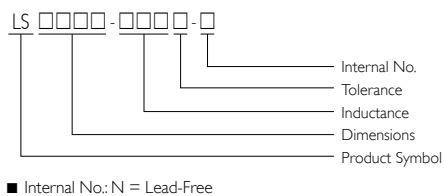


SMD Wire Wound Chip Inductors

LS Series



PRODUCT IDENTIFICATION



APPLICATIONS

Telecom and datacom applications such as xDSL, Cable Modem, Set-top Box, CATV filter/tuner, wireless LAN and so on.

OUTLINE

LS Series is the newest combo in open type ferrite wire wound chip inductors.

The wire wound ferrite construction provides higher SRF, lower DCR and superior Q values than other ferrite chip inductors.

FEATURES

Lead-free electrodes.

Very strong solderability by reflow soldering and soldering iron or wave soldering.

Highly accurate dimensions can be mounted automatically.

Terminals are highly resistant to pull forces.

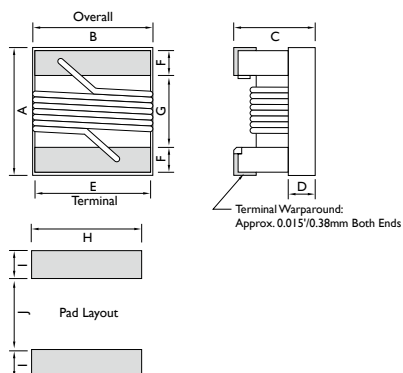
Highly resistant to mechanical shocks and pressure.

Highly reliable in environments of sudden temperature change and humidity.

Lowest DCR & better Q value in ferrite series.

SHAPES AND DIMENSIONS

Unit: mm



TYPE	A Max.	B Max.	C Max.	D	E	F	G	H	I	J
LS0603	1.80	1.25	1.02	0.38	0.76	0.33	0.86	1.02	0.64	0.64
LS0805	2.40	1.72	1.52	0.70	1.27	0.50	1.02	1.78	1.02	0.76
LS1008	2.99	2.50	2.20	0.70	2.03	0.51	1.52	2.54	1.02	1.27

ELECTRICAL CHARACTERISTICS LS0603

PART NO.	INDUCTANCE (nH)	TOLERANCE (±%)	Q TYPICAL	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE (Ω) Max.	IDC (mA) Max.	COLOR CODING
LS0603-47N□-N	47	5 / 10	17	7.90	1,700	0.075	1,500	Black
LS0603-72N□-N	72	5 / 10	17	7.90	1,700	0.12	1,500	Brown
LS0603-R10□-N	100	5 / 10	17	7.90	1,650	0.13	1,500	Red
LS0603-R12□-N	120	5 / 10	17	7.90	1,350	0.15	1,500	Orange
LS0603-R15□-N	150	5 / 10	17	7.90	1,350	0.15	1,450	Yellow
LS0603-R18□-N	180	5 / 10	17	7.90	1,150	0.15	1,400	Green
LS0603-R22□-N	220	5 / 10	17	7.90	1,050	0.16	1,350	Blue
LS0603-R24□-N	240	5 / 10	17	7.90	1,050	0.19	1,300	Violet
LS0603-R27□-N	270	5 / 10	17	7.90	1,050	0.30	1,050	Gray
LS0603-R33□-N	330	5 / 10	17	7.90	850	0.46	1,200	White
LS0603-R39□-N	390	5 / 10	17	7.90	810	0.51	1,200	Black
LS0603-R47□-N	470	5 / 10	17	7.90	720	0.62	1,050	Brown
LS0603-R56□-N	560	5 / 10	17	7.90	600	0.44	850	Red
LS0603-R68□-N	680	5 / 10	17	7.90	600	0.52	850	Orange
LS0603-R78□-N	780	5 / 10	17	7.90	460	0.83	850	Yellow
LS0603-R82□-N	820	5 / 10	17	7.90	480	0.69	750	Green
LS0603-1R0□-N	1,000	5 / 10	18	7.90	310	0.81	600	Blue
LS0603-1R2□-N	1,200	5 / 10	17	7.90	270	0.87	550	Violet
LS0603-1R5□-N	1,500	5 / 10	17	7.90	270	1.06	540	Gray
LS0603-1R8□-N	1,800	5 / 10	17	7.90	230	1.10	520	White
LS0603-2R2□-N	2,200	5 / 10	17	7.90	140	1.20	500	Black
LS0603-2R7□-N	2,700	5 / 10	17	7.90	105	1.50	480	Brown
LS0603-3R3□-N	3,300	5 / 10	17	7.90	84	1.50	440	Red
LS0603-3R9□-N	3,900	5 / 10	17	7.90	80	1.60	430	Orange
LS0603-4R7□-N	4,700	5 / 10	18	7.90	69	2.10	420	Yellow
LS0603-5R6□-N	5,600	5 / 10	18	7.90	65	2.60	400	Green
LS0603-6R8□-N	6,800	5 / 10	19	7.90	55	3.10	400	Blue
LS0603-7R8□-N	7,800	5 / 10	17	7.90	47	3.50	400	Violet
LS0603-8R2□-N	8,200	5 / 10	17	7.90	42	3.60	400	Gray
LS0603-100□-N	10,000	5 / 10	19	7.90	40	4.80	300	White

