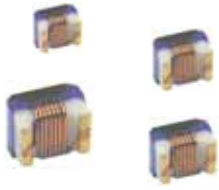


# High-Frequency Wound Chip Inductor

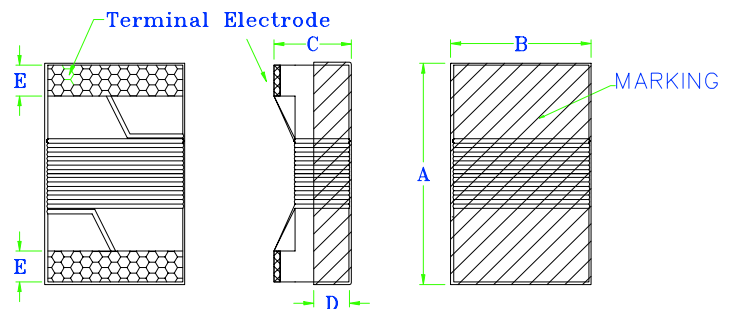


## FEATURES

- » High reliability and easy surface mount assembly
- » Consisting of size 0402~1210 sizes
- » High quality factor

## APPLICATIONS

- » Computer products, mother board, TV card
- » Power supplier, OA products, modem....
- » Telecommunication  
(ADSL, mobilephone, bluetooth)
- » Compliance with CE,  
FCC, VDE or VCCI radiated emissions



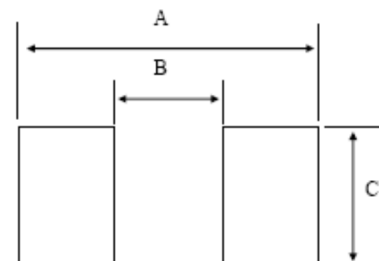
## DIMENSIONS (mm)

No.	Part No.	Size (mm)				
		A	B	C	D	E
1	0402	1.0 ± 0.10	0.55 ± 0.10	0.50 ± 0.10	0.2 Ref.	0.20 ± 0.10
2	0603	1.6 ± 0.20	1.05 ± 0.20	1.05 ± 0.20	0.5 Ref.	0.35 ± 0.10
3	0805	2.0 ± 0.20	1.25 ± 0.20	1.20 ± 0.20	0.6 Ref.	0.40 ± 0.10
4	1008	2.5 ± 0.20	2.00 ± 0.20	1.60 ± 0.20	0.7 Ref.	0.50 ± 0.10
5	1210	3.2 ± 0.20	2.50 ± 0.20	2.20 ± 0.20	1.1 Ref.	0.50 ± 0.10

## RECOMMENDED PATTERN

Part No.	A	B	C
0402	1.20	0.45	0.65
0603	1.90	0.65	1.00
0805	2.60	0.75	1.30
1008	3.00	1.20	2.20
1210	4.00	1.70	2.82

