

WIRE WOUND INDUCTORS *For signal line*

Series LS - F



FEATURES

- ◆ Utilizing a miniaturized winding structure.
- ◆ These products provide high current characteristics.
- ◆ Resin-coated surface enables excellent mounting.
- ◆ Low DC resistance design is ideal for low loss.
- ◆ Precision inductance tolerance is available.

APPLICATIONS

- ◆ Personal computers, Hard disk drives.
- ◆ xDSL modem and Cable modem.
- ◆ Digital camera and other electronic equipment.

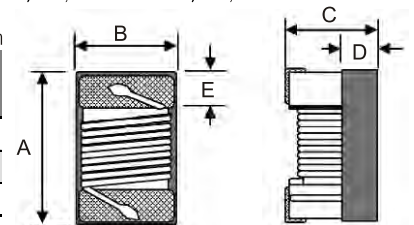
PRODUCT IDENTIFICATION

LS 08 F 05 2 J 180N
 a b c d e f g

- a : Type of Products - SMD Wire wound inductors for signal line
 b : Dimension - 08=2.4mm Max. 10=2.9mm Max.
 c : Materials - X - No use
 d : Width - 05= 1.45mm Max. 08=2.03mm Max.
 e : Packing - PCS/REEL - 2 = 2000, 4 = 4000, K = 2500
 f : Tolerance - J : ±5% K : ±10%
 g : Inductance - 1N2 = 0.0012 μH, 100N = 0.1 μH, 1U = 1.0 μH, 1U2 = 1.2 μH, 1M = 1000 μH, 1M2 = 1200 μH

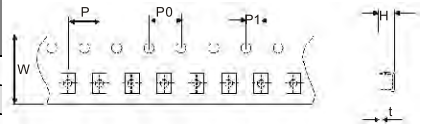
SHAPES & DIMENSIONS

Type	Alias in inch	A (max.)	B (max.)	C (max.)	D (ref.)	E (± 0.1)
LS08F05	0805	2.40	1.65	1.21	0.65	0.44
LS10F08	1008	2.90	2.54	2.03	1.30	0.50
LS12F10	1210	3.60	2.90	2.50	1.10	0.50



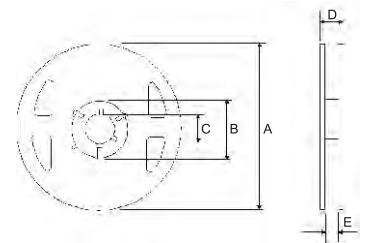
TAPE DIMENSIONS

Type	Alias in inch	W	P	P0	P1	H	T
LS08F05	0805	8.00	4.00	4.00	2.00	1.30	0.22
LS10F08	1008	8.00	4.00	4.00	2.00	2.00	0.22
LS12F10	1210	8.00	4.00	4.00	2.00	2.50	0.26

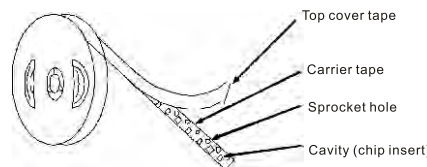


REEL DIMENSIONS

Type	Alias in inch	Q'TY /REEL	A	B	C	D	E
LS08F05	0805	2000PCS	180	60	13	14.4	8.4
LS10F08	1008	2000PCS	180	60	13	14.4	8.4
LS12F10	1210	2000PCS	180	60	13	14.4	8.4

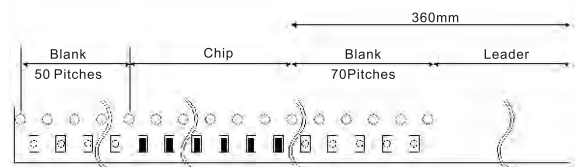


TAPPING FIGURE



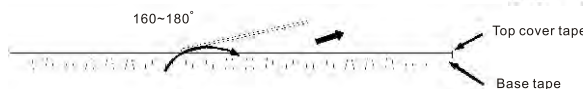
PACKAGING FORM

There shall not continuation more than two vacancies of the product.

