

Features

1. Coil body of ceramic or ferrite material according to inductance value.
2. Two solderable metallized terminations of Ag/Pd/Pt.
3. Wound with lacquer-coated copper wire.
4. Wire ends welded onto the terminations.
5. Lead Free (RoHS Compliance).

Applications

1. RF technique
2. Antenna Amplifiers Tuners, Base Stations or SAT Receivers

Ordering Information

5503	270	*	*	**
(1)	(2)	(3)	(4)	(5)

(1) Series

- 5503: Size 1206(3216)

(2) Inductance Value

example: $27 \times 10^x = 27 \times 10^0 = 27(\text{nH})$

(3) Inductance Tolerance

- | | |
|----------------|-----------------------|
| 1 : $\pm 20\%$ | 4 : $\pm 2\%$ |
| 2 : $\pm 10\%$ | 9 : special tolerance |
| 3 : $\pm 5\%$ | |

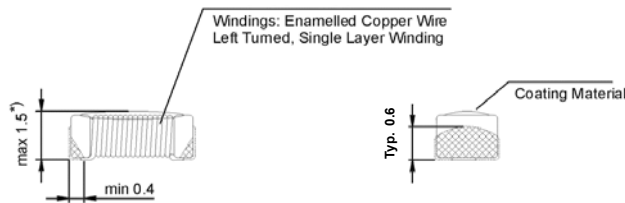
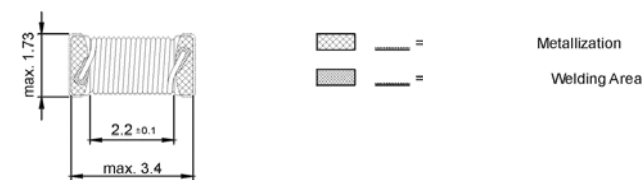
(4) Delivery Form

- 2: standard , tape & reel
- 4 : coated, tape & reel

(5) Packing unit tape & reel

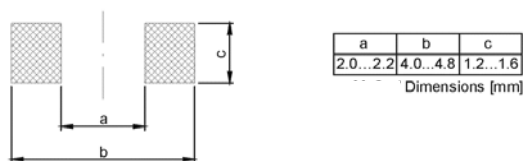
- 00 : reels $\Phi 180\text{mm}$, 3,000 pcs.
- 03 : reels $\Phi 330\text{mm}$, 10,000 pcs.
- 05 : reels $\Phi 180\text{mm}$, 500 pcs.

Shape and Dimensions (mm)



*) Component Height without Coating Material: max 1.30

Recommendation:



*All specifications are subject to change without notice.

Electrical Parameters

Order No.	L [nH]	Q _{min}	f _{L,Q} [MHz]	f _{res,min} [MHz]	D.C.R. ,max [mΩ]	I _{N,max} [mA]	Tol. [%]
5503 030 ** **	3,3	30	100	> 5000	40	1000	10/20
5503 060 ** **	6,8	30	100	> 5000	50	1000	10/20
5503 120 ** **	12	30	100	4000	80	1000	10/20
5503 150 ** **	15	30	100	3200	80	1000	5/10/20
5503 180 ** **	18	35	100	2800	80	1000	5/10/20
5503 220 ** **	22	35	100	2300	100	1000	5/10/20
5503 270 ** **	27	40	100	2000	110	1000	5/10/20
5503 330 ** **	33	40	100	1900	130	1000	5/10/20
5503 390 ** **	39	40	100	1800	130	1000	5/10/20
5503 470 ** **	47	40	100	1400	230	1000	5/10/20
5503 560 ** **	56	35	100	1400	230	840	2/ 5/10/20
5503 680 ** **	68	40	100	1300	210	570	2/ 5/10/20
5503 820 ** **	82	40	100	1200	230	660	2/5/10/20
5503 101 ** **	100	40	100	1100	290	660	2/5/10/20
5503 121 ** **	120	40	100	1000	300	570	2/5/10/20
5503 151 ** **	150	45	100	970	400	530	2/5/10/20
5503 181 ** **	180	35	50	880	470	450	2/5/10/20
5503 221 ** **	220	35	50	850	500	430	2/5/10/20
5503 271 ** **	270	35	50	800	620	420	2/5/10/20
5503 331 ** **	330	35	50	710	820	410	2/5/10/20
5503 391 ** **	390	35	50	650	1100	410	2/5/10/20
5503 471 ** **	470	35	50	640	1300	290	2/5/10/20
5503 561 ** **	560	30	35	560	1500	280	2/5/10/20
5503 681 ** **	680	30	35	540	1800	270	2/5/10/20
5503 821 ** **	820	30	35	470	2800	260	2/5/10/20
5503 102 ** **	1000	30	35	450	2700	230	2/5/10/20
5503 122 ** **	1200	30	35	430	3200	220	2/5/10/20
5503 152 ** **	1500	25	7,9	260	1200	320	2/5/10/20
5503 182 ** **	1800	25	7,9	250	1200	320	2/5/10/20
5503 222 ** **	2200	25	7,9	240	1300	300	2/5/10/20
5503 272 ** **	2700	25	7,9	230	1400	300	2/5/10/20
5503 332 ** **	3300	25	7,9	200	1500	280	2/5/10/20
5503 392 ** **	3900	25	7,9	190	1900	280	2/5/10/20
5503 472 ** **	4700	25	7,9	170	2200	280	2/5/10/20
5503 562 ** **	5600	25	7,9	160	2400	260	2/5/10/20
5503 682 ** **	6800	25	7,9	150	2800	240	2/5/10/20
5503 822 ** **	8200	25	7,9	130	3100	220	2/5/10/20
5503 103 ** **	10000	25	7,9	120	4000	200	2/5/10/20
5503 123 ** **	12000	18	2,5	110	4600	200	2/5/10/20
5503 153 ** **	15000	16	2,5	100	8200	160	2/5/10/20
5503 183 ** **	18000	16	2,5	95	9000	130	2/5/10/20

