

## Ferrite Wirewound SMD Inductors

### Features

- LSF Series is the newest in open type ferrite wire wound chip inductors.
- The wire wound ferrite construction supports higher SRF, lower DCR and superior Q values than other ferrite chip inductors.
- Very strong solderability by reflow soldering and soldering iron
- Highly accurate dimensions
- Can be mounted automatically
- Terminals are highly resistant to external forces
- Highly resistant to mechanical shocks and pressure
- Highly reliable in environments of sudden temperature change and Humidity
- Low DCR & better Q value in ferrite series



### Applications

- Telecom and datacom applications such as xDSL
- Cable modem
- Set-top box
- CATV filter/tuner
- Wireless LAN, etc

### Environmental Data

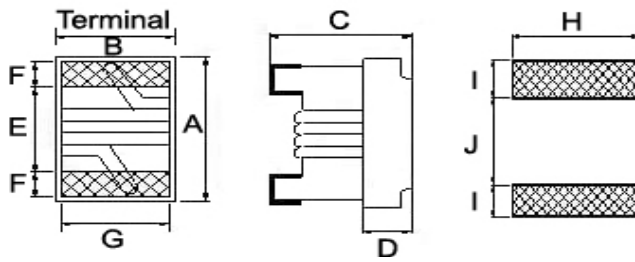
■ Operating temperature range: -25 °C ~ +105 °C (including coil's Self temperature rise)

### Ordering Code

LS    F    1005    TP - 101    K - R  
 ①       ②       ③       ④       ⑤       ⑥    ※

①Type		②Material		③Body size(L*W)	
LS		Ferrite Bobbin		1005	1.02*0.55
				1608	1.60*1.10
				2012	2.20*1.60
				2520	2.70*2.20
④Packing		⑤Inductance Value(uH)		⑥Inductance Tol(%)	
TP	Taping	0.010	10N	J	±5
TQ	High Q Taping	0.10	R10	K	±10
		1.0	1R0	M	±20
		10	100		
		100	101		

Sape& Dimension (Unit:mm)



TYPE	A max.	B max.	C max.	D	E	F	G	H	I	J
LSF1005TP	1.12	0.65	0.66	0.25	0.54	0.23	0.50	0.65	0.38	0.44
LSF1608TP	1.80	1.25	1.02	0.38	0.86	0.33	0.76	1.02	0.64	0.64
LSF2012TP	2.40	1.72	1.52	0.70	1.02	0.50	1.27	1.78	1.02	0.76
LSF2520TP	2.99	2.50	2.20	0.70	1.52	0.51	2.03	2.54	1.02	1.27