Note:

When ordering, please specify tolerance and packaging codes.

Tolerance: J = ± 5%, K = ± 10%

Packaging: Clear tape and reel (standard)

Test Instruments: L/Q- Agilent/HP4291A+Agilent/HP16197A

SRF- Agilent/HP4291A

RDC- CH502BC/ HP4338B

IDC- For Inductance drop 10% from its value without current

Operating Temperature Range: -25 °C to +85 °C



ELECTRICAL CHARACTERISTICS LS0805

PART NO.	INDUCTANCE (nH)	TOLERANCE (±%)	Q TYPICAL	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE (Ω) Max.	IDC (mA) Max.	COLOR CODING
LS0805-78N□-N	78	5 / 10	19	7.90	1,440	0.06	2,000	Black
LS0805-110□-N	110	5 / 10	19	7.90	1,200	0.07	2,000	Brown
LS0805-470□-N	470	5 / 10	19	7.90	480	0.40	800	Red
LS0805-680□-N	680	5 / 10	20	7.90	480	0.40	800	Orange
LS0805-1000□-N	1,000	5 / 10	20	7.90	400	0.69	700	Yellow
LS0805-1500□-N	1,500	5 / 10	20	7.90	330	0.83	700	Green
LS0805-1800□-N	1,800	5 / 10	20	7.90	300	1.00	650	Blue
LS0805-2200□-N	2,200	5 / 10	20	7.90	250	1.10	650	Violet
LS0805-2700□-N	2,700	5 / 10	23	7.90	200	1.25	650	Gray
LS0805-3300□-N	3,300	5 / 10	23	7.90	160	1.45	650	White
LS0805-3900□-N	3,900	5 / 10	23	7.90	90	1.50	600	Black
LS0805-4700□-N	4,700	5 / 10	20	7.90	70	1.60	530	Brown
LS0805-5600□-N	5,600	5 / 10	20	7.90	65	1.70	500	Red
LS0805-6800□-N	6,800	5 / 10	20	7.90	45	1.95	470	Orange
LS0805-8200□-N	8,200	5 / 10	16	2.50	45	2.10	450	Yellow
LS0805-10000□-N	10,000	5 / 10	16	2.50	40	2.40	400	Green
LS0805-12000□-N	12,000	5 / 10	16	2.50	38	3.20	360	Red
LS0805-15000□-N	15,000	5 / 10	16	2.50	35	3.55	350	Blue
LS0805-18000□-N	18,000	5 / 10	16	2.50	25	4.90	300	Orange
LS0805-22000□-N	22,000	5 / 10	16	2.50	20	5.45	270	Violet
LS0805-27000□-N	27,000	5 / 10	16	2.50	19	7.80	240	Gray
LS0805-47000□-N	47,000	5 / 10	16	2.50	15	14.5	180	Brown

