

SMD Wire Wound Ferrite Chip Inductors – LS Series

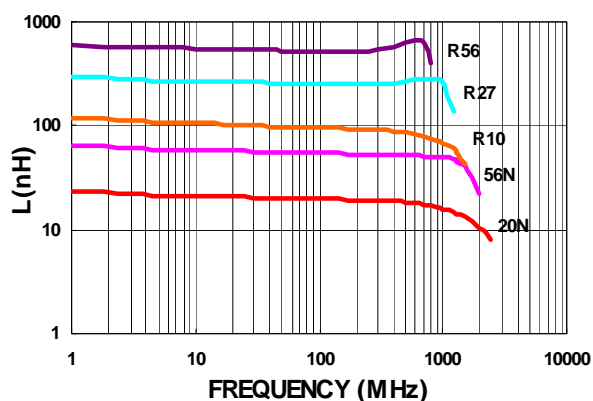
Electrical Characteristics

art Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	Q Typ	SRF (MHz)Typ	Rdc (Ω) Max	Irms (mA)Typ
LS0402-18N□-N	0.018	100	10 / 5	10	2600	0.055	1600
LS0402-20N□-N	0.020	100	10 / 5	10	2600	0.050	1600
LS0402-22N□-N	0.022	100	10	10	2500	0.072	1300
LS0402-33N□-N	0.033	100	10 / 5	10	2300	0.060	1400
LS0402-36N□-N	0.036	100	10 / 5	10	2300	0.092	1000
LS0402-39N□-N	0.039	100	10 / 5	10	2200	0.150	830
LS0402-51N□-N	0.051	100	10	10	1930	0.070	1100
LS0402-56N□-N	0.056	100	10	10	1900	0.125	900
LS0402-70N□-N	0.070	100	10 / 5	10	1900	0.130	900
LS0402-72N□-N	0.072	100	10 / 5	10	1650	0.100	900
LS0402-78N□-N	0.078	100	10 / 5	10	1600	0.190	850
LS0402-R10□-N	0.10	100	10	9	1400	0.160	900
LS0402-R14□-N	0.14	50	10 / 5	11	1220	0.260	540
LS0402-R18□-N	0.18	50	10	11	1150	0.330	560
LS0402-R20□-N	0.20	50	10 / 5	11	1000	0.440	400
LS0402-R22□-N	0.22	50	10 / 5	11	1150	0.530	380
LS0402-R25□-N	0.25	25	10 / 5	11	900	0.360	520
LS0402-R27□-N	0.27	25	10	11	860	0.550	360
LS0402-R30□-N	0.30	25	10 / 5	11	860	0.410	420
LS0402-R33□-N	0.33	7.9	10 / 5	11	820	0.680	350
LS0402-R36□-N	0.36	7.9	10 / 5	11	810	0.575	360
LS0402-R39□-N	0.39	7.9	10 / 5	11	760	0.890	300
LS0402-R42□-N	0.42	7.9	10 / 5	11	700	1.100	340
LS0402-R47□-N	0.47	7.9	10	11	650	0.730	310
LS0402-R56□-N	0.56	7.9	10 / 5	11	600	1.100	200

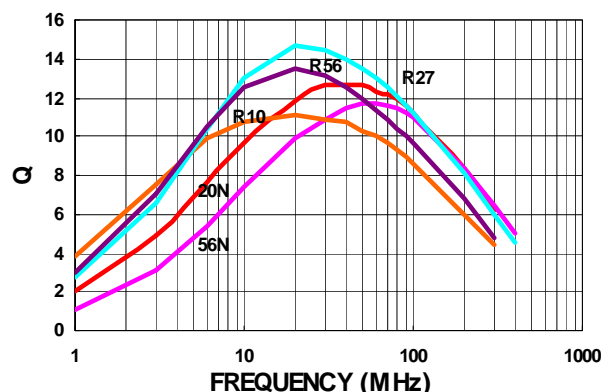
- When ordering, please specify tolerance and packaging codes.
- Tolerance : J = ±5% , K = ±10%
- L , Q : Agilent E4991A+ Agilent HP16197A
- SRF : Agilent E4991A
- Rdc : CH502BC/ HP4338B
- Irms for 15°C rise above 25°C ambient.
- Operating temperature range from -25°C to 105°C. (Including self - temperature rise)

