Common Mode Cores

Features

High saturation flux density of 1.25 Tesla
High permeability of 10,000 to 100,000
High impedance and good frequency performance
Low core loss and temperature rising, high temperature stability
Smaller core size and weight

Application

High voltage pulse noise attenuation
Common mode choke coils for Switched Mode Power Supplies, Welding Machine, Frequency Inverters, and Uninterruptible Power Supplies (UPS)

Specification & Property

Product Code Name

ANB- 3 CM 38 30 20 - S F 3

ANB- CM 38 30 20 - A R 5

ANB- CM 38 30 20 - S R 8

ANB: Company core code No.

3 CM: 3 phases common mode core

CM: single phase

38: core OD, 30: core ID, 20: core HT

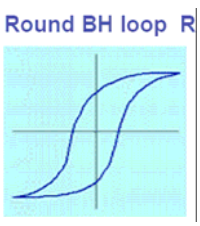
S: nano thin strip, A: nano thick strip

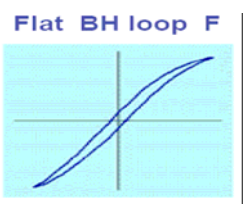
F: flat BH loop, R: round BH loop

3: permeability level = 30000

5: permeability level = 50000

7: permeability level = 70000





Common Mode Core Size Information

Product	Case size (mm)			Core size (mm)			Mean path length	Cross section (cm^2)	Core weight	window area (cm^2)
Code No.	OD	ID	HT	OD	ID	HT	lc (cm)	Ac	(grams)	Wa
986545	11.2	5.2	5.7	9.8	6.5	4.5	2.56	0.06	1.1	0.2
110705	12.5	5.6	6.8	11	7	5	2.83	0.08	1.6	0.3
120805	14.2	6.4	7.3	12	8	4.5	3.14	0.07	1.6	0.3
141005	15.5	8.5	6.8	14	10	5	3.77	0.08	2.1	0.6
161108	18.3	8.3	10	16	11	8	4.24	0.15	4.7	0.5
181305	21.1	9.9	7.3	18.5	13	5	4.95	0.11	3.8	0.8
181108	20.5	9.3	9.7	18	11	8	4.55	0.22	7.1	0.7
181110	20.4	9.4	12.2	18	11	10	4.55	0.27	8.9	0.7
191005	21	8.2	6.9	19	10	5	4.55	0.17	5.7	0.5
201205	21.7	10.7	7.9	20	12	5	5.02	0.15	6	0.9
201206	21.7	10.7	7.9	20	12	6	5.02	0.19	7	0.9
201208	22.3	10.2	10.4	20	12	8	5.02	0.25	9	0.8
201210	21.3	10.6	12	20	12	10	5.02	0.31	11	0.9
211610	24.5	14	12.5	21	16	10	5.81	0.19	8	1.5
261610	28.3	14	12.5	26	16	10	6.59	0.39	18	1.5
261910	28.7	16.5	12.6	26	19	10	7.07	0.27	14	2.1
302010	33	18.1	13	30	20	10	7.85	0.39	22	2.6
302015	33.7	17.7	17.7	30	20	15	7.85	0.58	33	2.5
302020	33.7	17.7	22.7	30	20	20	7.85	0.77	44	2.5
322010	34.2	18	13	32	20	10	8.16	0.46	27	2.5
322015	33.6	17.8	17	32	20	15	8.16	0.69	41	2.5
332310	33.6	17.8	22	33	23	10	8.79	0.39	25	2.5
332315	33.6	17.8	27	33	23	15	8.79	0.58	37	2.5
332320	33.6	17.8	32	33	23	20	8.79	0.77	49	2.5
332325	33.6	17.8	37	33	23	25	8.79	0.96	61	2.5
383020	42	26.5	24	38	30	20	10.68	0.62	48	5.5
402510	44.5	21	14	40	25	10	10.21	0.58	43	3.5
402515	44.5	21	19	40	25	15	10.21	0.87	64	3.5
403215	44.5	29.4	19.3	40	32	15	11.30	0.46	38	6.8
503215	54	29	19	50	32	15	12.87	1.04	97	6.6
503220	54	29	24	50	32	20	12.87	1.39	129	6.6
504025	54.5	35.3	29.7	50	40	25	14.13	0.96	99	9.8
583820	61.8	34.5	23.7	58	38	20	15.07	1.54	168	9.4
603525	66.2	29.8	29.6	60	35	25	14.92	2.41	260	7.0
644020	66	37	23	64	40	20	16.33	1.85	219	10.8
655025	68.2	46.7	28.6	65	50	25	18.06	1.44	189	17.1