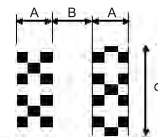


COVER TAPE PEEL STRENGTH

The force for tearing off cover tape is 0.1~0.6(N) in the arrow direction at the following conditions:
 Temperature : 5~35°C
 Humidity : 45~85%
 Atmospheric pressure : 860~1060 hpa



RECOMMENDED PATTERN



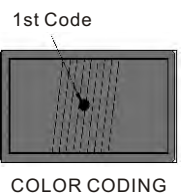
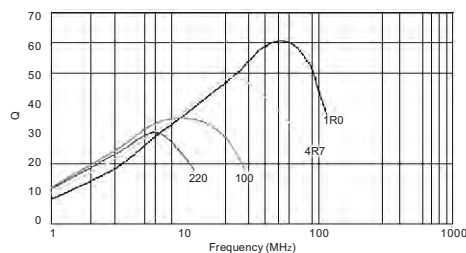
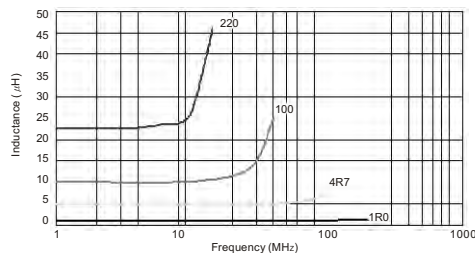
Type	Alias in inch	A	B	C
LS08F05	0805	1.02	0.76	1.78
LS10F08	1008	1.02	1.27	2.54
LS12F10	1210	1.20	2.00	2.70

WIRE WOUND INDUCTORS *For Signal Line*

Series **LS - F** ELECTRICAL CHARACTERISTICS **LS08F05**

Part Number	L/MHz (μ H)	Inductance tolerance	Q/MHz min.	SRF(MHz) min.	DCR(Ω) max.	Irms (mA) max.	Color Coding
LS08F052□78N	0.078/7.9	J, K	13/7.9	1500	0.076	2000	Gray
LS08F052K100N	0.100/25	K	20/25	1400	0.100	1700	White
LS08F052K110N	0.11/25	K	25/25	1200	0.1	1700	White
LS08F052□120N	0.12/25	J, K	25/25	1000	0.18	1500	Violet
LS08F052□150N	0.15/25	J, K	25/25	1000	0.18	1400	Gray
LS08F052□180N	0.18/25	J, K	30/25	1000	0.2	1400	Black
LS08F052□220N	0.22/25	J, K	30/25	830	0.25	1350	Brown
LS08F052□270N	0.27/25	J, K	30/25	800	0.38	1300	Red
LS08F052□330N	0.33/25	J, K	30/25	750	0.35	1200	Orange
LS08F052□390N	0.39/25	J, K	30/25	700	0.35	1160	Yellow
LS08F052□470N	0.47/25	J, K	30/25	690	0.4	1100	Green
LS08F052□560N	0.56/25	J, K	30/25	640	0.4	1040	Blue
LS08F052□620N	0.62/25	J, K	30/25	640	0.45	980	Brown
LS08F052□680N	0.68/25	J, K	30/25	510	0.5	900	Violet
LS08F052□750N	0.75/25	J, K	30/25	500	0.5	900	Violet
LS08F052□820N	0.82/25	J, K	30/25	500	0.5	900	Gray
LS08F052□910N	0.91/25	J, K	30/25	500	0.55	900	Yellow
LS08F052□1U	1.0/7.9	J, K	20/7.9	470	0.5	840	White
LS08F052□1U2	1.2/7.9	J, K	20/7.9	400	0.75	800	Black
LS08F052□1U5	1.5/7.9	J, K	25/7.9	400	1	720	Brown
LS08F052□1U8	1.8/7.9	J, K	25/7.9	230	1	660	Red
LS08F052□2U2	2.2/7.9	J, K	25/7.9	200	1.05	600	Orange
LS08F052□2U7	2.7/7.9	J, K	25/7.9	130	1.18	500	Yellow
LS08F052□3U3	3.3/7.9	J, K	25/7.9	160	1.26	480	Green
LS08F052□3U9	3.9/7.9	J, K	25/7.9	130	1.75	440	Blue
LS08F052□4U7	4.7/7.9	J, K	25/7.9	120	1.87	390	Violet
LS08F052□5U6	5.6/7.9	J, K	25/7.9	90	2	340	Gray
LS08F052□6U8	6.8/7.9	J, K	25/7.9	55	2.15	300	White
LS08F052□8U2	8.2/7.9	J, K	25/7.9	40	2.37	280	Black
LS08F052□10U	10/2.5	J, K	16/2.5	40	2.55	260	Brown
LS08F052□12U	12/2.5	J, K	16/2.5	37	2.8	220	Red
LS08F052□15U	15/2.5	J, K	16/2.5	30	3.8	200	Orange
LS08F052□18U	18/2.5	J, K	16/2.5	23	4.48	180	Yellow
LS08F052□22U	22/2.5	J, K	16/2.5	20	6.3	160	Green
LS08F052□27U	27/2.5	J, K	16/2.5	19	6.85	140	Blue
LS08F052□33U	33/2.5	J, K	16/2.5	18	7.6	120	Violet
LS08F052□39U	39/2.5	J, K	15/2.5	16	8.2	100	Gray
LS08F052□47U	47/2.5	J, K	13/2.5	13	13.10	60	White