Test Instruments : Agilent E4991A Material/Impedance Analyzer

Typical L vs. Frequency



Typical Q vs. Frequency



SMD Wire Wound Ferrite Chip Inductors – LS Series

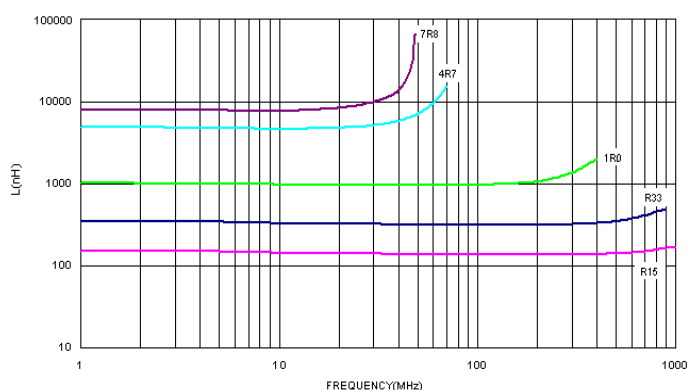
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	Q Typ.	SRF (MHz) Min	Rdc (Ω) Max	Idc (mA)	Color
LS0603-47N□-N	0.047	7.9	10 / 5	17	1700	0.075	1500	Black
LS0603-72N□-N	0.072	7.9	10 / 5	17	1700	0.12	1500	Brown
LS0603-R10□-N	0.10	7.9	10 / 5	17	1650	0.13	1500	Red
LS0603-R12□-N	0.12	7.9	10 / 5	17	1350	0.15	1500	Orange
LS0603-R15□-N	0.15	7.9	10 / 5	17	1350	0.15	1450	Yellow
LS0603-R18□-N	0.18	7.9	10 / 5	17	1150	0.15	1400	Green
LS0603-R22□-N	0.22	7.9	10 / 5	17	1050	0.16	1350	Blue
LS0603-R24□-N	0.24	7.9	10 / 5	17	1050	0.19	1300	Violet
LS0603-R27□-N	0.27	7.9	10 / 5	17	1050	0.30	1050	Gray
LS0603-R33□-N	0.33	7.9	10 / 5	17	850	0.46	1200	White
LS0603-R39□-N	0.39	7.9	10 / 5	17	810	0.51	1200	Black
LS0603-R47□-N	0.47	7.9	10 / 5	17	720	0.62	1050	Brown
LS0603-R56□-N	0.56	7.9	10 / 5	17	600	0.44	850	Red
LS0603-R68□-N	0.68	7.9	10 / 5	17	600	0.52	850	Orange
LS0603-R78□-N	0.78	7.9	10 / 5	17	460	0.83	850	Yellow
LS0603-R82□-N	0.82	7.9	10 / 5	17	480	0.69	750	Green
LS0603-1R0□-N	1.0	7.9	10 / 5	18	310	0.81	600	Blue
LS0603-1R2□-N	1.2	7.9	10 / 5	17	270	0.87	550	Violet
LS0603-1R5□-N	1.5	7.9	10 / 5	17	270	1.06	540	Gray
LS0603-1R8□-N	1.8	7.9	10 / 5	17	230	1.10	520	White
LS0603-2R2□-N	2.2	7.9	10 / 5	17	140	1.20	500	Black
LS0603-2R7□-N	2.7	7.9	10 / 5	17	105	1.50	480	Brown
LS0603-3R3□-N	3.3	7.9	10 / 5	17	84	1.50	440	Red
LS0603-3R9□-N	3.9	7.9	10 / 5	17	80	1.60	430	Orange
LS0603-4R7□-N	4.7	7.9	10 / 5	18	69	2.10	420	Yellow
LS0603-5R6□-N	5.6	7.9	10 / 5	18	65	2.60	400	Green
LS0603-6R8□-N	6.8	7.9	10 / 5	19	55	3.10	400	Blue
LS0603-7R8□-N	7.8	7.9	10 / 5	17	47	3.50	400	Violet
LS0603-8R2□-N	8.2	7.9	10 / 5	17	42	3.80	400	Gray
LS0603-100□-N	10	7.9	10 / 5	19	40	4.80	300	White