Recommended Pattern



## PACKAGE

Type	0402	0603	0805	1008	1210
Q'TY/Reel	10,000	3,000	2,000	2,000	2,000

# High-Frequency Wound Chip Inductor

No.	Part No.	Inductance (nH)	Q Min.	Typical 900MHz	Test Fq. (MHz)	SRF Min.(GHz)	RDC Max.(Ω)	IDC Max.(mA)
1	0402-1	1.0	13	26	250	6.00	0.045	1360
2	0402-1.9	1.9	16	29	250	6.00	0.070	1040
3	0402-2	2.0	16	30	250	6.00	0.070	1040
4	0402-2.2	2.2	18	32	250	6.00	0.070	960
5	0402-2.4	2.4	16	35	250	6.00	0.068	790
6	0402-2.7	2.7	16	31	250	6.00	0.120	860
7	0402-3.3	3.3	20	41	250	6.00	0.066	840
8	0402-3.6	3.6	20	43	250	6.00	0.066	840
9	0402-3.9	3.9	20	41	250	5.80	0.066	840
10	0402-4.3	4.3	18	45	250	6.00	0.091	700
11	0402-4.7	4.7	15	45	250	4.78	0.130	640
12	0402-5.1	5.1	23	49	250	5.80	0.083	800
13	0402-5.6	5.6	23	46	250	5.80	0.083	760
14	0402-6.2	6.2	23	49	250	5.80	0.083	760
15	0402-6.8	6.8	20	50	250	4.80	0.083	680
16	0402-7.5	7.5	25	50	250	5.80	0.104	680
17	0402-8.2	8.2	25	49	250	4.40	0.104	680
18	0402-8.7	8.7	18	50	250	4.10	0.200	480
19	0402-9	9.0	25	49	250	4.16	0.104	680
20	0402-9.5	9.5	18	45	250	4.00	0.200	680
21	0402-10	10.0	23	47	250	3.90	0.195	480
22	0402-11	11.0	26	56	250	3.68	0.120	640
23	0402-12	12.0	26	51	250	3.60	0.120	640
24	0402-13	13.0	24	54	250	3.45	0.210	560
25	0402-15	15.0	26	54	250	3.28	0.172	560
26	0402-16	16.0	24	54	250	3.10	0.220	560
27	0402-18	18.0	25	52	250	3.10	0.230	520
28	0402-19	19.0	26	50	250	3.04	0.202	480
29	0402-20	20.0	25	51	250	3.00	0.250	420
30	0402-22	22.0	25	52	250	2.80	0.300	400
31	0402-23	23.0	26	53	250	2.72	0.214	400
32	0402-24	24.0	25	51	250	2.70	0.300	400
33	0402-27	27.0	26	48	250	2.48	0.298	400
34	0402-30	30.0	25	46	250	2.35	0.300	400
35	0402-33	33.0	24	48	250	2.35	0.350	400
36	0402-36	36.0	26	48	250	2.32	0.403	320
37	0402-39	19.0	26	50	250	3.04	0.202	480
38	0402-40	40.0	26	48	250	2.24	0.438	320
39	0402-43	43.0	25	46	250	2.03	0.810	240
40	0402-47	47.0	26	46	200	2.10	0.830	150
41	0402-51	51.0	25	40	200	1.75	0.820	210
42	0402-56	56.0	22	42	200	1.76	0.970	200
43	0402-68	68.0	22	36	200	1.62	1.120	180
44	0402-82	82.0	20	33	150	1.50	1.250	150
45	0402-91	91.0	20	30	150	1.35	2.300	120
46	0402-100	100.0	20	30	150	1.30	2.520	120
47	0402-120	120.0	20	29	150	1.10	2.660	110

Tolerance:  $\pm 0.3\text{nH}$  ( $\leq 3.9\text{nH}$ );  $\pm 5\%$  ( $\geq 4.3\text{nH}$ )

Material Type: Ceramic

# High-Frequency Wound Chip Inductor

No.	Part No.	Inductance (nH)	Q Min.	Typical 900MHz	Test Fq. (MHz)	SRF Min.(GHz)	RDC Max.(Ω)	IDC Max.(mA)
1	0603-1.6	1.6	24	40	250	12.50	0.030	700
2	0603-1.8	1.8	16	35	250	12.50	0.045	700
3	0603-2	2.0	16	31	250	6.90	0.080	700
4	0603-3.9	3.9	22	51	250	6.90	0.080	700
5	0603-4.3	4.3	22	45	250	5.90	0.080	700
6	0603-4.7	4.7	20	47	250	5.80	0.130	700
7	0603-5.1	5.1	20	47	250	5.70	0.140	700
8	0603-5.6	5.6	16	40	250	5.50	0.150	700
9	0603-6.8	6.8	30	63	250	5.80	0.110	700
10	0603-7.5	7.5	28	64	250	4.80	0.106	700
11	0603-8.2	8.2	30	72	250	4.60	0.100	700
12	0603-8.7	8.7	28	66	250	4.60	0.109	700
13	0603-9.1	9.1	28	60	250	4.00	0.135	700
14	0603-9.5	9.5	28	62	250	4.50	0.135	700
15	0603-10	10	30	66	250	4.80	0.130	700
16	0603-11	11	33	68	250	4.00	0.090	700
17	0603-12	12	35	72	250	4.00	0.130	700
18	0603-13	13	38	75	250	4.00	0.106	700
19	0603-15	15	35	68	250	4.00	0.170	700
20	0603-16	16	34	66	250	3.30	0.170	700
21	0603-18	18	38	77	250	3.10	0.170	700
22	0603-20	20	38	72	250	3.00	0.220	700
23	0603-22	22	38	70	250	3.00	0.220	700
24	0603-24	24	37	75	250	2.65	0.135	700
25	0603-27	27	40	75	250	2.80	0.220	600
26	0603-30	30	45	57	250	2.30	0.220	600
27	0603-33	33	43	78	250	2.30	0.220	600
28	0603-36	36	43	70	250	2.20	0.250	600
29	0603-39	39	43	66	250	2.20	0.250	600
30	0603-43	43	38	62	250	2.00	0.280	600
31	0603-47	47	40	65	200	2.00	0.280	600
32	0603-51	51	40	66	200	1.90	0.310	600
33	0603-56	56	40	66	200	1.90	0.310	600
34	0603-62	62	40	60	200	1.70	0.340	600
35	0603-68	68	40	57	200	1.70	0.340	600
36	0603-72	72	35	60	150	1.70	0.490	400
37	0603-82	82	35	58	150	1.70	0.540	400
38	0603-90	90	35	52	150	1.70	0.540	400
39	0603-100	100	35	51	150	1.40	0.630	400
40	0603-110	110	35	22	150	1.40	0.630	400
41	0603-120	120	35	45	150	1.30	0.650	300
42	0603-130	130	35	40	150	1.00	0.920	280
43	0603-150	150	35	33	150	1.00	0.920	280
44	0603-180	180	30	26	100	1.00	1.250	240
45	0603-200	200	30	23	100	1.00	1.250	240
46	0603-210	210	27	23	100	1.00	1.700	200
47	0603-220	220	30	23	100	1.00	1.700	200
48	0603-240	240	30	15	100	1.00	1.700	200
49	0603-270	270	30	10	100	1.00	1.800	170
50	0603-330	330	25	-	100	0.45	2.000	150
51	0603-390	390	20	-	100	0.35	2.000	170