CURVE



COLOR CODING

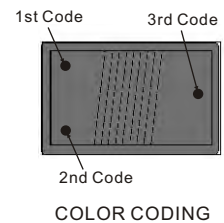
- When ordering, please specify tolerance and packaging codes. Ex: LS08F052J10U
Tolerance : J=±5%,K=±10%
Packaging : Clear tape and reel { standard}.
- L, Q, SRF : Agilent/HP E4991A+ Agilent/HP16197A,
(The electrical specification test by the smallest gap position) or HP16193A
- Rdc : Chroma Milliohmmeter 16502, or equivalent.
- I_{dc} for Inductance drop 10% from its value without current.
- Operating temperature range from -40°C to 105°C.
- I_{rms} for a 25°C rise above 25°C ambient.

WIRE WOUND INDUCTORS *For signal line*

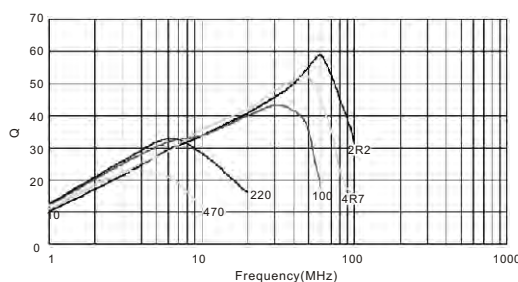
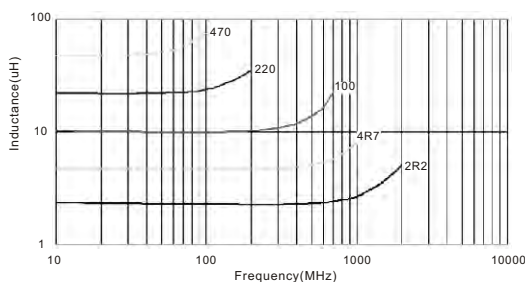
Series LS - F ELECTRICAL CHARACTERISTICS LS10F08