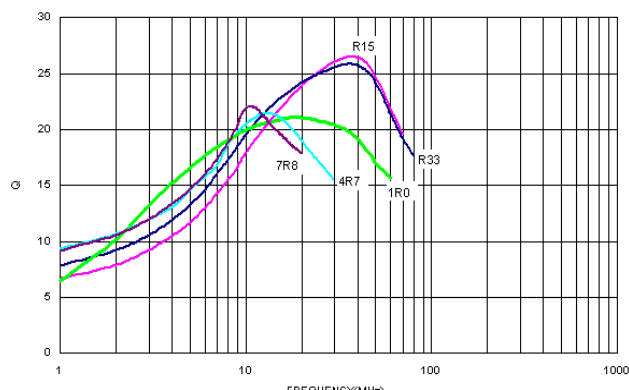
- When ordering, please specify tolerance and packaging codes.
- Tolerance : J = ±5% , K = ±10%
- L , Q : Agilent E4991A+ Agilent HP16197A
- SRF : Agilent E4991A
- Rdc : CH502BC/ HP4338B
- Idc for Inductance drop 10% from its value without current.
- Operating temperature range from -25°C to 105°C. (Including self - temperature rise)

Test Instruments : Agilent E4991A Material/Impedance Analyzer

Typical L vs. Frequency



Typical Q vs. Frequency



SMD Wire Wound Ferrite Chip Inductors – LS Series

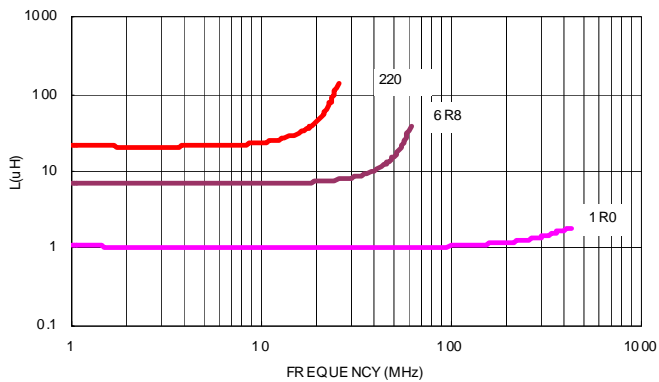
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	Q Typ.	SRF (MHz) Min	Rdc (Ω) Max	Idc (mA)	Color
LS0805-78N□-N	0.078	7.9	10 / 5	19	1440	0.06	2000	Black
LS0805-R11□-N	0.11	7.9	10 / 5	19	1200	0.07	2000	Brown
LS0805-R47□-N	0.47	7.9	10 / 5	19	480	0.40	800	Red
LS0805-R56□-N	0.56	7.9	10 / 5	19	480	0.40	800	Yellow
LS0805-R68□-N	0.68	7.9	10 / 5	20	480	0.40	800	Orange
LS0805-1R0□-N	1.0	7.9	10 / 5	20	400	0.69	700	Yellow
LS0805-1R5□-N	1.5	7.9	10 / 5	20	330	0.83	700	Green
LS0805-1R8□-N	1.8	7.9	10 / 5	20	300	1.00	650	Blue
LS0805-2R2□-N	2.2	7.9	10 / 5	20	250	1.10	650	Violet
LS0805-2R7□-N	2.7	7.9	10 / 5	23	200	1.25	650	Gray
LS0805-3R3□-N	3.3	7.9	10 / 5	23	160	1.45	650	White
LS0805-3R9□-N	3.9	7.9	10 / 5	23	90	1.50	600	Black
LS0805-4R7□-N	4.7	7.9	10 / 5	20	70	1.60	530	Brown
LS0805-5R6□-N	5.6	7.9	10 / 5	20	65	1.70	500	Red
LS0805-6R8□-N	6.8	7.9	10 / 5	20	45	1.95	470	Orange
LS0805-8R2□-N	8.2	2.5	10 / 5	16	45	2.10	450	Yellow
LS0805-100□-N	10	2.5	10 / 5	16	40	2.40	400	Green
LS0805-120□-N	12	2.5	10 / 5	16	38	3.20	360	Red
LS0805-150□-N	15	2.5	10 / 5	16	30	3.55	350	Blue
LS0805-180□-N	18	2.5	10 / 5	16	25	4.90	300	Orange
LS0805-220□-N	22	2.5	10 / 5	16	20	5.45	270	Violet
LS0805-270□-N	27	2.5	10 / 5	16	19	7.80	240	Gray
LS0805-470□-N	47	2.5	10 / 5	16	15	14.50	180	Brown