Tolerance:  $\pm 0.3\text{nH}$  ( $\leq 4.7\text{nH}$ );  $\pm 5\%$  ( $\geq 5.1\text{nH}$ )

Material Type: Ceramic

## High-Frequency Wound Chip Inductor

No.	Part No.	Inductance (nH)	Q Min.	SRF Min. (GHz)	RDC Max. (Ω)	IDC Max. (mA)
1	0805-2.2	2.2 @ 250MHz	50 @ 1000MHz	6	0.06	800
2	0805-2.7	2.7 @ 250MHz	35 @ 1000MHz	6	0.08	800
3	0805-3.3	3.3 @ 250MHz	60 @ 1000MHz	6	0.08	800
4	0805-3.9	3.9 @ 250MHz	60 @ 1000MHz	6	0.06	600
5	0805-4.7	4.7 @ 250MHz	60 @ 1000MHz	6	0.06	600
6	0805-5.1	5.1 @ 250MHz	60 @ 1000MHz	6	0.08	600
7	0805-5.6	5.6 @ 250MHz	60 @ 1000MHz	6	0.08	600
8	0805-6.8	6.8 @ 250MHz	60 @ 1000MHz	6	0.06	600
9	0805-8.2	8.2 @ 250MHz	60 @ 1000MHz	6	0.06	600
10	0805-10	10 @ 250MHz	60 @ 500MHz	5	0.08	600
11	0805-12	12 @ 250MHz	60 @ 500MHz	4	0.08	600
12	0805-15	15 @ 250MHz	60 @ 500MHz	4	0.08	600
13	0805-18	18 @ 250MHz	60 @ 500MHz	3	0.08	600
14	0805-22	22 @ 250MHz	60 @ 500MHz	3	0.10	600
15	0805-27	27 @ 250MHz	60 @ 500MHz	3	0.12	600
16	0805-33	33 @ 250MHz	60 @ 500MHz	2	0.15	500
17	0805-39	39 @ 250MHz	60 @ 500MHz	2	0.18	500
18	0805-47	47 @ 200MHz	60 @ 500MHz	2	0.15	500
19	0805-56	56 @ 200MHz	60 @ 500MHz	2	0.25	500
20	0805-68	68 @ 200MHz	60 @ 500MHz	1	0.27	500
21	0805-82	82 @ 150MHz	60 @ 500MHz	1	0.32	500
22	0805-100	100 @ 150MHz	60 @ 500MHz	1	0.43	500
23	0805-120	120 @ 150MHz	50 @ 250MHz	1	0.48	500
24	0805-150	150 @ 100MHz	50 @ 250MHz	0.95	0.56	400
25	0805-180	180 @ 100MHz	50 @ 250MHz	0.9	0.78	400
26	0805-220	220 @ 100MHz	50 @ 250MHz	0.86	1.00	400
27	0805-270	270 @ 100MHz	45 @ 250MHz	0.85	1.46	350
28	0805-330	330 @ 100MHz	45 @ 250MHz	0.8	1.65	300
29	0805-390	390 @ 100MHz	45 @ 250MHz	0.78	2.20	210