Test Equipments

•Irms for a 15°C temperature rise from 25°C ambient with current

•Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A

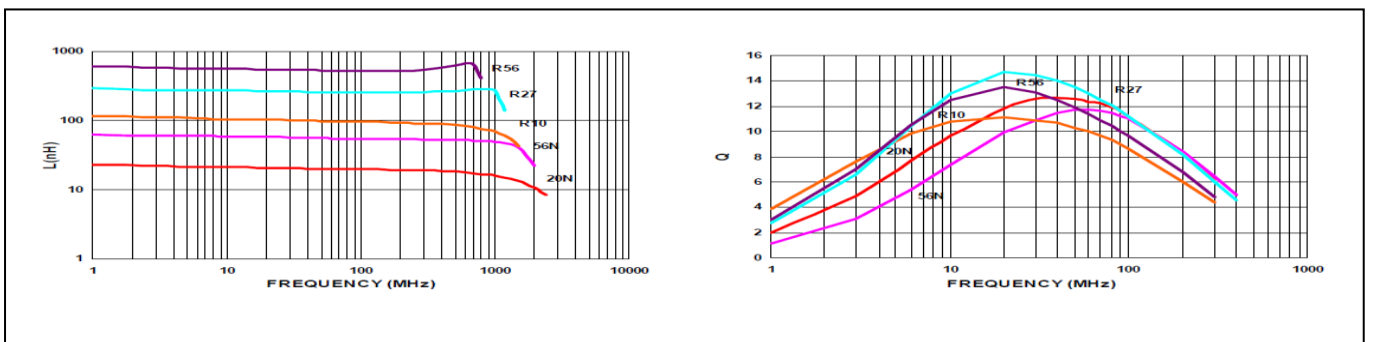
SRF : Agilent E4991A

RDC : DIGITAL MILLINHM METER CHROMA 16502

Irms : HP4284A+HP42841A

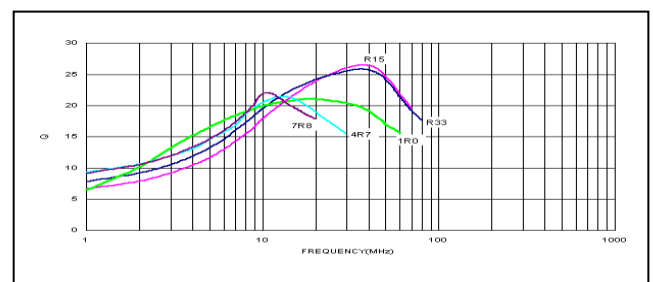
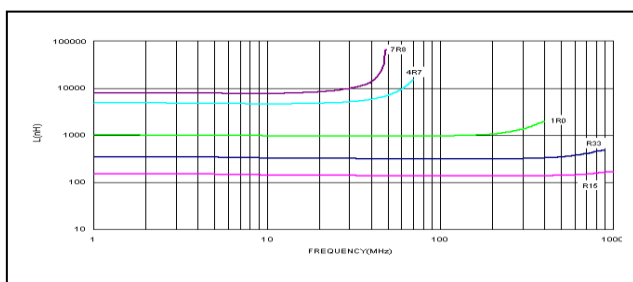
LSF1005TP

Part Number	Inductance	Tolerance	Test Frequency	Q	SRF Typ.	Rdc Max.	Irms Typ.
	uH	%	MHz	Typ.	MHz	$\Omega$	mA
LSF1005TP-20NK	0.020	$\pm 10/\pm 5$	100	10	2600	0.050	1600
LSF1005TP-22NK	0.022	$\pm 10$	100	10	2500	0.072	1300
LSF1005TP-33NK	0.033	$\pm 10/\pm 5$	100	10	2300	0.060	1400
LSF1005TP-36NK	0.036	$\pm 10/\pm 5$	100	10	2300	0.092	1000
LSF1005TP-39NK	0.039	$\pm 10/\pm 5$	100	10	2200	0.150	830
LSF1005TP-51NK	0.051	$\pm 10$	100	10	1930	0.070	1100
LSF1005TP-56NK	0.056	$\pm 10$	100	10	1900	0.125	900
LSF1005TP-72NK	0.072	$\pm 10/\pm 5$	100	10	1650	0.100	900
LSF1005TP-78NK	0.078	$\pm 10/\pm 5$	100	10	1600	0.190	850
LSF1005TP-R10K	0.100	$\pm 10$	100	9	1400	0.160	900
LSF1005TP-R14K	0.140	$\pm 10/\pm 5$	50	11	1220	0.260	540
LSF1005TP-R18K	0.180	$\pm 10$	50	11	1150	0.330	560
LSF1005TP-R20K	0.200	$\pm 10/\pm 5$	50	11	1000	0.440	400
LSF1005TP-R22K	0.220	$\pm 10/\pm 5$	50	11	1150	0.530	380
LSF1005TP-R25K	0.250	$\pm 10/\pm 5$	25	11	900	0.360	520
LSF1005TP-R27K	0.270	$\pm 10$	25	11	860	0.550	360
LSF1005TP-R30K	0.300	$\pm 10/\pm 5$	25	11	860	0.410	420
LSF1005TP-R33K	0.330	$\pm 10/\pm 5$	7.9	11	820	0.680	350
LSF1005TP-R36K	0.360	$\pm 10/\pm 5$	7.9	11	810	0.575	360
LSF1005TP-R39K	0.390	$\pm 10/\pm 5$	7.9	11	760	0.890	300
LSF1005TP-R42K	0.420	$\pm 10/\pm 5$	7.9	11	700	1.100	340
LSF1005TP-R47K	0.470	$\pm 10$	7.9	11	650	0.730	310
LSF1005TP-R56K	0.560	$\pm 10/\pm 5$	7.9	11	600	1.100	200