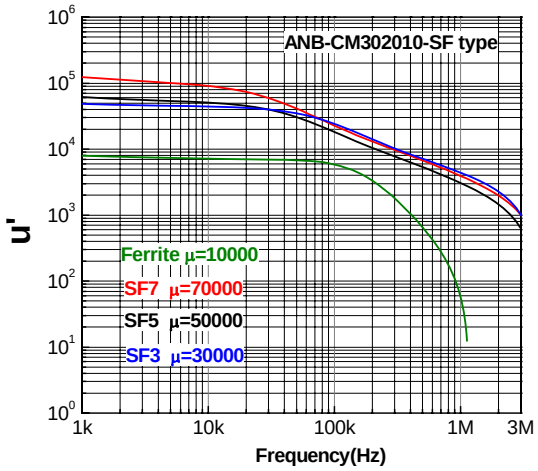
806015	85	56	18.5	80	60	15	21.98	1.16	184	24.6
906020	95	56	24	90	60	20	23.55	2.31	394	24.6
1008020	104	76.4	23.4	100	80	20	28.26	1.54	316	45.8
1108025	114	76.4	28.6	110	80	25	29.83	2.89	624	45.8
1158020	119	76	24	115	80	20	30.62	2.70	598	45.4
1158525	119	81	29	115	85	25	31.40	2.89	657	51.5
1208525	125	81	29	120	85	25	32.19	3.37	786	51.5
12010025	125	96	29	120	100	25	34.54	1.93	482	72.4
13010030	136	96	34.5	130	100	30	36.11	3.47	907	72.4
14010020	144	96	24.5	140	100	20	37.68	3.08	841	72.4
14010025	144	96	29	140	100	25	37.68	3.85	1052	72.4
17012525	174	116	29	170	120	25	45.53	4.81	1589	105.7
22219025	226	185	30.9	222	190	25	64.68	3.08	1444	267.3
22219030	226	185	35.9	222	190	30	64.68	3.70	1733	267.3
24819820	252	188	25	248	198	20	70.02	3.85	1954	277.6
24819830	252	188	35	248	198	30	70.02	5.78	2932	277.6
26421430	268	210	35	264	214	30	75.05	5.78	3142	346.4
27020030	274	196	35	270	200	30	73.79	8.09	4325	301.7

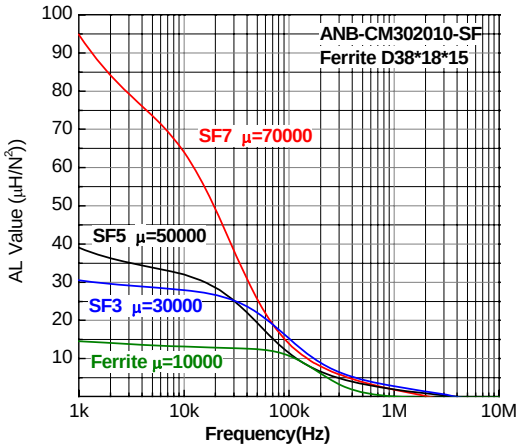
AL vs Frequency Property for Different Permeability Level Core