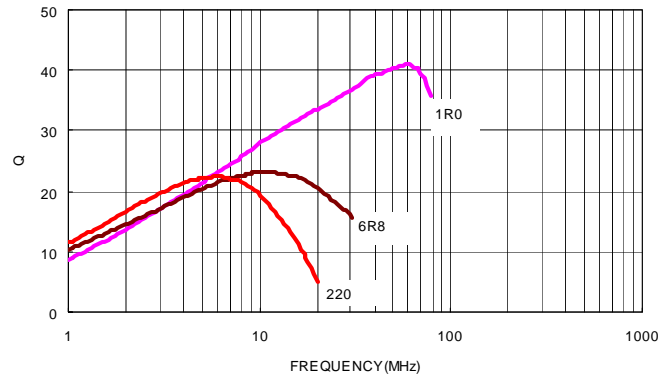
- When ordering, please specify tolerance and packaging codes.
- Tolerance : J = ±5% , K = ±10%
- L , Q : Agilent E4991A + Agilent HP16197A
- SRF : Agilent E4991A
- Rdc : CH502BC/ HP4338B
- Idc for Inductance drop 10% from its value without current.
- Operating temperature range from -25°C to 105°C. (Including self - temperature rise)

Test Instruments : Agilent E4991A Material/Impedance Analyzer

Typical L vs. Frequency



Typical Q vs. Frequency



SMD Wire Wound Ferrite Chip Inductors – LS Series

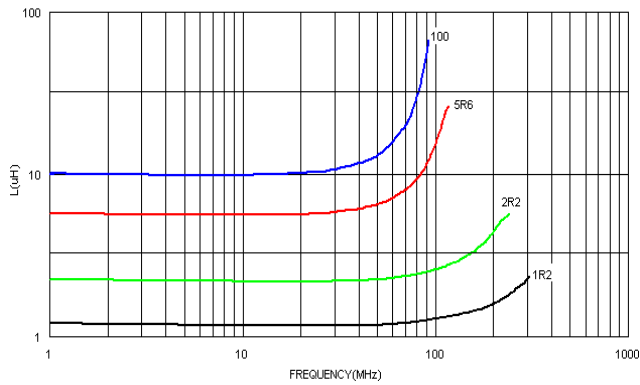
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	Q Typ.			SRF (MHz) Min	Rdc (Ω) Max	Idc (mA)	Color Coding		
				7.9MHz	25MHz	50MHz				1 ST	2 ND	3 RD
LS1008-1R2□-N	1.2	7.9	10 / 5	35	47	55	350	0.50	1200	Brown	Red	Red
LS1008-1R5□-N	1.5	7.9	10 / 5	38	53	58	300	0.65	1200	Brown	Green	Red
LS1008-1R8□-N	1.8	7.9	10 / 5	34	47	54	280	0.75	1050	Brown	Gray	Red
LS1008-2R2□-N	2.2	7.9	10 / 5	34	43	48	250	0.90	950	Red	Red	Red
LS1008-2R7□-N	2.7	7.9	10 / 5	38	49	51	200	1.00	950	Red	Violet	Red
LS1008-3R3□-N	3.3	7.9	10 / 5	42	57	58	200	1.15	900	Orange	Orange	Red
LS1008-3R9□-N	3.9	7.9	10 / 5	37	46	47	170	1.25	850	Orange	White	Red
LS1008-4R7□-N	4.7	7.9	10 / 5	37	43	38	130	1.35	700	Yellow	Violet	Red
LS1008-5R6□-N	5.6	7.9	10 / 5	36	40	29	110	1.45	700	Green	Blue	Red
LS1008-6R8□-N	6.8	7.9	10 / 5	33	39	33	105	1.60	600	Blue	Gray	Red
LS1008-8R2□-N	8.2	7.9	10 / 5	40	43	28	90	1.80	550	Gray	Red	Red
LS1008-100□-N	10.0	7.9	10 / 5	40	41	25	85	2.40	500	Brown	Black	Orange

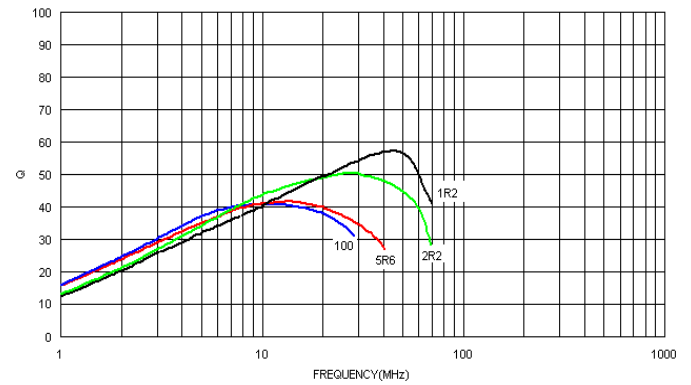
- When ordering, please specify tolerance and packaging codes.
- Tolerance : J = ±5% , K = ±10%
- L / Q: Agilent E4991A+ Agilent HP16197A
- SRF: Agilent E4991A
- Rdc: CH502BC/ HP4338B
- Idc for Inductance drop 10% from its value without current
- Operating temperature range from -25°C to 105°C. (Including self - temperature rise)

