

Features

1. Coil body of ceramic material.
2. Rugged inductance even in high frequencies.
3. Tight tolerances.
4. Low DC resistance.
5. Operating temperature range -40°C to $+85^{\circ}\text{C}$.
6. Lead Free (RoHS Compliance).

Applications

1. Antenna amplifier.
2. Mobile phones (GSM etc.)
3. Global Positioning Systems (GPS)
4. Digital cameras.
5. HDD (Hard Disk Drivers) etc.

Ordering Information

5526	270	*	452
(1)	(2)	(3)	

(1) Series

- 5526 Size 0603C(1608), Ceramic body

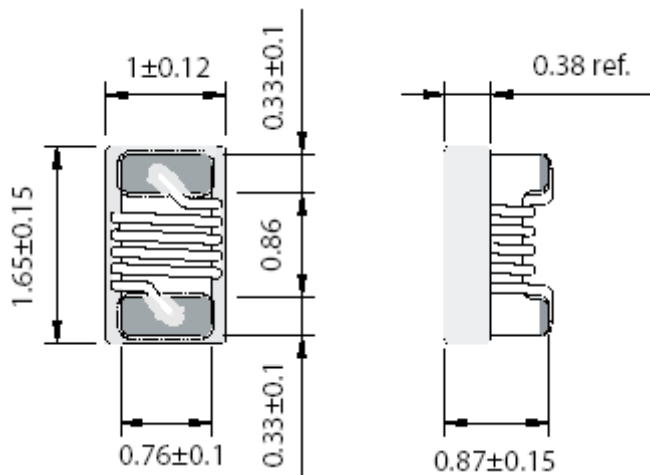
(3) Inductance Tolerance

- 2 : $\pm 10\%$
- 3 : $\pm 5\%$
- 4 : $\pm 2\%$

(2) Inductance Value

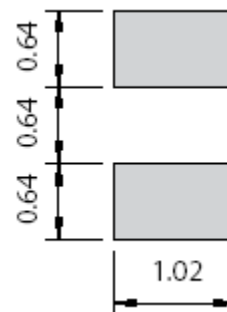
example: $27 \times 10^x = 27 \times 10^0 = 27(\text{nH})$

Shape and Dimensions (mm)