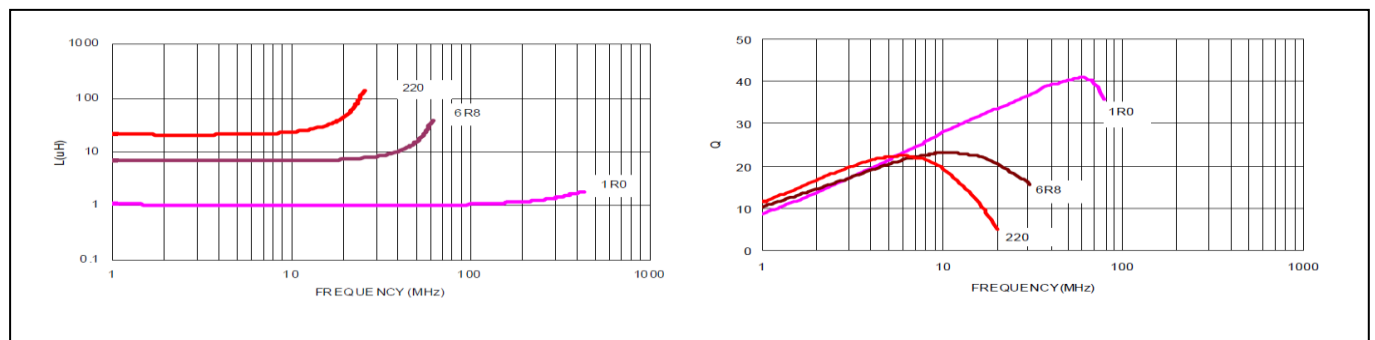
LSF1608TP

Part Number	Inductance	Tolerance	Test Frequency	Q	SRF Typ.	Rdc Max.	Irms Typ.
	uH	%	MHz	Typ.	MHz	Ω	mA
LSF1608TP-47NK	0.047	±10/±5	7.9	17	1700	0.075	1500
LSF1608TP-72NK	0.072	±10/±5	7.9	17	1700	0.12	1500
LSF1608TP-R10K	0.10	±10/±5	7.9	17	1650	0.13	1500
LSF1608TP-R12K	0.12	±10/±5	7.9	17	1350	0.15	1500
LSF1608TP-R15K	0.15	±10/±5	7.9	17	1350	0.15	1450
LSF1608TP-R18K	0.18	±10/±5	7.9	17	1150	0.15	1400
LSF1608TP-R22K	0.22	±10/±5	7.9	17	1050	0.16	1350
LSF1608TP-R24K	0.24	±10/±5	7.9	17	1050	0.19	1300
LSF1608TP-R27K	0.27	±10/±5	7.9	17	1050	0.30	1050
LSF1608TP-R33K	0.33	±10/±5	7.9	17	850	0.46	1200
LSF1608TP-R39K	0.39	±10/±5	7.9	17	810	0.51	1200
LSF1608TP-R47K	0.47	±10/±5	7.9	17	720	0.62	1050
LSF1608TP-R56K	0.56	±10/±5	7.9	17	600	0.44	850
LSF1608TP-R68K	0.68	±10/±5	7.9	17	600	0.52	850
LSF1608TP-R78K	0.78	±10/±5	7.9	17	460	0.83	850
LSF1608TP-R82K	0.82	±10/±5	7.9	17	480	0.69	750
LSF1608TP-R91K	0.91	±10/±5	7.9	17	330	0.76	670
LSF1608TP-1R0K	1.0	±10/±5	7.9	18	310	0.81	600
LSF1608TP-1R2K	1.2	±10/±5	7.9	17	270	0.87	550
LSF1608TP-1R5K	1.5	±10/±5	7.9	17	270	1.06	540
LSF1608TP-1R8K	1.8	±10/±5	7.9	17	230	1.10	520
LSF1608TP-2R2K	2.2	±10/±5	7.9	17	140	1.20	500
LSF1608TP-2R7K	2.7	±10/±5	7.9	17	105	1.50	480
LSF1608TP-3R3K	3.3	±10/±5	7.9	17	84	1.50	440
LSF1608TP-3R9K	3.9	±10/±5	7.9	17	80	1.60	430
LSF1608TP-4R7K	4.7	±10/±5	7.9	18	69	2.10	420
LSF1608TP-5R6K	5.6	±10/±5	7.9	18	65	2.60	400
LSF1608TP-6R8K	6.8	±10/±5	7.9	19	55	3.10	400
LSF1608TP-7R8K	7.8	±10/±5	7.9	17	47	3.50	400
LSF1608TP-8R2K	8.2	±10/±5	7.9	17	42	3.80	400
LSF1608TP-100K	10	±10/±5	7.9	19	40	4.80	300