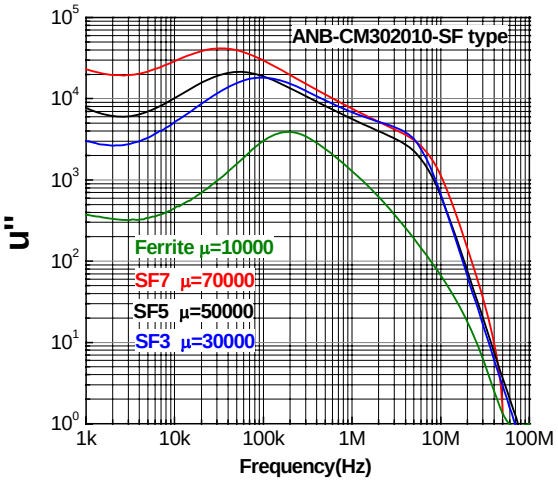
AL ($\mu H/N^2$)	-SR7 type			-SF5 type			-SF3 type		
Code No.	1kHz	10kHz	100kHz	1kHz	10kHz	100kHz	1kHz	10kHz	100kHz
986545	22.4	19.6	3.1	15.43	12.6	3.6	11.2	8.4	4.2
110705	27.4	24.0	3.8	18.82	15.4	4.4	13.7	10.3	5.1
120805	22.2	19.4	3.0	15.25	12.5	3.6	11.1	8.3	4.2
141005	20.5	18.0	2.8	14.12	11.6	3.3	10.3	7.7	3.9
161108	36.5	31.9	5.0	25.10	20.5	5.9	18.3	13.7	6.8
181305	21.5	18.8	3.0	14.79	12.1	3.5	10.8	8.1	4.0
181108	47.6	41.6	6.5	32.71	26.8	7.7	23.8	17.8	8.9
181110	59.5	52.0	8.2	40.89	33.5	9.7	29.7	22.3	11.2
191005	38.2	33.5	5.3	26.29	21.5	6.2	19.1	14.3	7.2
201205	30.8	27.0	4.2	21.18	17.3	5.0	15.4	11.6	5.8
201206	34.1	29.9	4.7	23.46	19.2	5.5	17.1	12.8	6.4
201208	49.3	43.1	6.8	33.88	27.7	8.0	24.6	18.5	9.2
201210	61.6	53.9	8.5	42.35	34.7	10.0	30.8	23.1	11.6
211508	32.9	28.7	4.5	22.59	18.5	5.3	16.4	12.3	6.2
211510	41.1	35.9	5.6	28.23	23.1	6.7	20.5	15.4	7.7
211610	33.3	29.1	4.6	22.89	18.7	5.4	16.6	12.5	6.2
261610	58.7	51.3	8.1	40.33	33.0	9.5	29.3	22.0	11.0
261910	38.3	33.5	5.3	26.35	21.6	6.2	19.2	14.4	7.2

