

## 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

<b>5508</b>	<b>270</b>	<b>*</b>	<b>*</b>	<b>**</b>
(1)	(2)	(3)	(4)	(5)

### (1) Series

-5508: Size 0805(2012)

### (2) Inductance Value

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

### (3) Inductance Tolerance

8 : $\pm 0.2$ nH	3 : $\pm 5\%$
9 : $\pm 0.3$ nH	4 : $\pm 2\%$

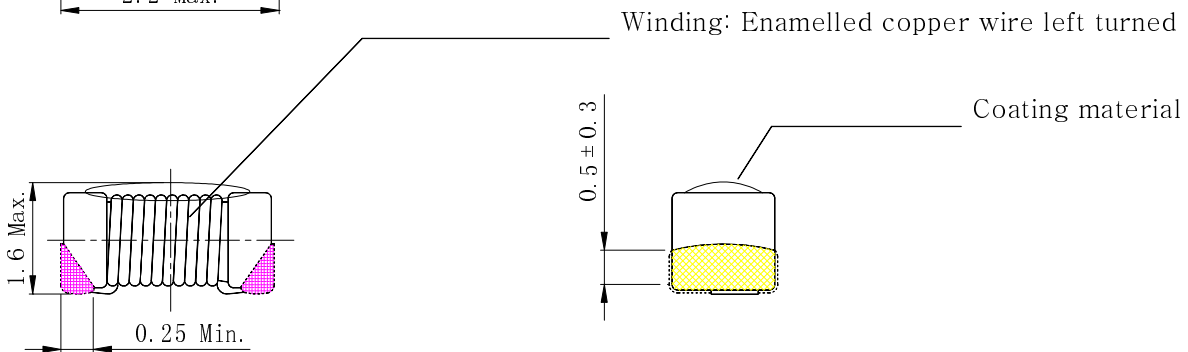
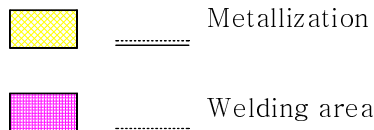
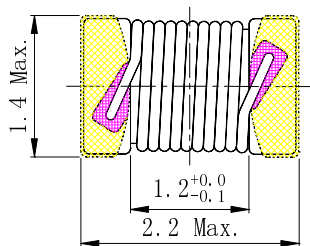
### (4) Delivery Form

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

### (5) Packing unit tape & reel

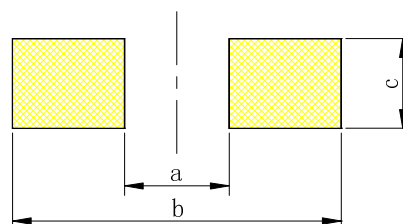
00 : reels  $\Phi 180\text{mm}$ , 3,000 pcs.  
03 : reels  $\Phi 330\text{mm}$ , 10,000 pcs.  
05 : reels  $\Phi 180\text{mm}$ , 500 pcs.