Test Instruments : Agilent E4991A Material/Impedance Analyzer

Typical L vs. Frequency



Typical Q vs. Frequency



SMD Wire Wound Ferrite Chip Inductors - LS Series

Packaging Specifications

Tape Dimensions

Tape Material

Figure 1

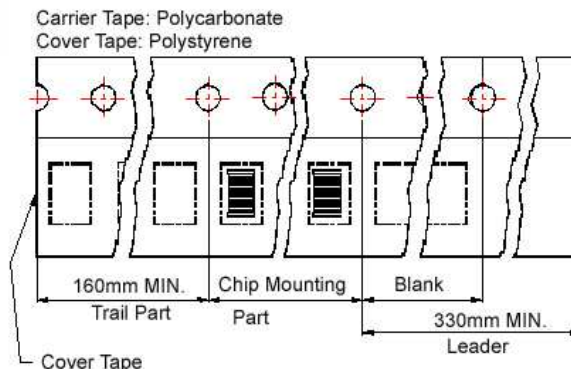
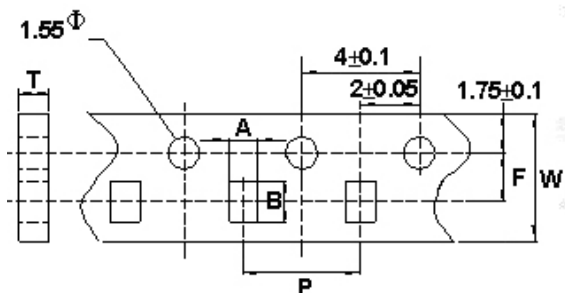
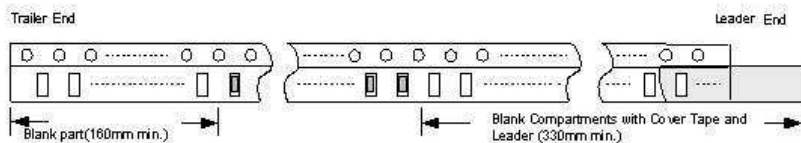
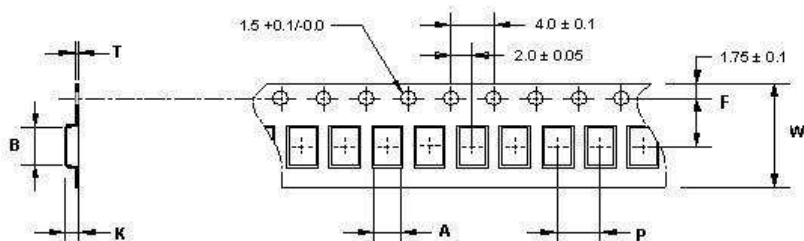
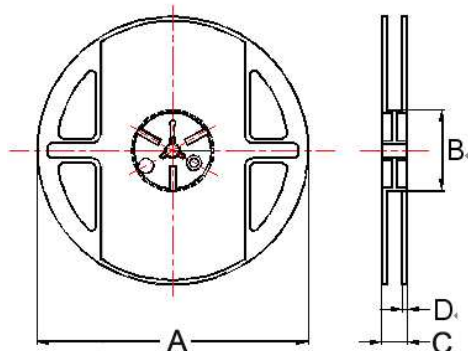


Figure 2



Reel Dimensions



Dimensions in mm

TYPE	Fig.	Tape Dimensions							Reel Dimensions				Quantity PCS / REEL
		A	B	T	W	P	F	K	A	B	C	D	
LS0402	2	0.67	1.20	0.75	8	2	3.5	0.53	178	60	12	1.5	4000
LS0603	1	1.23	1.90	0.97	8	4	3.5	-	178	60	12	1.5	4000
LS0805	2	1.60	2.42	0.22	8	4	3.5	1.45	178	60	12	1.5	2000
LS1008	2	2.40	2.93	0.26	8	4	3.5	2.25	178	60	12	1.5	2000