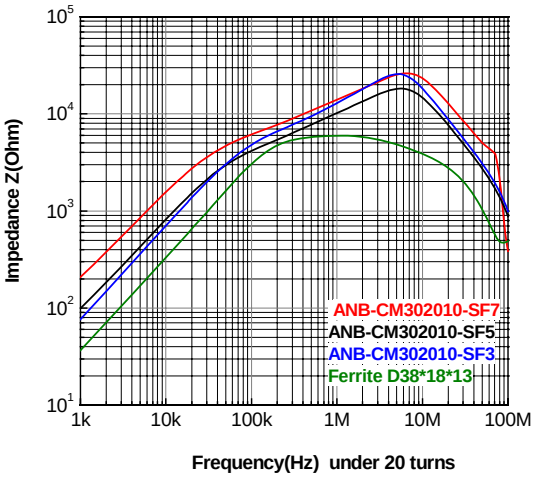
302010	49.3	43.1	6.8	33.88	27.7	8.0	24.6	18.5	9.2
302015	73.9	64.7	10.2	50.82	41.6	12.0	37.0	27.7	13.9
302020	98.6	86.2	13.6	67.76	55.4	16.0	49.3	37.0	18.5
322010	56.9	49.8	7.8	39.09	32.0	9.2	28.4	21.3	10.7
322015	85.3	74.6	11.7	58.64	48.0	13.9	42.6	32.0	16.0
332310	44.0	38.5	6.1	30.25	24.8	7.2	22.0	16.5	8.3
332315	66.0	57.8	9.1	45.38	37.1	10.7	33.0	24.8	12.4
332320	88.0	77.0	12.1	60.50	49.5	14.3	44.0	33.0	16.5
332325	110.0	96.3	15.1	75.63	61.9	17.9	55.0	41.3	20.6
383020	58.0	50.7	8.0	39.86	32.6	9.4	29.0	21.7	10.9
402510	56.9	49.8	7.8	39.09	32.0	9.2	28.4	21.3	10.7
402515	85.3	74.6	11.7	58.64	48.0	13.9	42.6	32.0	16.0
402520	113.7	99.5	15.6	78.18	64.0	18.5	56.9	42.6	21.3
403215	41.1	35.9	5.6	28.23	23.1	6.7	20.5	15.4	7.7
503210	54.1	47.3	7.4	37.19	30.4	8.8	27.0	20.3	10.1
503215	81.1	71.0	11.2	55.78	45.6	13.2	40.6	30.4	15.2
503220	108.2	94.7	14.9	74.37	60.8	17.6	54.1	40.6	20.3
504020	54.8	47.9	7.5	37.64	30.8	8.9	27.4	20.5	10.3
504025	68.4	59.9	9.4	47.06	38.5	11.1	34.2	25.7	12.8
583820	102.7	89.8	14.1	70.58	57.8	16.7	51.3	38.5	19.3
604025	123.2	107.8	16.9	84.70	69.3	20.0	61.6	46.2	23.1
644020	113.7	99.5	15.6	78.18	64.0	18.5	56.9	42.6	21.3
655025	80.3	70.3	11.0	55.24	45.2	13.1	40.2	30.1	15.1
805025	142.2	124.4	19.5	97.73	80.0	23.1	71.1	53.3	26.7
806015	52.8	46.2	7.3	36.30	29.7	8.6	26.4	19.8	9.9
906020	98.6	86.2	13.6	67.76	55.4	16.0	49.3	37.0	18.5
1008020	54.8	47.9	7.5	37.64	30.8	8.9	27.4	20.5	10.3
1108025	97.3	85.1	13.4	66.87	54.7	15.8	48.6	36.5	18.2
1158525	92.4	80.9	12.7	63.53	52.0	15.0	46.2	34.7	17.3
1208520	84.1	73.6	11.6	57.84	47.3	13.7	42.1	31.6	15.8
1208525	105.2	92.0	14.5	72.30	59.2	17.1	52.6	39.4	19.7
12010025	56.0	49.0	7.7	38.50	31.5	9.1	28.0	21.0	10.5
13010030	96.4	84.4	13.3	66.29	54.2	15.7	48.2	36.2	18.1
14010020	82.1	71.9	11.3	56.47	46.2	13.3	41.1	30.8	15.4
14010025	102.7	89.8	14.1	70.58	57.8	16.7	51.3	38.5	19.3
17012525	106.2	92.9	14.6	73.02	59.7	17.3	53.1	39.8	19.9
22219025	47.8	41.9	6.6	32.89	26.9	7.8	23.9	17.9	9.0
22219030	57.4	50.2	7.9	39.47	32.3	9.3	28.7	21.5	10.8
24819820	55.2	48.3	7.6	37.98	31.1	9.0	27.6	20.7	10.4
24819830	82.9	72.5	11.4	56.97	46.6	13.5	41.4	31.1	15.5
26421430	77.3	67.7	10.6	53.16	43.5	12.6	38.7	29.0	14.5
27020030	110.1	96.3	15.1	75.69	61.9	17.9	55.0	41.3	20.6