LSF2012TP

Part Number	Inductance	Tolerance	Test Frequency	Q	SRF Typ.	Rdc Max.	Irms Typ.
	uH	%	MHz	Typ.	MHz	Ω	mA
LSF2012TP-78NK	0.078	±10/±5	7.9	19	1440	0.06	2000
LSF2012TP-90NK	0.090	±10/±5	7.9	19	1200	0.07	2000
LSF2012TP-R11K	0.11	±10/±5	7.9	19	1200	0.07	2000
LSF2012TP-R47K	0.47	±10/±5	7.9	19	480	0.40	800
LSF2012TP-R56K	0.56	±10/±5	7.9	35	480	0.40	800
LSF2012TP-R68K	0.68	±10/±5	7.9	20	480	0.40	800
LSF2012TP-R91K	0.91	±10/±5	7.9	20	400	0.69	700
LSF2012TP-1R0K	1.0	±10/±5	7.9	20	400	0.69	700
LSF2012TP-1R2K	1.2	±10/±5	7.9	20	330	0.83	700
LSF2012TP-1R5K	1.5	±10/±5	7.9	20	330	0.83	700
LSF2012TP-1R8K	1.8	±10/±5	7.9	20	300	1.00	650
LSF2012TP-2R2K	2.2	±10/±5	7.9	20	250	1.10	650
LSF2012TP-2R7K	2.7	±10/±5	7.9	23	200	1.25	650
LSF2012TP-3R3K	3.3	±10/±5	7.9	23	160	1.45	650
LSF2012TP-3R9K	3.9	±10/±5	7.9	23	90	1.50	600
LSF2012TP-4R7K	4.7	±10/±5	7.9	20	70	1.60	530
LSF2012TP-5R6K	5.6	±10/±5	7.9	20	65	1.70	500
LSF2012TP-6R8K	6.8	±10/±5	7.9	20	45	1.95	470
LSF2012TP-8R2K	8.2	±10/±5	2.5	16	45	2.10	450
LSF2012TP-100K	10	±10/±5	2.5	16	40	2.40	400
LSF2012TP-120K	12	±10/±5	2.5	16	38	3.20	360
LSF2012TP-150K	15	±10/±5	2.5	16	30	3.55	350
LSF2012TP-180K	18	±10/±5	2.5	16	25	4.90	300
LSF2012TP-220K	22	±10/±5	2.5	16	20	5.45	270
LSF2012TP-270K	27	±10/±5	2.5	16	19	7.80	240
LSF2012TP-330K	33	±10/±5	2.5	16	16	9.50	210
LSF2012TP-470K	47	±10/±5	2.5	16	15	14.50	180



### LSF2520TP

Part Number	Inductance	Tolerance	Test Frequency	Q	SRF Typ.	Rdc Max.	Irms Typ.
	uH	%	MHz	Typ.	MHz	Ω	mA
LSF2520TP-1R2K	1.2	±10/±5	7.9	55	350	0.50	1200
LSF2520TP-1R5K	1.5	±10/±5	7.9	58	300	0.65	1200
LSF2520TP-1R8K	1.8	±10/±5	7.9	54	280	0.75	1050
LSF2520TP-2R2K	2.2	±10/±5	7.9	48	250	0.90	950
LSF2520TP-2R7K	2.7	±10/±5	7.9	51	200	1.00	950
LSF2520TP-3R3K	3.3	±10/±5	7.9	58	200	1.15	900
LSF2520TP-3R9K	3.9	±10/±5	7.9	37	170	1.25	850
LSF2520TP-4R7K	4.7	±10/±5	7.9	37	130	1.35	700
LSF2520TP-5R6K	5.6	±10/±5	7.9	36	110	1.45	700
LSF2520TP-6R8K	6.8	±10/±5	7.9	33	105	1.60	600
LSF2520TP-8R2K	8.2	±10/±5	7.9	40	90	1.80	550
LSF2520TP-100K	10	±10/±5	7.9	40	85	2.40	500
LSF2520TP-120K	12	±10/±5	7.9	40	80	2.40	450
LSF2520TP-150K	15	±10/±5	7.9	35	38	2.40	450
LSF2520TP-390K	39	±10/±5	2.5	33	26	10	170

