

Features

1. Coil body of ceramic material.
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

5506	270	*	*	**
(1)	(2)	(3)	(4)	(5)

(1) Series

- 5506 : Size 0603(1608)

(4) Delivery Form

3: coated, bulk
4 : coated, tape & reel

(2) Inductance Value

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

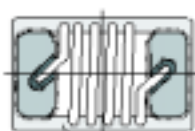
(5) Packing unit tape & reel

00 : reels $\Phi 180\text{mm}$, 4,000 pcs.

(3) Inductance Tolerance

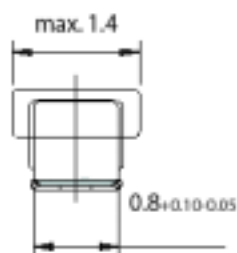
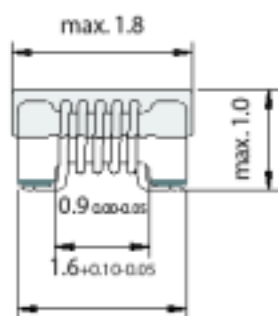
1 : $\pm 20\%$ 4 : $\pm 2\%$
2 : $\pm 10\%$ 9 : special tolerance
3 : $\pm 5\%$

Shape and Dimensions (mm)



Winding: enamelled copper wire,
Left turned, single layer winding

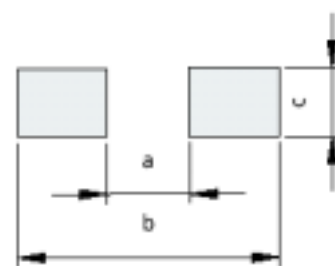
coating material; terminals free of coating material



Dimensions including metallization, winding and coating



Pad Layout Recommendation



a	b	c
0,8 ~ 1,0	2,0 ~ 2,5	0,7 ~ 0,9

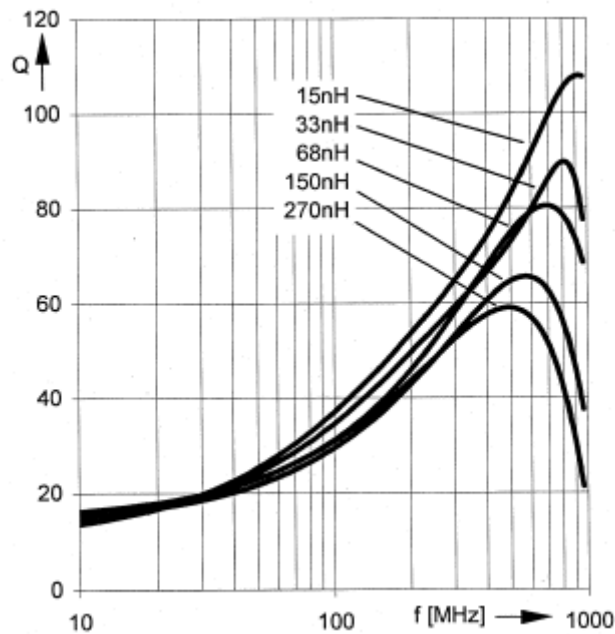
Electrical Parameters

Order No.	L [nH]	Q _{min}	Q _{typ} @800MHz	f _{L,Q} [MHz]	f _{res,min} [MHz]	D.C.R.,max [mΩ]	I _{N,max} [mA]	Tol. [%]
5506 015 ***	1,5	22	45	250	6000	25	1000	10/20
5506 018 ***	1,8	22	35	250	6000	35	900	10/20
5506 033 ***	3,3	30	55	250	6000	40	800	10/20
5506 036 ***	3,6	35	50	250	6000	35	900	10/20
5506 039 ***	3,9	35	50	250	6000	35	900	10/20
5506 047 ***	4,7	28	45	250	6000	75	620	10/20
5506 056 ***	5,6	35	60	250	6000	40	840	5/10/20
5506 068 ***	6,8	40	70	250	5600	35	890	5/10/20
5506 082 ***	8,2	40	55	250	5500	60	700	5/10/20
5506 087 ***	8,7	35	70	250	5300	60	700	5/10/20
5506 100 ***	10	45	80	250	5000	45	780	2/5/10
5506 120 ***	12	40	70	250	4100	90	560	2/5/10
5506 150 ***	15	45	80	250	3300	55	710	2/5/10
5506 180 ***	18	45	75	250	3700	90	560	2/5/10
5506 220 ***	22	45	70	250	3100	135	450	2/5/10
5506 270 ***	27	45	70	250	2900	115	500	2/5/10
5506 330 ***	33	45	70	250	2550	115	490	2/5/10
5506 390 ***	39	45	65	250	2150	120	480	2/5/10
5506 470 ***	47	40	55	200	2050	200	380	2/5/10
5506 560 ***	56	40	50	200	2000	290	310	2/5/10
5506 680 ***	68	40	50	200	1700	360	280	2/5/10
5506 820 ***	82	35	60	150	1700	590	220	2/5/10
5506 101 ***	100	35	50	150	1550	890	180	2/5/10
5506 121 ***	120	35	50	150	1300	1100	160	2/5/10
5506 151 ***	150	30	40	100	1200	1200	150	2/5/10
5506 181 ***	180	30	35	100	1150	1300	140	2/5/10
5506 221 ***	220	30	30	100	1050	1900	120	2/5/10
5506 271 ***	270	30	-	100	990	2100	115	2/5/10
5506 331 ***	330	30	-	100	890	2900	95	2/5/10
5506 391 ***	390	30	-	100	810	4000	80	2/5/10

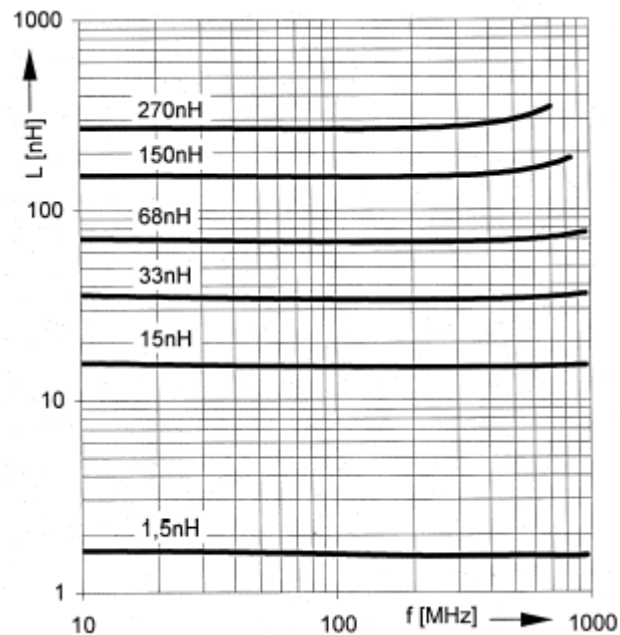
All values on ceramic core.

Electrical Characteristic Curves

Typical Q factor vs. frequency



Typical Inductance vs. frequency



Climatic category acc. to DIN IEC 68-1:55/125/56

Test equipment : Inductance and Q: Agilent 42286A+16193A.

Resonant Frequency : Agilent 8753E.

D.C.R. : Burst Resistomat 2329.(at20°C)