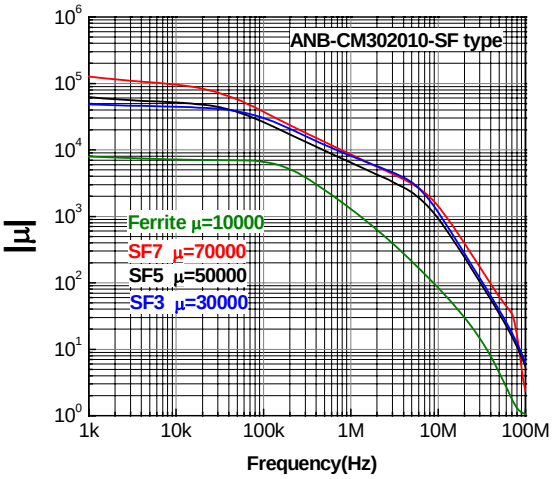
Material Characteristic Curves

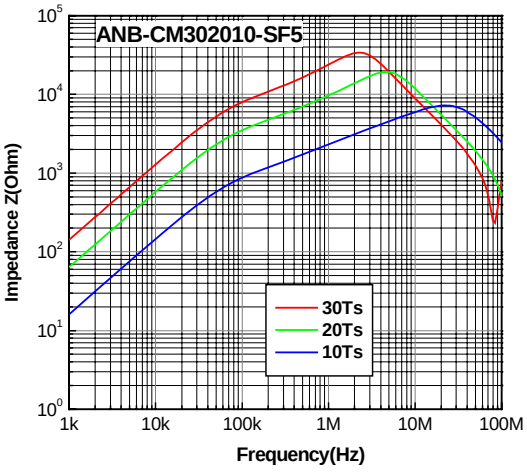




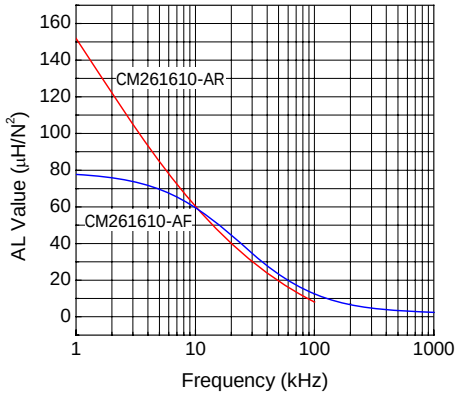


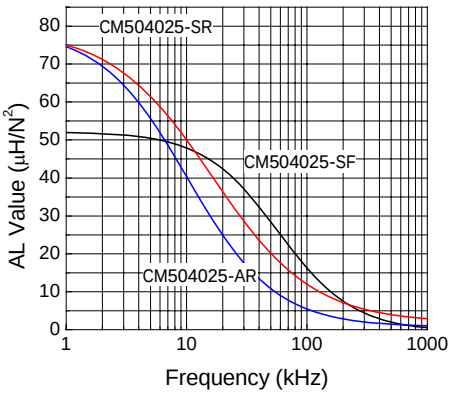


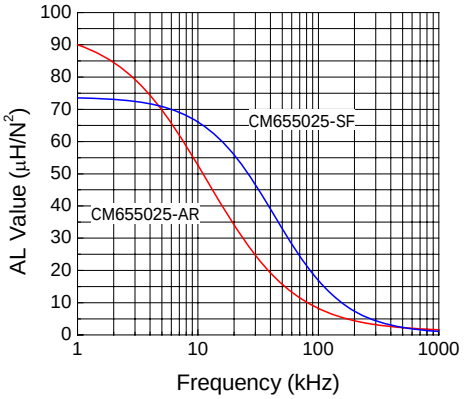


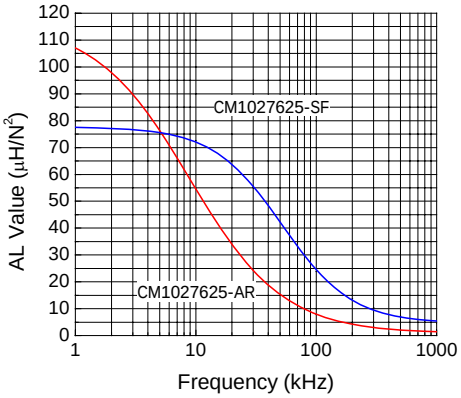


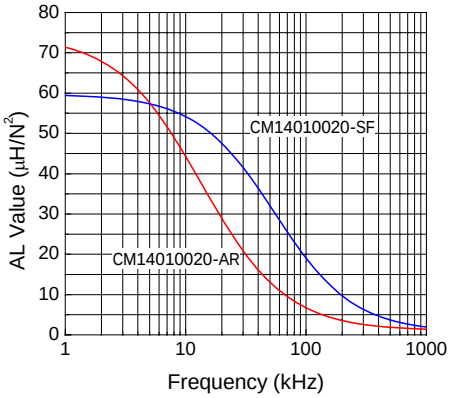