Ceramic

Ferrite

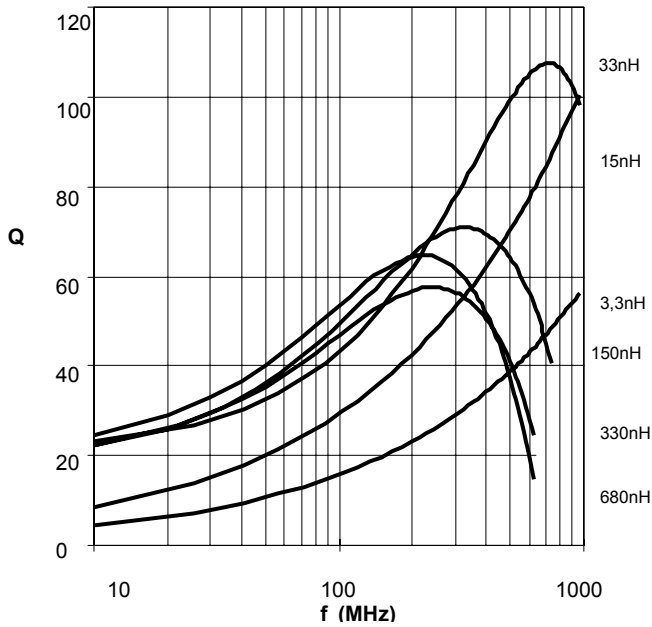
All values up to 1200 nH on ceramic core – from 1500 nH on ferrite core.

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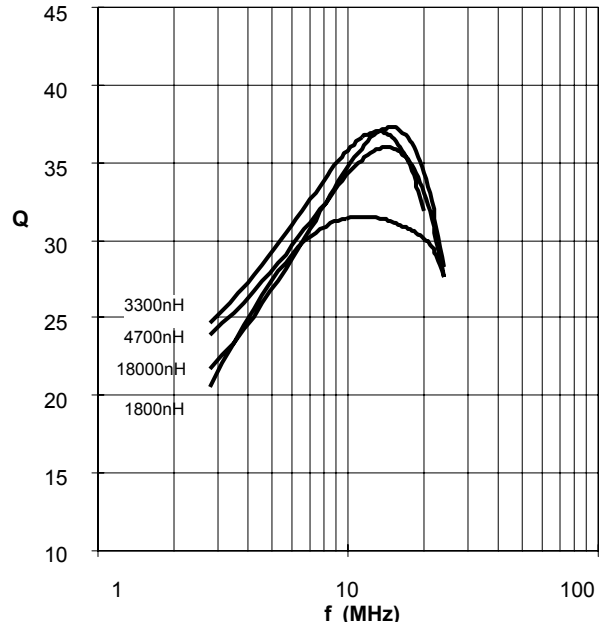
Electrical Characteristic Curves