ELECTRICAL CHARACTERISTICS LS1008

PART NO.	INDUCTANCE (μH)	TOLERANCE (±%)	Q TYPICAL			TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE (Ω) Max.	IDC (mA) Max.	COLOR CODING		
			7.9MHz	25MHz	50MHz					1 st	2 nd	3 rd
LS1008-1R2□-N	1.2	5 / 10	35	47	55	7.90	350	0.50	1,200	Brown	Red	Red
LS1008-1R5□-N	1.5	5 / 10	38	53	58	7.90	300	0.65	1,200	Brown	Green	Red
LS1008-1R8□-N	1.8	5 / 10	34	47	54	7.90	280	0.75	1,050	Brown	Gray	Red
LS1008-2R2□-N	2.2	5 / 10	34	43	48	7.90	250	0.90	950	Red	Red	Red
LS1008-2R7□-N	2.7	5 / 10	38	49	51	7.90	200	1.00	950	Red	Violet	Red
LS1008-3R3□-N	3.3	5 / 10	42	57	58	7.90	200	1.15	900	Orange	Orange	Red
LS1008-3R9□-N	3.9	5 / 10	37	46	47	7.90	170	1.25	850	Orange	White	Red
LS1008-4R7□-N	4.7	5 / 10	37	43	38	7.90	130	1.35	700	Yellow	Violet	Red
LS1008-5R6□-N	5.6	5 / 10	36	40	29	7.90	110	1.45	700	Green	Blue	Red
LS1008-6R8□-N	6.8	5 / 10	33	39	33	7.90	105	1.60	600	Blue	Gray	Red
LS1008-8R2□-N	8.2	5 / 10	40	43	28	7.90	90	1.80	550	Gray	Red	Red
LS1008-100□-N	10	5 / 10	40	41	25	7.90	85	2.40	500	Brown	Black	Orange

Note:

When ordering, please specify tolerance and packaging codes.

Tolerance: J = ± 5%, K = ± 10%

Packaging: Clear tape and reel (standard)

Test Instruments: L/Q- Agilent/HP4291A + Agilent/HPI 6197A

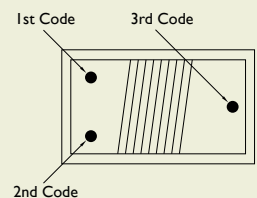
SRF- Agilent/HP4291A

RDC- CH502BC/ HP4338B

IDC- For Inductance drop 10% from its value without current

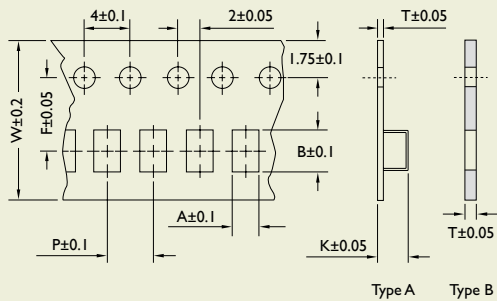
Operating Temperature Range: -25 °C to +85 °C

Color Coding



TAPE DIMENSIONS

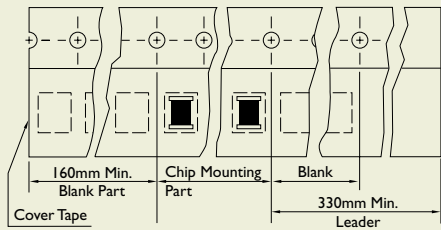
Unit: mm



TYPE	A	B	T	W	P	F	K	TAPE TYPE
LS0603	1.23	1.90	0.97	8	4	3.50	-	B
LS0805	1.60	2.42	0.22	8	4	3.50	1.45	A
LS1008	2.61	2.93	0.26	8	4	3.50	2.25	A

TAPE MATERIAL

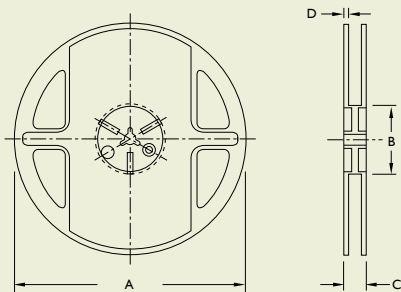
PACKAGING QUANTITY



TYPE	QUANTITY/REEL
LS0603	4,000
LS0805	2,000
LS1008	2,000

REEL DIMENSIONS

Unit: mm



TYPE	A	B	C	D
LS0603	178	60	12	1.5
LS0805	178	60	12	1.5
LS1008	178	60	12	1.5