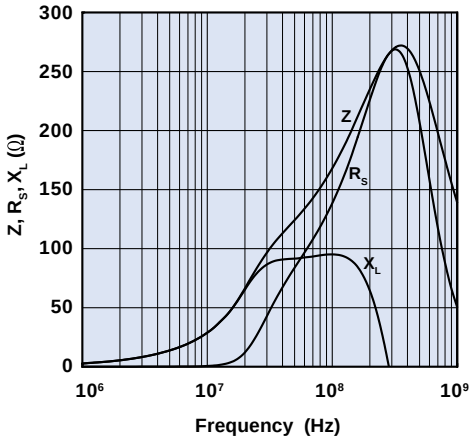

Figure 30 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861000202.

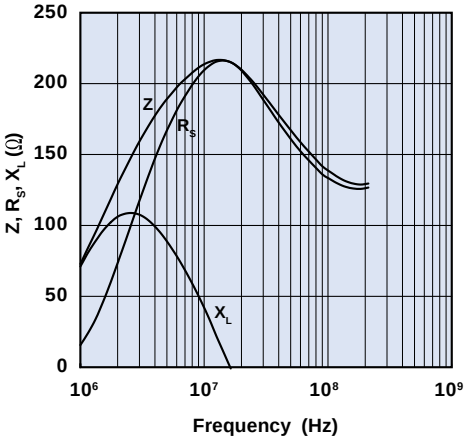

Figure 31 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2873006802.

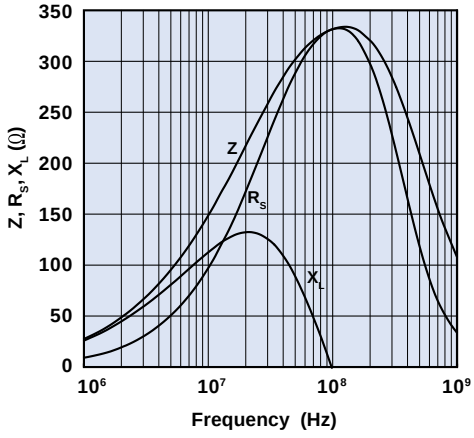

Figure 32 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843006802.

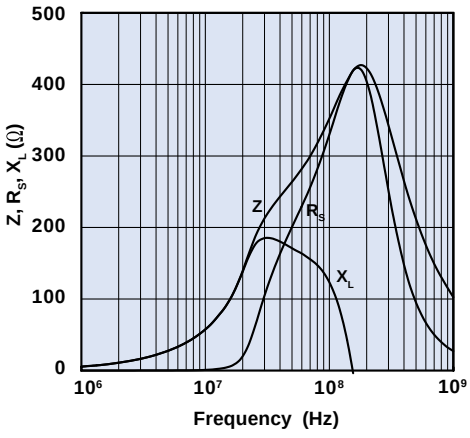

Figure 33 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861006802.

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Multi-Aperture Cores

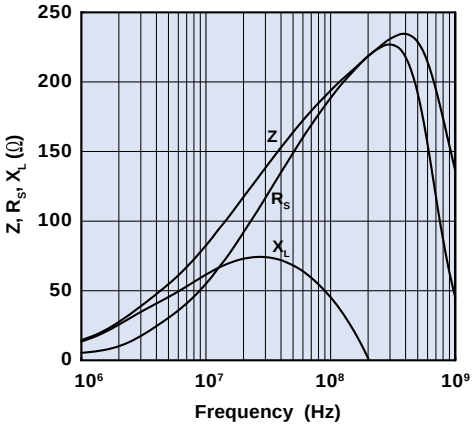

Figure 34 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843010402.

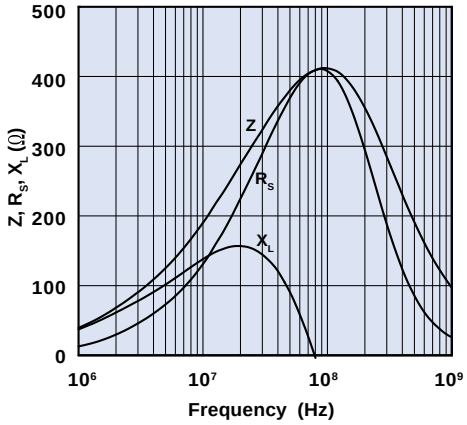

Figure 35 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843010302.

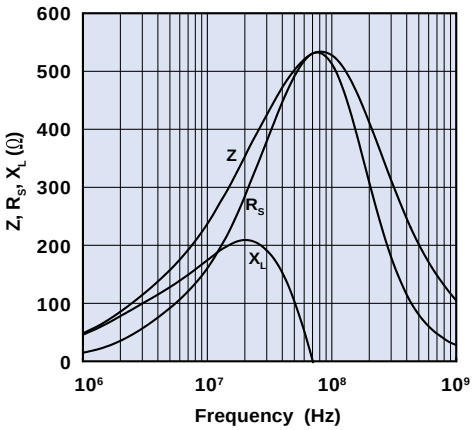

Figure 36 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2843009902.

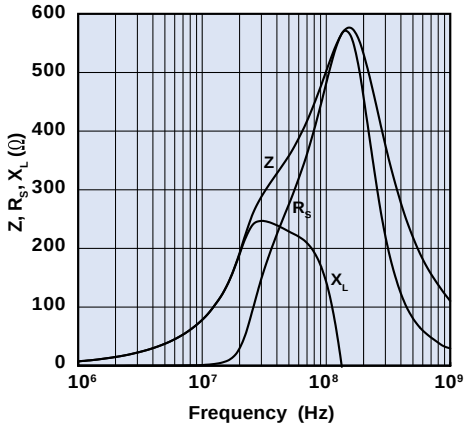

Figure 37 Impedance, reactance, and resistance vs. frequency curve for multi-aperture core 2861010002.

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