## Shape and Dimensions (mm)



## Recommended land pattern dimension (mm)

a	b	c
1.0...1.2	3.0...3.8	0.9...1.3



## Electrical Parameters

Order No.	L [nH]	Q <sub>min</sub>	Q <sub>typ</sub> at 800MHz	f <sub>L,Q</sub> [MHz]	f <sub>res,min</sub> [MHz]	D.C.R. ,max [mΩ ]	I <sub>N,max</sub> [mA]	Tol. [%]
5508020****	2,7	20	50	250	6000	30	1000	20
5508050****	5,6	25	60	250	6000	40	900	10/20
5508060****	6,8	30	70	250	5500	50	800	10/20
5508080****	8,2	35	75	250	5000	60	700	20
5508100****	10	40	80	250	4500	60	700	5/10/20
5508120****	12	40	85	250	4000	60	700	5/10/20
5508150****	15	40	85	250	3500	70	670	5/10/20
5508180****	18	45	90	250	3300	70	670	5/10/20
5508220****	22	45	85	250	2600	90	600	5/10/20
5508270****	27	50	90	250	2500	90	600	5/10/20
5508330****	33	45	80	250	2150	120	520	5/10/20
5508390****	39	50	90	250	2050	100	560	5/10/20
5508470****	47	45	85	200	1900	130	500	2/5/10/20
5508560****	56	45	60	200	1700	140	480	2/5/10/20
5508680****	68	45	60	200	1550	190	410	2/5/10/20
5508820****	82	40	60	150	1430	210	390	2/5/10/20
5508101****	100	40	50	150	1310	260	350	2/5/10/20
5508121****	120	40	45	150	1210	440	270	2/5/10/20
5508151****	150	35	40	100	1120	440	270	2/5/10/20
5508181****	180	35	30	100	1030	470	260	2/5/10/20
5508221****	220	35	-	100	950	550	240	2/5/10/20
5508271****	270	35	-	100	870	1000	180	2/5/10/20
5508331****	330	35	-	100	800	1000	180	2/5/10/20
5508391****	390	35	-	100	730	1900	130	2/5/10/20
5508471****	470	35	-	100	660	2400	115	2/5/10/20
5508561****	560	35	-	100	600	3200	100	2/5/10/20
5598681****	680	35	-	100	550	3700	95	5/10/20
5598821****	820	35	-	100	510	5000	75	5/10/20
5508681****	680	20	-	25.2	450	500	250	2/5/10/20
5508821****	820	20	-	25.2	400	550	240	2/5/10/20
5508102****	1000	20	-	7.96	350	500	250	2/5/10/20
5508122****	1200	20	-	7.96	300	650	220	2/5/10/20
5508152****	1500	20	-	7.96	250	750	200	2/5/10/20
5508182****	1800	20	-	7.96	250	850	190	2/5/10/20
5508222****	2200	20	-	7.96	200	1700	130	2/5/10/20
5508272****	2700	20	-	7.96	200	2000	120	2/5/10/20
5508332****	3300	20	-	7.96	200	3300	100	2/5/10/20
5508392****	3900	20	-	7.96	150	3600	95	2/5/10/20
5508472****	4700	20	-	7.96	150	3800	90	2/5/10/20

Ceramic

Ferrite

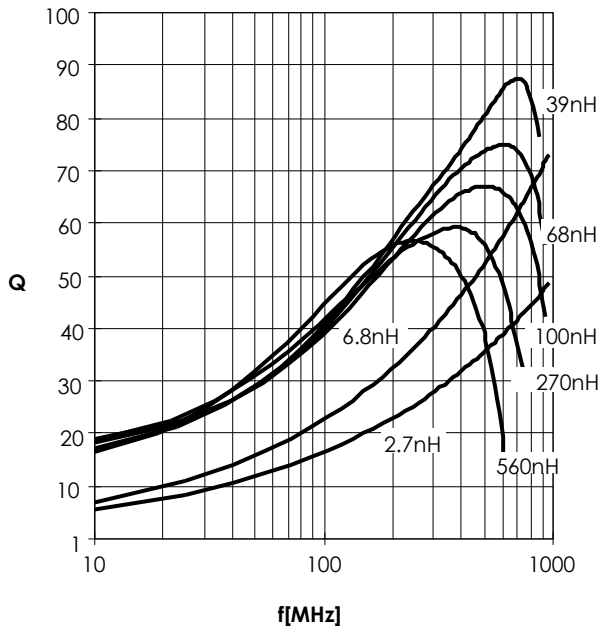
All values up to 560nH on ceramic core –

The values 680nH and 820nH either ceramic or ferrite core – from 1000nH on ferrite core.