Materials Characteristic Comparison

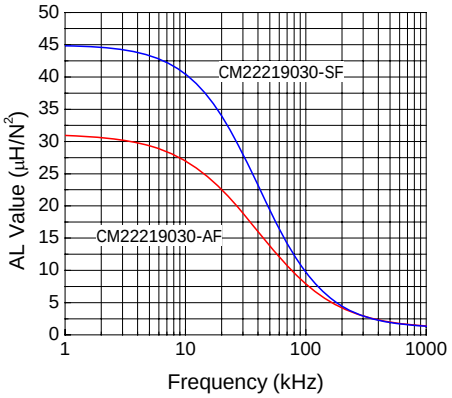




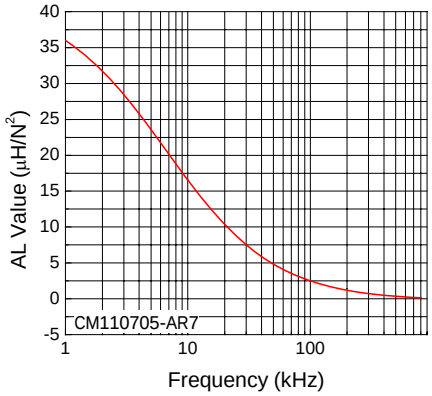


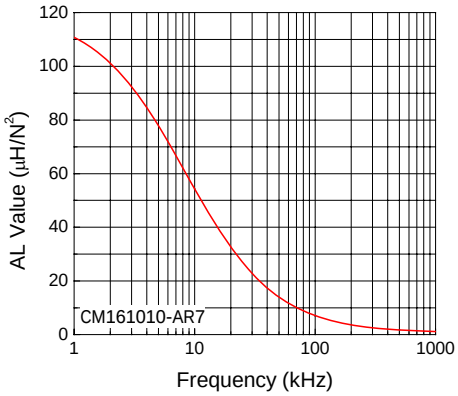


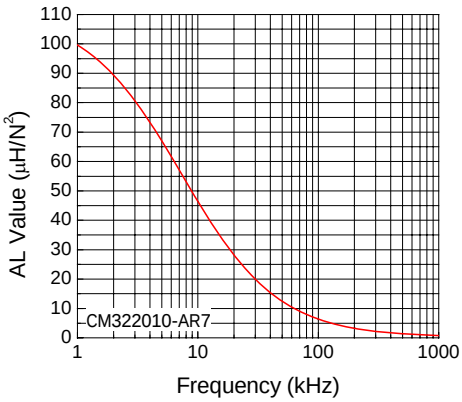


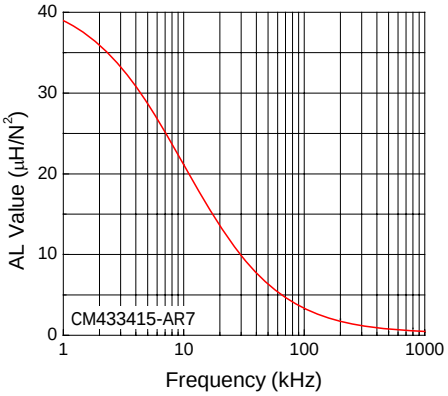


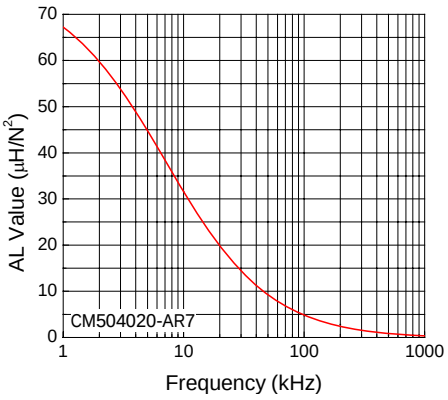
Frequency Characteristic Curves For AR type