Tolerance:  $\pm 0.3\text{nH}$  ( $\leq 4.7\text{nH}$ );  $\pm 5\%$  ( $\geq 5.1\text{nH}$ )

Material Type: Ceramic

## High-Frequency Wound Chip Inductor

No.	Part No.	Inductance (nH)	Q Min.	SRF Min. (MHz)	RDC Max. (Ω)	IDC Max. (mA)
1	0805-470	0.47 @ 25.2MHz	45 @ 100MHz	375	0.95	500
2	0805-560	0.56 @ 25.2MHz	45 @ 100MHz	340	1.10	450
3	0805-680	0.68 @ 25.2MHz	35 @ 100MHz	188	1.20	400
4	0805-820	0.82 @ 25.2MHz	35 @ 100MHz	215	1.50	300
5	0805-1000	1.00 @ 25.2MHz	35 @ 50MHz	200	2.13	180
6	0805-1200	1.20 @ 7.96MHz	15 @ 7.96MHz	200	2.38	150
7	0805-1500	1.50 @ 7.96MHz	15 @ 7.96MHz	200	2.90	130
8	0805-1800	1.80 @ 7.96MHz	15 @ 7.96MHz	120	3.00	120
9	0805-2200	2.20 @ 7.96MHz	15 @ 7.96MHz	110	3.10	110
10	0805-2700	2.70 @ 7.96MHz	15 @ 7.96MHz	100	3.50	100
11	0805-3300	3.30 @ 7.96MHz	15 @ 7.96MHz	70	2.30	210
12	0805-3900	3.90 @ 7.96MHz	15 @ 7.96MHz	60	2.50	200
13	0805-4700	4.70 @ 7.96MHz	15 @ 7.96MHz	50	2.80	180
14	0805-5600	5.60 @ 7.96MHz	15 @ 7.96MHz	45	3.00	160
15	0805-6800	6.80 @ 7.96MHz	15 @ 7.96MHz	45	3.20	130
16	0805-8200	8.20 @ 7.96MHz	15 @ 7.96MHz	40	3.50	120
17	0805-10000	10.00 @ 2.52MHz	15 @ 2.52MHz	40	5.00	80

Tolerance:  $\pm 0.3\text{nH}$  ( $\leq 4.7\text{nH}$ );  $\pm 5\%$  ( $\geq 5.1\text{nH}$ )

Material Type: Ferrite

# High-Frequency Wound Chip Inductor

No.	Part No.	Inductance (nH)	Q Min.	SRF Min. (GHz)	RDC Max. (Ω)	IDC Max. (mA)
1	1008-3.3	3.3 @ 100MHz	50 @ 1000MHz	6	0.060	1000
2	1008-6.8	6.8 @ 100MHz	50 @ 1000MHz	5.5	0.060	1000
3	1008-8.2	8.2 @ 100MHz	50 @ 1000MHz	5.5	0.060	1000
4	1008-10	10 @ 100MHz	50 @ 1000MHz	4.30	0.080	1000
5	1008-12	12 @ 100MHz	60 @ 500MHz	3.60	0.080	1000
6	1008-15	15 @ 100MHz	60 @ 500MHz	2.70	0.080	1000
7	1008-18	18 @ 100MHz	60 @ 350MHz	2.70	0.100	1000
8	1008-22	22 @ 100MHz	60 @ 350MHz	2.50	0.100	1000
9	1008-27	27 @ 100MHz	60 @ 350MHz	1.80	0.100	1000
10	1008-33	33 @ 100MHz	60 @ 350MHz	1.70	0.100	1000
11	1008-39	39 @ 100MHz	60 @ 350MHz	1.50	0.100	1000
12	1008-47	47 @ 100MHz	60 @ 350MHz	1.50	0.100	1000
13	1008-56	56 @ 100MHz	60 @ 350MHz	1.35	0.120	1000
14	1008-68	68 @ 100MHz	60 @ 350MHz	1.30	0.150	1000
15	1008-82	82 @ 100MHz	60 @ 350MHz	1.10	0.180	1000
16	1008-100	100 @ 100MHz	60 @ 350MHz	1.10	0.180	1000
17	1008-120	120 @ 25MHz	45 @ 100MHz	0.95	0.200	800
18	1008-150	150 @ 25MHz	45 @ 100MHz	0.88	0.220	800
19	1008-180	180 @ 25MHz	45 @ 100MHz	0.80	0.330	800
20	1008-220	220 @ 25MHz	45 @ 100MHz	0.73	0.450	800
21	1008-270	270 @ 25MHz	45 @ 100MHz	0.65	0.750	600
22	1008-330	330 @ 25MHz	45 @ 100MHz	0.57	0.900	500
23	1008-390	390 @ 25MHz	45 @ 100MHz	0.53	1.060	470
24	1008-470	470 @ 25MHz	45 @ 100MHz	0.48	1.170	420
25	1008-560	560 @ 25MHz	45 @ 100MHz	0.43	1.500	310
26	1008-680	680 @ 25MHz	45 @ 100MHz	0.38	2.060	230
27	1008-750	750 @ 25MHz	45 @ 100MHz	0.36	2.200	200
28	1008-820	820 @ 25MHz	45 @ 100MHz	0.35	2.300	180
29	1008-910	910 @ 25MHz	45 @ 100MHz	0.33	3.180	150
30	1008-1000	1000 @ 25MHz	35 @ 50MHz	0.31	3.300	120