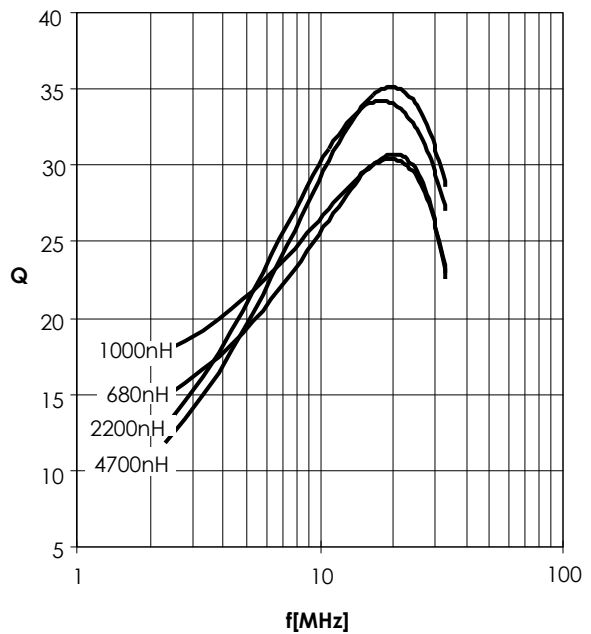
## Electrical Characteristic Curves

### Q-Factor Vs. Frequency

Coil on ceramic body

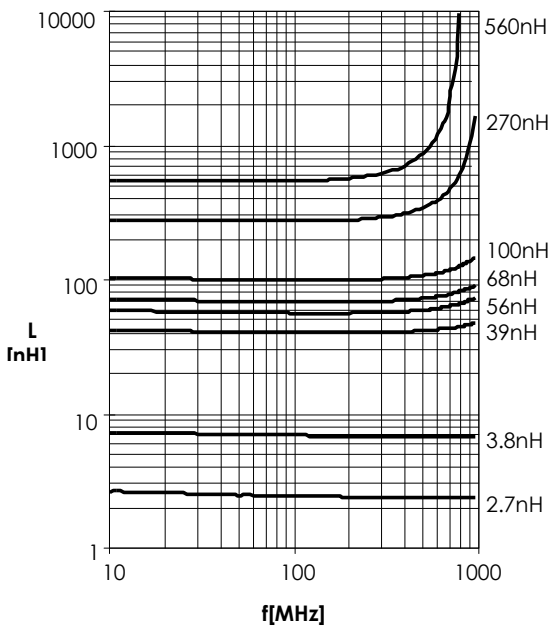


Coil on ferrite body

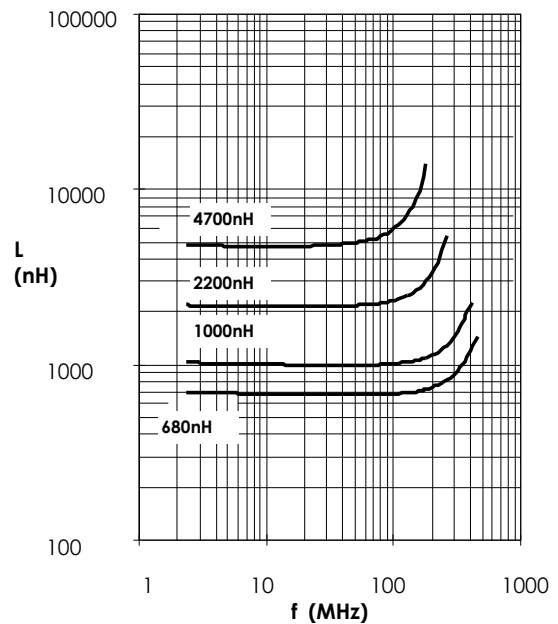


### Inductance vs. Frequency

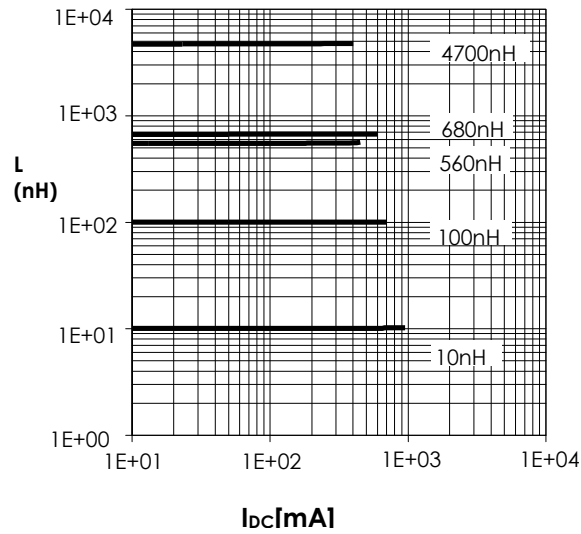
Coil on ceramic body



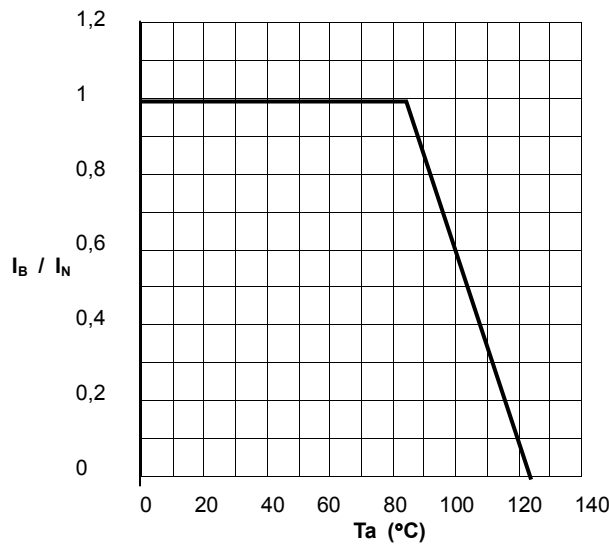
Coil on ferrite body



**Inductance L in dependence of direct current I<sub>DC</sub>**



**Current-carrying capacity I<sub>OP</sub>/I<sub>R</sub> in depend. Of the ambient temperature T<sub>a</sub>**



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)