Part Number	L/MHz (μ H)	Inductance tolerance	Q/MHz min.	SRF(MHz) min.	DCR(Ω) max.	Idc(mA) max.	Color Coding		
							1st	2nd	3rd
LS10F082K100N	0.1/25	K	25/25	930	0.2	1300	Brown	Black	Brown
LS10F082 120N	0.12/25	J, K	26/25	930	0.3	1000	Brown	Red	Brown
LS10F082 150N	0.15/25	J, K	26/25	930	0.3	1000	Brown	Green	Brown
LS10F082 180N	0.18/25	J, K	30/25	930	0.30	960	Brown	Gray	Brown
LS10F082 200N	0.20/25	J, K	30/25	735	0.30	960	Red	Black	Brown
LS10F082 220N	0.22/25	J, K	27/25	750	0.40	880	Red	Red	Brown
LS10F082 270N	0.27/25	J, K	29/25	700	0.42	900	Red	Violet	Brown
LS10F082 330N	0.33/25	J, K	30/25	600	0.42	900	Orange	Orange	Brown
LS10F082 390N	0.39/25	J, K	30/25	480	0.45	920	Orange	White	Brown
LS10F082 470N	0.47/25	J, K	30/25	470	0.5	920	Yellow	Violet	Brown
LS10F082 560N	0.56/25	J, K	30/25	460	0.55	900	Green	Blue	Brown
LS10F082 620N	0.62/25	J, K	30/25	460	0.55	900	Blue	Red	Brown
LS10F082 680N	0.68/25	J, K	30/25	420	0.55	880	Blue	Gray	Brown
LS10F082 750N	0.75/25	J, K	30/25	420	0.65	880	Violet	Green	Brown
LS10F082 820N	0.82/25	J, K	30/25	380	0.65	840	Gray	Red	Brown
LS10F082 910N	0.91/25	J, K	30/25	400	0.65	840	White	Brown	Brown
LS10F082 1U	1.0/ 7.9	J, K	25/ 7.9	300	0.6	800	Brown	Black	Red
LS10F082 1U2	1.2/ 7.9	J, K	25/ 7.9	280	0.74	800	Brown	Red	Red
LS10F082 1U5	1.5/ 7.9	J, K	25/ 7.9	245	0.85	780	Brown	Green	Red
LS10F082 1U8	1.8/ 7.9	J, K	25/ 7.9	240	0.92	780	Brown	Gray	Red
LS10F082 2U2	2.2/ 7.9	J, K	25/ 7.9	205	1.10	760	Red	Red	Red
LS10F082 2U7	2.7/ 7.9	J, K	25/ 7.9	187	1.22	760	Red	Violet	Red
LS10F082 3U3	3.3/ 7.9	J, K	25/ 7.9	165	1.37	740	Orange	Orange	Red
LS10F082 3U9	3.9/ 7.9	J, K	25/ 7.9	144	1.66	700	Orange	White	Red
LS10F082 4U7	4.7/ 7.9	J, K	25/ 7.9	110	1.68	660	Yellow	Violet	Red
LS10F082 5U6	5.6/ 7.9	J, K	25/ 7.9	88	1.75	640	Green	Blue	Red
LS10F082 6U8	6.8/ 7.9	J, K	25/ 7.9	70	1.85	640	Blue	Gray	Red
LS10F082 8U2	8.2/ 7.9	J, K	25/ 7.9	57	2.00	600	Gray	Red	Red
LS10F082 10U	10/ 7.9	J, K	25/ 7.9	55	2.32	600	Brown	Black	Orange
LS10F082 12U	12/ 2.5	J, K	15/ 2.5	52	2.99	560	Brown	Red	Orange
LS10F082 15U	15/ 2.5	J, K	15/ 2.5	49	3.42	480	Brown	Green	Orange
LS10F082 18U	18/ 2.5	J, K	15/ 2.5	48	4.65	420	Brown	Gray	Orange
LS10F082 22U	22/ 2.5	J, K	15/ 2.5	25	5.12	420	Red	Red	Orange
LS10F082 27U	27/ 2.5	J, K	15/ 2.5	23	5.76	420	Red	Violet	Orange
LS10F082 33U	33/ 2.5	J, K	15/ 2.5	17	6.44	400	Orange	Orange	Orange
LS10F082 39U	39/ 2.5	J, K	15/ 2.5	15	6.85	380	Orange	White	Orange
LS10F082 47U	47/ 2.5	J, K	14/ 2.5	13	9.94	340	Yellow	Violet	Orange
LS10F082 56U	56/ 2.5	J, K	14/ 2.5	10	10.7	280	Green	Blue	Orange
LS10F082 68U	68/ 2.5	J, K	14/ 2.5	8	12.8	260	Blue	Gray	Orange
LS10F082 82U	82/ 2.5	J, K	14/ 2.5	8	18.3	240	Gray	Red	Orange
LS10F082 100U	100/ 1.0	J, K	8/ 1.0	7	19.6	200	Brown	Black	Yellow

- When ordering, please specify tolerance and packaging codes. Ex: LS10F082K10U
Tolerance : J = $\pm 5\%$, K = $\pm 10\%$
Packaging : Clear tape and reel { standard }
- L, Q : Agilent/HP E4991A+ Agilent/HP16197A
(The electrical specification test by the smallest gap position) or HP16193A
- SRF : Agilent/HP E4991A+ Agilent/HP 16197A
(The electrical specification test by the smallest gap position) or HP16193A
- Rdc : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.
- Idc for Inductance drop 10% from its value without current.
- Operating temperature range from -25°C to 105°C.