Tolerance: ± 5%

Material Type: Ceramic

## High-Frequency Wound Chip Inductor

No.	Part No.	Inductance ( $\mu$ H)	Q Min.	SRF Min. (MHz)	RDC Max. ( $\Omega$ )	IDC Max. (mA)
1	1008-1200	1.20 @ 7.96MHz	20 @ 7.96MHz	280	1.30	230
2	1008-1500	1.50 @ 7.96MHz	20 @ 7.96MHz	250	1.65	220
3	1008-1800	1.80 @ 7.96MHz	20 @ 7.96MHz	200	2.20	210
4	1008-2200	2.20 @ 7.96MHz	20 @ 7.96MHz	160	2.35	200
5	1008-2700	2.70 @ 7.96MHz	20 @ 7.96MHz	130	2.60	195
6	1008-3300	3.30 @ 7.96MHz	20 @ 7.96MHz	80	2.85	185
7	1008-3900	3.90 @ 7.96MHz	20 @ 7.96MHz	50	4.00	180
8	1008-4700	4.70 @ 7.96MHz	20 @ 7.96MHz	45	4.30	175
9	1008-5600	5.60 @ 7.96MHz	20 @ 7.96MHz	42	2.60	170
10	1008-6800	6.80 @ 7.96MHz	20 @ 7.96MHz	39	2.80	165
11	1008-8200	8.20 @ 7.96MHz	20 @ 7.96MHz	36	3.05	160
12	1008-10000	10.00 @ 2.52MHz	15 @ 2.52MHz	33	3.50	150
13	1008-12000	12.00 @ 2.52MHz	15 @ 2.52MHz	30	3.60	140
14	1008-15000	15.00 @ 2.52MHz	15 @ 2.52MHz	26	3.80	130
15	1008-18000	18.00 @ 2.52MHz	15 @ 2.52MHz	24	4.50	120
16	1008-22000	22.00 @ 2.52MHz	15 @ 2.52MHz	22	4.80	110
17	1008-27000	27.00 @ 2.52MHz	15 @ 2.52MHz	21	5.30	95
18	1008-33000	33.00 @ 2.52MHz	15 @ 2.52MHz	20	6.10	85
19	1008-39000	39.00 @ 2.52MHz	15 @ 2.52MHz	18	8.30	60
20	1008-47000	47.00 @ 2.52MHz	15 @ 2.52MHz	17	12.60	45