Typical Q factor vs frequency

Coil on ceramic body

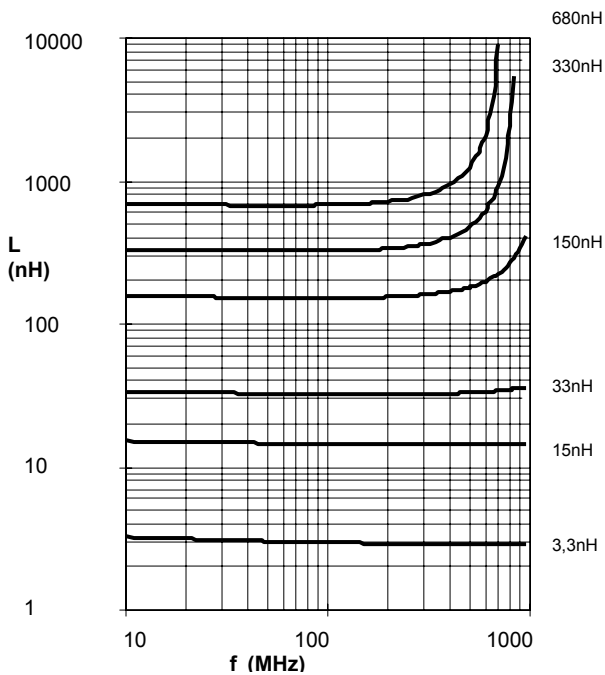


Coil on ferrite body

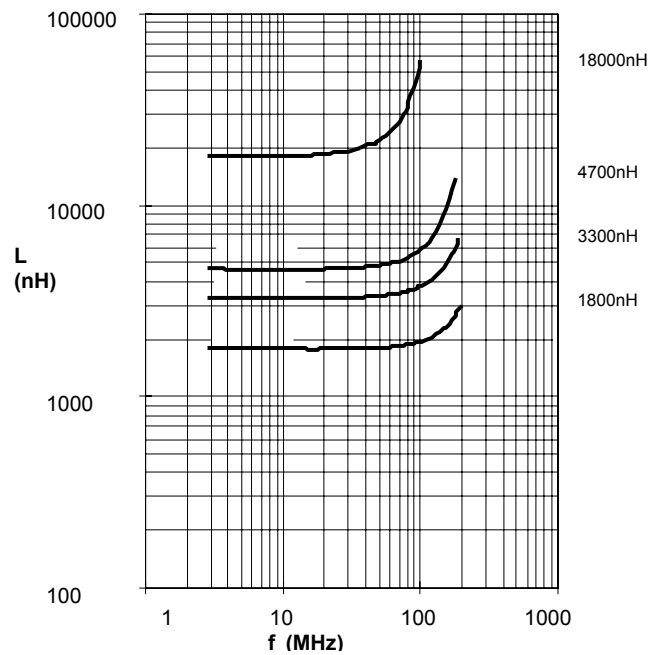


Typical Inductance vs. frequency

Coil on ceramic body

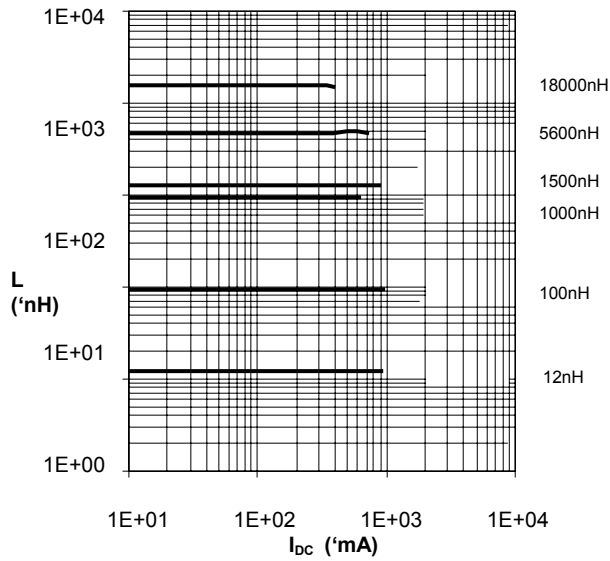


Coil on ferrite body

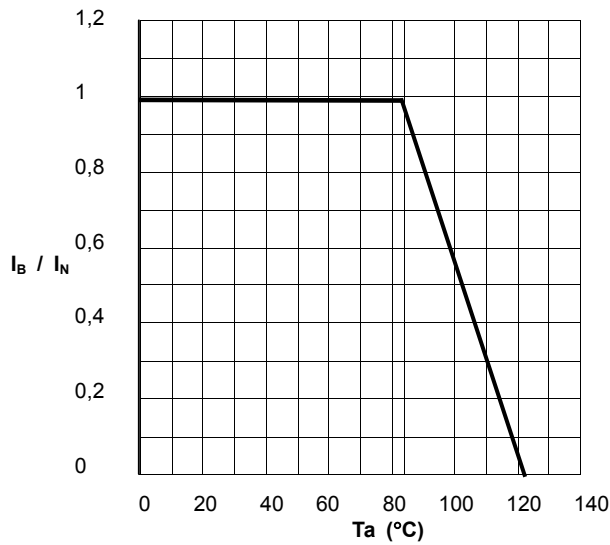


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Inductance L in dependence of direct current I_{DC}



Current-carrying capacity I_{OP}/I_R in dependence of the ambient temperature T_a



Test equipment: Inductance and Q: Agilent 42286A + 16093A.
 Resonant Frequency: Agilent 8753E.
 D.C.R. : Burst Resistomat 2329.(at 20°C)