

Features

1. Coil body of ceramic material.
2. Contact area of pure tin with a nickel barrier layer.
3. Windings are created by laser-cutting of the copper layer and are –for protection – completely lacquer-coated.
4. Lead Free (RoHS Compliance)

Applications

Typical applications are resonant circuits or impedance matching for video cameras, mobile telephones and antenna amplifiers etc

Ordering Information

5516	270	*	*	51
(1)	(2)	(3)	(4)	

(1) Series

- 5516 : Size 0603(1608) Laser trimmed.

(4) Delivery Form

4 : coated, taped on 8 mm cardboard tape
packing unit reels Φ 180mm, 10,000 pcs.

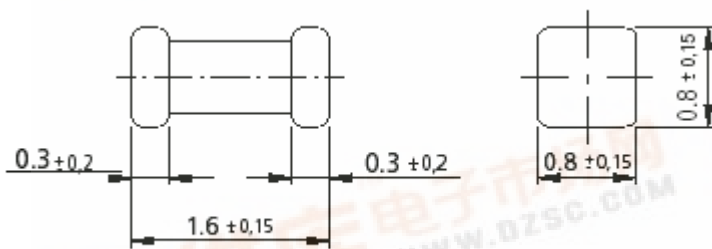
(2) Inductance Value

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

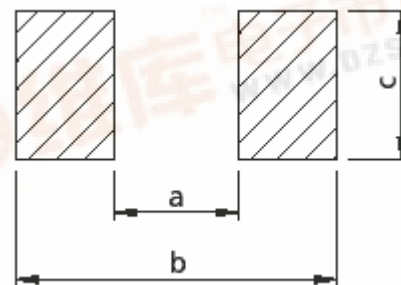
(3) Inductance Tolerance

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

Shape and Dimensions (mm)



Pad Layout Recommendation



a	b	c
0,8...1,0	2,0...2,6	0,7...0,9

Dimensions [mm]

*All specifications are subject to change without notice.

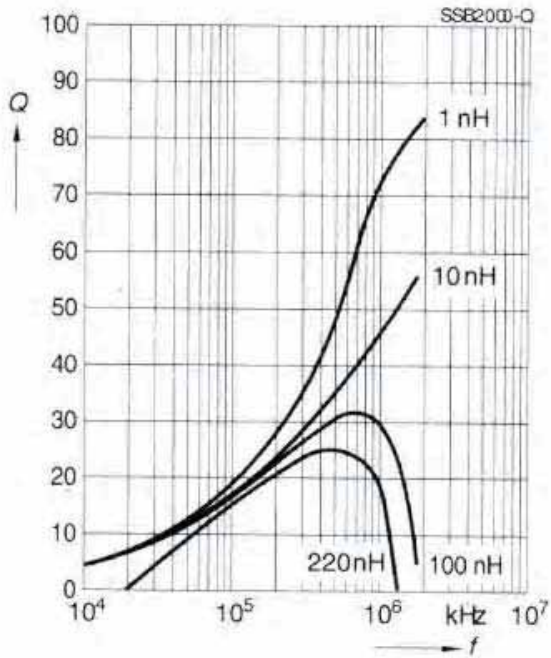
Electrical Parameters

Order No.	L [nH]	Q _{min}	Q _{typ} @800MHz	f _{LQ} [MHz]	f _{res,min} [MHz]	D.C.R. max. [mΩ]	I _{N,max} [mA]	Tol. [%]
5516 010 ** 51	1,0	7	60	100	16000	20	1800	±0,2 / 0,3 nH
5516 012 ** 51	1,2	8	60	100	15000	25	1800	±0,2 / 0,3 nH
5516 015 ** 51	1,5	8	50	100	13000	30	1500	±0,2 / 0,3 nH
5516 018 ** 51	1,8	12	50	100	12000	33	1500	±0,2 / 0,3 nH
5516 022 ** 51	2,2	14	50	100	10000	35	1500	±0,2 / 0,3 nH
5516 027 ** 51	2,7	14	40	100	10000	40	1400	±0,2 / 0,3 nH
5516 033 ** 51	3,3	14	40	100	9000	60	1200	±0,2 / 0,3 nH
5516 039 ** 51	3,9	14	40	100	8000	65	1100	±0,2 / 5 %
5516 047 ** 51	4,7	14	40	100	7000	100	800	±0,2 / 5 %
5516 056 ** 51	5,6	14	40	100	6000	150	700	±0,2 / 5 %
5516 068 ** 51	6,8	14	40	100	6000	150	700	±0,2 / 5 %
5516 082 ** 51	8,2	14	40	100	6000	180	650	±0,2 / 5 %
5516 100 ** 51	10	14	40	100	5000	200	600	2 % / 5 %
5516 120 ** 51	12	14	40	100	5000	350	450	2 % / 5 %
5516 150 ** 51	15	14	40	100	4500	400	420	2 % / 5 %
5516 180 ** 51	18	14	40	100	4000	450	400	2 % / 5 %
5516 220 ** 51	22	14	40	100	4000	500	360	2 % / 5 %
5516 270 ** 51	27	14	35	100	3000	550	350	2 % / 5 %
5516 330 ** 51	33	14	35	100	3000	600	300	2 % / 5 %
5516 390 ** 51	39	14	35	100	2000	800	270	2 % / 5 %
5516 470 ** 51	47	14	35	100	2500	950	250	2 % / 5 %
5516 560 ** 51	56	14	35	100	2500	1200	230	2 % / 5 %
5516 680 ** 51	68	14	35	100	2000	1300	220	2 % / 5 %
5516 820 ** 51	82	14	35	100	2000	1500	200	2 % / 5 %
5516 101 ** 51	100	14	30	100	1800	1800	160	2 % / 5 %
5516 121 ** 51	120	5	30	25,2	1800	3000	130	2 % / 5 %
5516 151 ** 51	150	5	30	25,2	1600	5000	120	2 % / 5 %
5516 181 ** 51	180	4	25	25,2	1400	6000	110	2 % / 5 %
5516 221 * * 51	220	4	25	25,2	1300	7000	110	2 % / 5 %