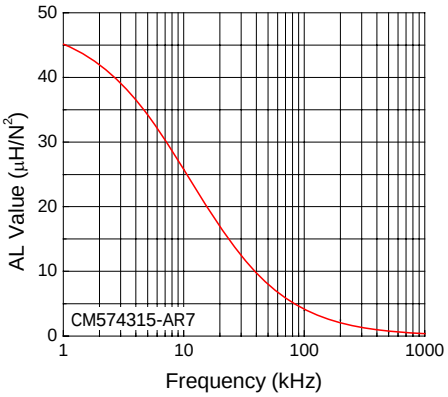


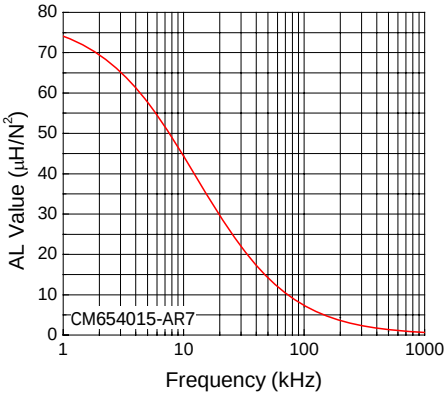


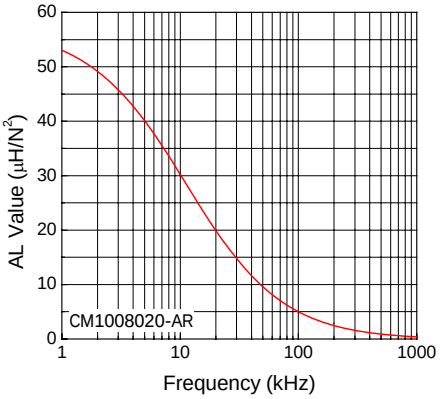




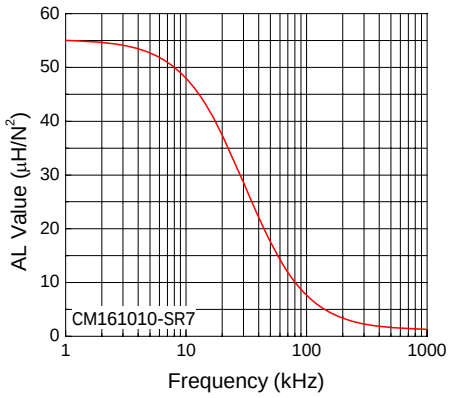


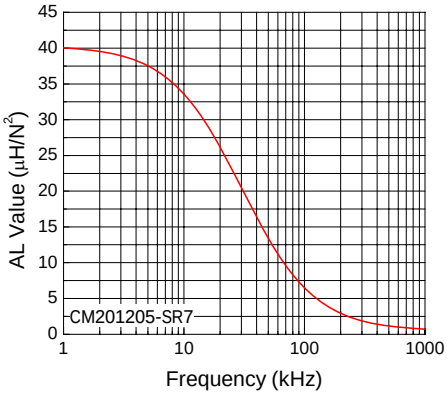


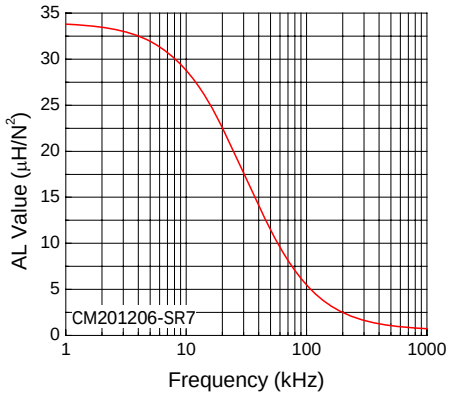


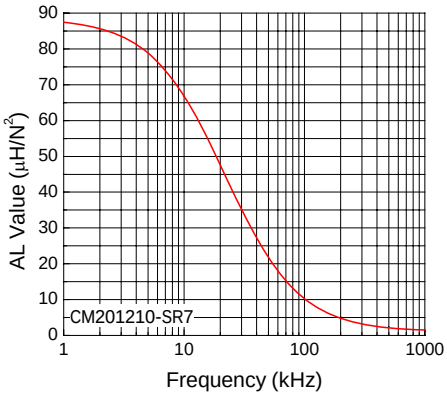


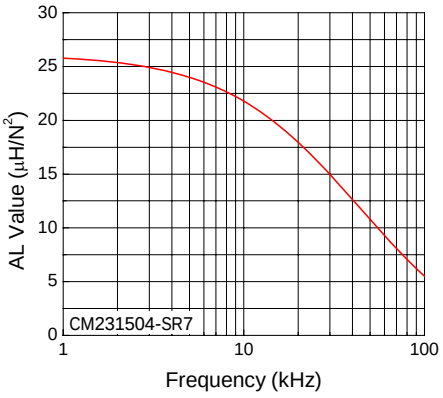
Frequency Characteristic Curves For SR type

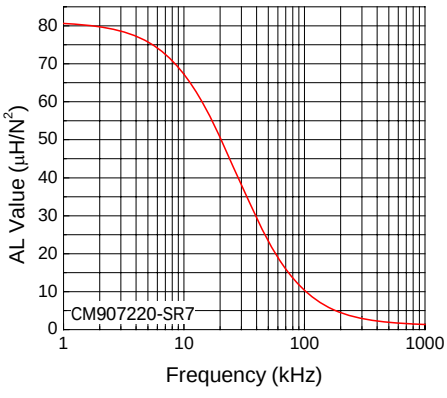












Frequency Characteristic Curves For SF type