Pad Layout Recommendation

Electrode: AgPd/Ni/Sn



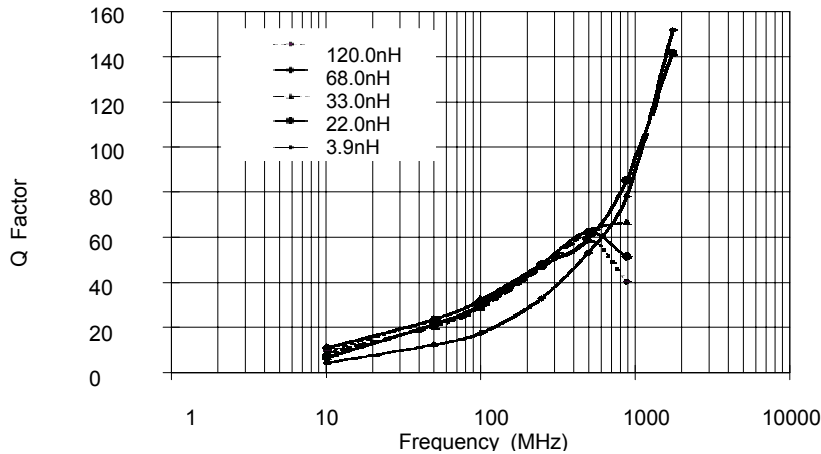
Electrical Parameters

Order No.	L	Q _{min}	f _{L, Q}	Q _{typ.}	f _{res, min}	R _{DC, max}	I _{DC, max}	Tol.
	[nH]		[MHz]	@ 900 MHz	[MHz]	[Ω]	[mA]	[%]
5526 016 *4 52	1,6	24,0	250	38	12500	0,030	700	5/10
5526 018 *4 52	1,8	16,0	250	42	12500	0,045	700	5/10
5526 033 *4 52	3,3	25,0	250	62	10000	0,050	700	5/10
5526 036 *4 52	3,6	22,0	250	53	5900	0,063	700	5/10
5526 039 *4 52	3,9	22,0	250	59	6900	0,080	700	5/10
5526 043 *4 52	4,3	22,0	250	62	5900	0,063	700	5/10
5526 047 *4 52	4,7	20,0	250	57	5800	0,130	700	5/10
5526 051 *4 52	5,1	20,0	250	49	5700	0,140	700	5/10
5526 056 *4 52	5,6	25,0	250	71	6000	0,100	700	5/10
5526 068 *4 52	6,8	27,0	250	70	5800	0,110	700	2/5/10
5526 075 *4 52	7,5	28,0	250	65	4800	0,106	700	2/5/10
5526 082 *4 52	8,2	28,0	250	68	4600	0,110	700	2/5/10
5526 087 *4 52	8,7	28,0	250	72	4600	0,109	700	2/5/10
5526 095 *4 52	9,5	28,0	250	73	5400	0,135	700	2/5/10
5526 100 *4 52	10,0	31,0	250	74	4800	0,130	700	2/5/10
5526 110 *4 52	11,0	33,0	250	78	4000	0,107	700	5/10
5526 120 *4 52	12,0	35,0	250	82	4000	0,130	700	2/5/10
5526 150 *4 52	15,0	35,0	250	81	4000	0,170	700	2/5/10
5526 160 *4 52	16,0	34,0	250	84	3300	0,134	700	2/5/10
5526 180 *4 52	18,0	35,0	250	80	3100	0,170	700	2/5/10
5526 220 *4 52	22,0	38,0	250	84	3000	0,190	700	2/5/10
5526 240 *4 52	24,0	37,0	250	81	2650	0,190	700	2/5/10
5526 270 *4 52	27,0	40,0	250	82	2800	0,220	600	5/10
5526 300 *4 52	30,0	37,0	250	83	2250	0,187	600	2/5/10
5526 330 *4 52	33,0	38,0	250	72	2300	0,260	600	2/5/10
5526 360 *4 52	36,0	38,0	250	77	2080	0,250	600	2/5/10
5526 390 *4 52	39,0	40,0	250	73	2200	0,250	600	2/5/10
5526 430 *4 52	43,0	39,0	250	78	2000	0,280	600	5/10
5526 470 *4 52	47,0	38,0	200	65	2000	0,280	600	2/5/10
5526 560 *4 52	56,0	38,0	200	66	1900	0,340	600	2/5/10
5526 680 *4 52	68,0	37,0	200	58	1700	0,340	600	2/5/10
5526 720 *4 52	72,0	34,0	150	64	1700	0,490	400	2/5/10
5526 820 *4 52	82,0	34,0	150	58	1700	0,540	400	2/5/10
5526 101 *4 52	100,0	34,0	150	52	1400	0,580	400	2/5/10
5526 111 *4 52	110,0	32,0	150	54	1350	0,720	300	2/5/10
5526 121 *4 52	120,0	32,0	150	52	1300	0,720	300	2/5/10
5526 151 *4 52	150,0	28,0	150	39	990	0,920	280	2/5/10
5526 181 *4 52	180,0	25,0	100	38	990	1,650	240	2/5/10
5526 221 *4 52	220,0	25,0	100	38	900	2,100	200	2/5/10
5526 271 *4 52	270,0	24,0	100	31	900	2,300	170	2/5/10
5526 331 *4 52	330,0	25,0	100	27	800	4,300	140	2/5/10
5526 391 *4 52	390,0	25,0	100	19	700	5,700	130	2/5/10

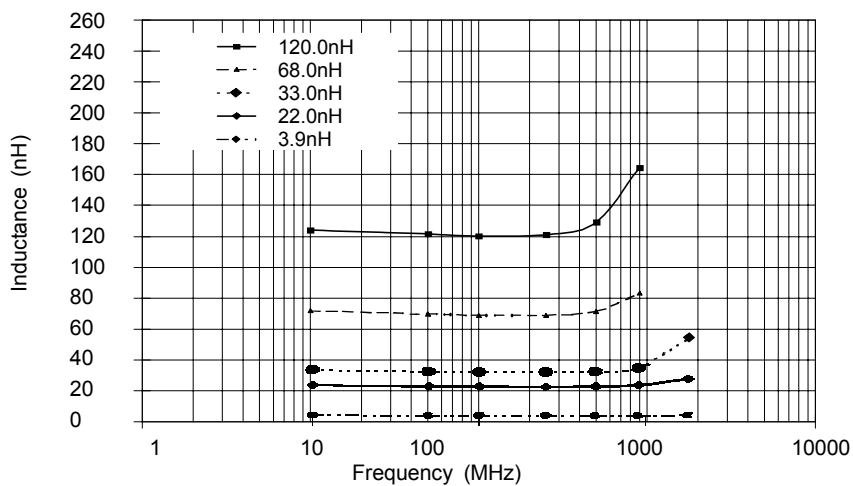
※ Packing Unit: 3,000 pcs. each

Electrical Characteristic Curves

Typical Q vs Frequency



Typical L vs Frequency



Test Equipment

Inductance and Quality Factor

RF LCR Meter: Agilent 4287 A

Test Fixture: Agilent 16193 A or equivalent

Resonant Frequency

Network Analyzer: Agilent 8720 ES or equivalent

R_{DC}

Measured at 25 °C ambient temperature

Digital Multimeter: Agilent 34420A or equivalent

Max. Permissible Direct Current: At 25 °C ambient temperature permissible temperature rise: 20 K