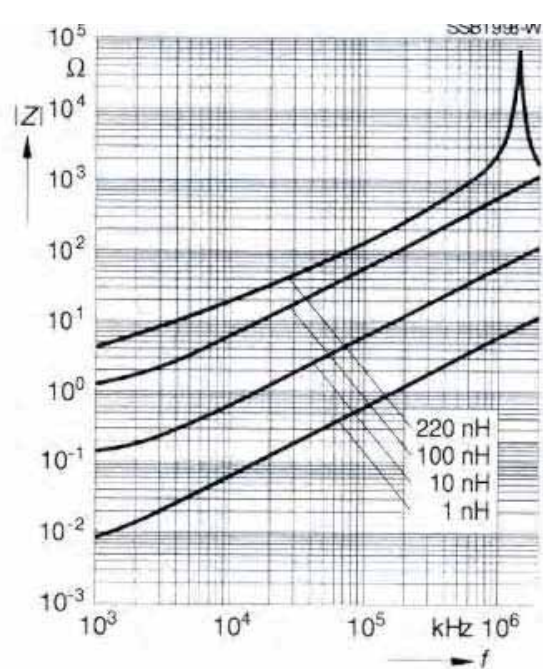
All values on ceramic core.

Electrical Characteristic Curves

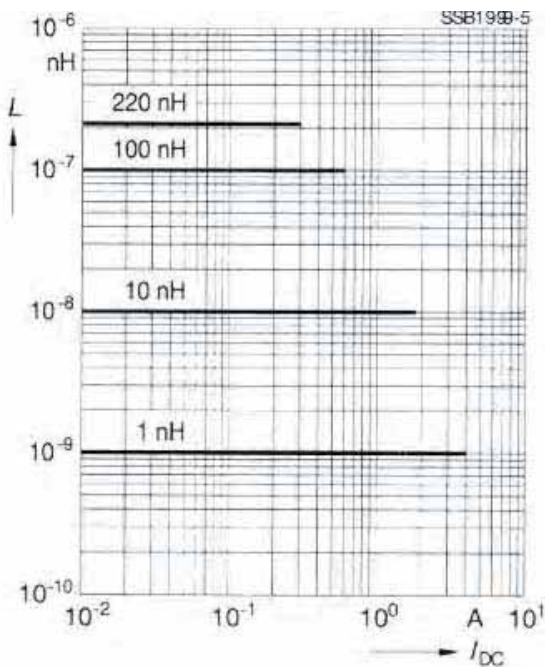
Q factor versus frequency



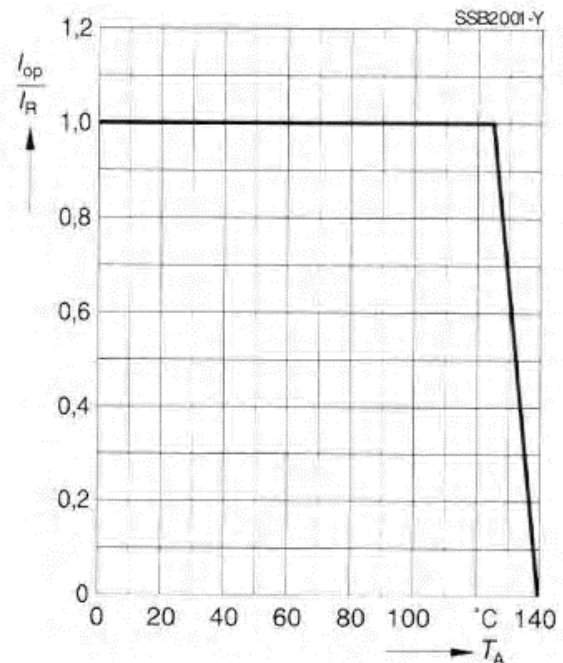
Impedance |Z| versus frequency



Inductance L versus DC Current



I_{op}/I_R versus ambient temperature



Climatic category acc. to DIN IEC 68-1:55/125/56
 Test equipment : Inductance and Q: Agilent 4291A+16096A.
 Resonant Frequency : Agilent 8720.
 D.C.R. : Burst Resistomat 2329.(at20°C)

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