Tolerance:  $\pm$  5%

Material Type: Ferrite

## High-Frequency Wound Chip Inductor

No.	Part No.	Inductance (nH)	Q Min.	SRF Min. (GHz)	RDC Max. (Ω)	IDC Max. (mA)
1	1210-4.7	4.7 @ 100MHz	50 @ 1000MHz	6.00	0.060	1000
2	1210-5.6	5.6 @ 100MHz	50 @ 1000MHz	5.50	0.080	1000
3	1210-10	10 @ 100MHz	60 @ 500MHz	4.00	0.060	1000
4	1210-12	12 @ 100MHz	60 @ 500MHz	3.40	0.060	1000
5	1210-15	15 @ 100MHz	60 @ 500MHz	3.20	0.060	1000
6	1210-18	18 @ 100MHz	60 @ 300MHz	2.80	0.060	1000
7	1210-22	22 @ 100MHz	60 @ 300MHz	2.10	0.080	1000
8	1210-27	27 @ 100MHz	60 @ 300MHz	1.90	0.080	1000
9	1210-33	33 @ 100MHz	60 @ 300MHz	1.70	0.080	1000
10	1210-39	39 @ 100MHz	60 @ 300MHz	1.70	0.080	1000
11	1210-47	47 @ 100MHz	60 @ 300MHz	1.40	0.080	1000
12	1210-56	56 @ 100MHz	60 @ 300MHz	1.10	0.100	1000
13	1210-68	68 @ 100MHz	60 @ 300MHz	1.00	0.100	1000
14	1210-82	82 @ 100MHz	60 @ 300MHz	1.00	0.100	1000
15	1210-100	100 @ 100MHz	60 @ 300MHz	0.90	0.100	1000
16	1210-120	120 @ 50MHz	60 @ 300MHz	0.90	0.120	800
17	1210-150	150 @ 50MHz	60 @ 300MHz	0.80	0.180	800
18	1210-180	180 @ 50MHz	60 @ 300MHz	0.76	0.210	800
19	1210-220	220 @ 50MHz	60 @ 300MHz	0.66	0.270	800
20	1210-270	270 @ 50MHz	50 @ 300MHz	0.60	0.330	700
21	1210-330	330 @ 50MHz	50 @ 100MHz	0.55	0.370	650
22	1210-390	390 @ 50MHz	50 @ 100MHz	0.50	0.630	600
23	1210-470	470 @ 50MHz	50 @ 100MHz	0.45	0.690	550
24	1210-560	560 @ 50MHz	50 @ 100MHz	0.40	0.900	450
25	1210-680	680 @ 25MHz	50 @ 100MHz	0.38	1.050	400
26	1210-820	820 @ 25MHz	50 @ 100MHz	0.35	1.450	350
27	1210-1000	1000 @ 25MHz	45 @ 100MHz	0.30	1.900	280
28	1210-1200	1200 @ 7.96MHz	45 @ 50MHz	0.30	2.200	250
29	1210-1500	1500 @ 7.96MHz	45 @ 50MHz	0.25	2.430	220
30	1210-1800	1800 @ 7.96MHz	45 @ 50MHz	0.20	3.360	180
31	1210-2200	2200 @ 7.96MHz	40 @ 50MHz	0.20	3.500	150

Tolerance: ± 5%

Material Type: Ceramic



## High-Frequency Wound Chip Inductor

No.	Part No.	Inductance ( $\mu$ H)	Q Min.	SRF Min. (MHz)	RDC Max. ( $\Omega$ )	IDC Max. (mA)
1	1210-1200	1.20 @ 7.96MHz	30 @ 7.96MHz	100	0.70	390
2	1210-1500	1.50 @ 7.96MHz	30 @ 7.96MHz	85	0.75	370
3	1210-1800	1.80 @ 7.96MHz	30 @ 7.96MHz	80	0.80	350
4	1210-2200	2.20 @ 7.96MHz	30 @ 7.96MHz	75	0.90	320
5	1210-2700	2.70 @ 7.96MHz	30 @ 7.96MHz	70	1.10	290
6	1210-3300	3.30 @ 7.96MHz	30 @ 7.96MHz	60	1.40	260
7	1210-3900	3.90 @ 7.96MHz	30 @ 7.96MHz	55	1.70	250
8	1210-4700	4.70 @ 7.96MHz	30 @ 7.96MHz	50	2.30	220
9	1210-5600	5.60 @ 7.96MHz	20 @ 7.96MHz	47	1.60	200
10	1210-6800	6.80 @ 7.96MHz	20 @ 7.96MHz	43	2.20	180
11	1210-8200	8.20 @ 7.96MHz	20 @ 7.96MHz	40	2.40	170
12	1210-10000	10.00 @ 2.52MHz	15 @ 2.52MHz	36	3.28	150
13	1210-12000	12.00 @ 2.52MHz	15 @ 2.52MHz	33	3.40	140
14	1210-15000	15.00 @ 2.52MHz	15 @ 2.52MHz	30	3.90	125
15	1210-18000	18.00 @ 2.52MHz	15 @ 2.52MHz	27	4.20	110
16	1210-22000	22.00 @ 2.52MHz	15 @ 2.52MHz	25	6.00	90
17	1210-27000	27.00 @ 2.52MHz	15 @ 2.52MHz	20	6.80	80
18	1210-33000	33.00 @ 2.52MHz	15 @ 2.52MHz	17	7.50	70
19	1210-39000	39.00 @ 2.52MHz	15 @ 2.52MHz	16	8.00	65
20	1210-47000	47.00 @ 2.52MHz	15 @ 2.52MHz	15	8.50	60

Tolerance:  $\pm$  5%

Material Type: Ferrite