CURVE



WIRE WOUND INDUCTORS *For signal line*

Series LS - F ELECTRICAL CHARACTERISTICS LS12F10

Part Number	L/MHz (μ H)	Inductance tolerance	Q/MHz min.	SRF(MHz) min.	DCR(Ω) max.	Idc(mA) max.	Color Coding		
							1st	2nd	3rd
LS12F102K120N	0.12/25	K	40/25	1000	0.07	2000	Brown	Red	Brown
LS12F102 180N	0.18/25	J, K	40/25	900	0.12	1900	Brown	Gray	Brown
LS12F102 220N	0.22/25	J, K	40/25	600	0.18	1700	Red	Red	Brown
LS12F102 270N	0.27/ 25	J, K	40/25	600	0.23	1600	Red	Violet	Brown
LS12F102 290N	0.29/25	J, K	40/25	550	0.25	1550	Red	White	Brown
LS12F102 330N	0.33/ 25	J, K	40/25	500	0.27	1500	Orange	Orange	Brown
LS12F102 390N	0.39/ 25	J, K	40/25	500	0.3	1500	Orange	White	Brown
LS12F102 560N	0.56/25	J, K	35/25	440	0.35	1400	Green	Blue	Brown
LS12F102 820N	0.82/ 25	J, K	35/25	340	0.38	1300	Gray	Red	Brown
LS12F102 1U	1.0/ 7.9	J, K	35/7.9	320	0.42	1200	Brown	Black	Red
LS12F102 1U2	1.2/7.9	J, K	35/7.9	280	0.47	1100	Brown	Red	Red
LS12F102 1U5	1.5/7.9	J, K	35/7.9	250	0.5	1100	Brown	Green	Red
LS12F102 1U8	1.8/7.9	J, K	40/7.9	203	0.62	1000	Brown	Gray	Red
LS12F102 2U2	2.2/7.9	J, K	33/7.9	200	0.65	1000	Red	Red	Red
LS12F102 2U7	2.7/7.9	J, K	40/7.9	200	0.65	1000	Red	Violet	Red
LS12F102 3U	3.0/7.9	J, K	40/7.9	180	0.78	800	Orange	Black	Red
LS12F102 3U3	3.3/7.9	J, K	30/7.9	146	0.83	1200	Orange	Orange	Red
LS12F102 3U9	3.9/7.9	J, K	30/7.9	139	1.74	900	Orange	White	Red
LS12F102 4U7	4.7/7.9	J, K	35/7.9	124	1.9	800	Yellow	Violet	Red
LS12F102 5U6	5.6/7.9	J, K	30/7.9	114	2.05	700	Green	Blue	Red
LS12F102 6U8	6.8/7.9	J, K	30/7.9	109	1.37	450	Blue	Gray	Red
LS12F102 8U2	8.2/7.9	J, K	30/7.9	90	1.6	600	Gray	Red	Red
LS12F102 10U	10/7.9	J, K	23/2.5	90	1.7	590	Brown	Black	Orange
LS12F102 12U	12/2.5	J, K	23/2.5	67	2.12	420	Brown	Red	Orange
LS12F102 15U	15/2.5	J, K	25/2.5	67	2.22	340	Brown	Green	Orange
LS12F102 18U	18/2.5	J, K	25/2.5	57	2.42	330	Brown	Gray	Orange
LS12F102 22U	22/2.5	J, K	25/2.5	48	2.66	300	Red	Red	Orange
LS12F102 27U	27/2.5	J, K	25/2.5	38	2.99	250	Red	Violet	Orange
LS12F102 33U	33/2.5	J, K	25/2.5	26	3.24	220	Orange	Orange	Orange
LS12F102 39U	39/2.5	J, K	25/2.5	24	3.61	195	Orange	White	Orange
LS12F102 47U	47/2.5	J, K	25/2.5	22	3.96	195	Yellow	Violet	Orange
LS12F102 56U	56/2.5	J, K	25/2.5	20	4.36	190	Green	Blue	Orange
LS12F102 68U	68/2.5	J, K	23/2.5	15	4.5	340	Blue	Gray	Orange
LS12F102 82U	82/2.5	J, K	23/2.5	15	5.95	280	Gray	Red	Orange
LS12F102 100U	100/1	J, K	15/1.0	14	6.62	250	Brown	Black	Yellow
LS12F102 120U	120/1	J, K	15/1.0	11	7.53	190	Brown	Red	Yellow
LS12F102 150U	150/1	J, K	15/1.0	11	8.29	135	Brown	Green	Yellow
LS12F102 180U	180/1	J, K	15/1.0	10	11.53	100	Brown	Gray	Yellow
LS12F102 220U	220/1	J, K	15/1.0	8	12.48	80	Red	Red	Yellow

- When ordering, please specify tolerance and packaging codes. Ex: LS12F102K68U
Tolerance : J = $\pm 5\%$, K = $\pm 10\%$, M = $\pm 20\%$
Packaging : Clear tape and reel { standard }
- L, Q : Agilent/HP E4991A+ Agilent/HP16197A
- SRF : Agilent/HP E4991A+ Agilent/HP 16197A
- Rdc : Chroma Milliohmmmeter 16502, or equivalent.
- Idc for Inductance drop 10% from its value without current.
- Operating temperature range from -25°C to 105°C.
- Irms for a 25°C rise above 25°C ambient.

CURVE

