FAITHFUL LINK

FLCS series

SMD Wire Wound Ceramic Chip Inductors

◆ Features

» RoHS Compliant.
» Ceramic base provide high SRF.
» Exceptional Q values even at high frequencies.
» Miniature SMD chip inductor for fully automated assembly.

◆ Applications

» RF Products:

Cellular Phone (CDMA/GSM/PHS)
Remote Control, Security System
Wireless PDA
Smart Phone
WLL, Wireless LAN / Mouse / Keyboard

» Earphone

VCO, RF Module & Other Wireless Products
Base Station, Repeater
GPS Receiver

» Broad Band Applications:

CATV Filter, Tuner
Cable Modem/ XDSL Tuner

◆ Part Number

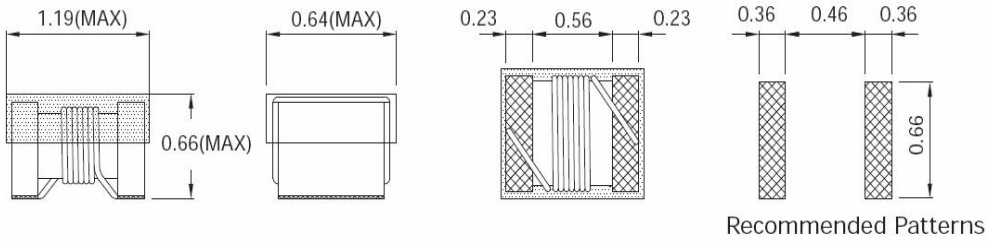
FLCS	0805	R56	J
Type	Size	Inductance	Tolerance
FLCS	0402	4.7nH = 4N7	K: ± 10%
	0603	82nH = 82N	J: ± 5%
	0805	560nH = R56	G: ± 2%
	1008	1000nH = 1R0	
		10000nH = 10R	

Tel: 886-2-8221-2898 E-MAIL:link88@ms33.hinet.net Website: www.faithfullink.com

◆ Dimension

» FLCS0402

Unit: mm



◆ Electrical Specifications

» FLCS0402

Inductance (nH)	Tolerance (±%)	Q Min.	Test Freqency (MHz)	SRF (GHz) Min.	DCR (Ohm) Max.	Rated Current (mA)
1.0	10/5	16	250	12.70	0.045	1360
1.2	10/5	16	250	12.90	0.090	740
1.3	10/5	10	250	10.40	0.140	640
1.8	10/5	16	250	12.00	0.070	1040
1.9	10/5	16	250	11.30	0.070	1040
2.0	10/5/2	16	250	11.10	0.070	1040
2.2	10/5/2	19	250	10.80	0.070	960
2.4	10/5/2	15	250	10.50	0.068	790
2.7	10/5/2	16	250	10.40	0.120	640
3.3	10/5/2	19	250	7.00	0.066	840
3.6	10/5/2	19	250	6.80	0.066	840
3.9	10/5/2	19	250	6.00	0.066	840
4.3	10/5/2	18	250	6.00	0.091	700
4.7	10/5/2	15	250	4.70	0.130	640
5.1	10/5/2	20	250	4.80	0.083	800
5.6	10/5/2	20	250	4.80	0.083	760
6.2	10/5/2	20	250	4.80	0.083	760
6.8	10/5/2	20	250	4.80	0.083	680
7.3	10/5/2	20	250	4.80	0.260	680
7.5	10/5/2	22	250	4.80	0.100	680
8.2	10/5/2	22	250	4.40	0.100	680
8.7	10/5/2	18	250	4.10	0.200	480
9.1	10/5/2	22	250	4.16	0.100	680

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» FLCS0402

Inductance (nH)	Tolerance (±%)	Q Min.	Test Frequency (MHz)	SRF (GHz) Min.	DCR (Ohm) Max.	Rated Current (mA)
9.5	10/5/2	18	250	4.00	0.200	480
10	10/5/2	21	250	3.90	0.200	480
11	10/5/2	24	250	3.68	0.120	640
12	10/5/2	24	250	3.60	0.120	640
13	10/5/2	24	250	3.45	0.210	440
15	10/5/2	24	250	3.28	0.170	560
16	10/5/2	24	250	3.10	0.220	560
18	10/5/2	25	250	3.10	0.230	420
19	10/5/2	24	250	3.04	0.200	480
20	10/5/2	25	250	3.00	0.250	420
22	10/5/2	25	250	2.80	0.300	400
23	10/5/2	22	250	2.72	.0.300	400
24	10/5/2	25	250	2.70	0.300	400
27	10/5/2	24	250	2.48	0.300	400
30	10/5/2	25	250	2.35	0.300	400
33	10/5/2	24	250	2.35	0.400	400
36	10/5/2	24	250	2.32	0.440	320
39	10/5/2	25	250	2.10	0.550	200
40	10/5/2	24	250	2.24	0.440	320
43	10/5/2	25	250	2.03	0.810	100
47	10/5/2	20	250	2.10	0.830	150
51	10/5/2	25	250	1.75	0.820	100
56	10/5/2	22	250	1.76	0.970	100
68	10/5/2	22	250	1.62	1.120	100
82	10/5/2	20	250	1.26	1.550	50
100	10/5/2	20	250	1.16	2.000	30
120	10/5/2	-	250	1.90	2.200	50

a. Tolerance：K=±10% ; J=±5% ; G=±2%
b. Operating Temp : -40℃ TO +125℃
c. For 15℃ Temperature Rise.
d. Inductance & Q measured using the HP4291B.
e. SRF measured using the HP8753E or HP8720D.
f. DCR measured using the 16502 milli-ohm meter.
g. Unspecified values available on request.
h. Special specification are available for costumer's requirement.

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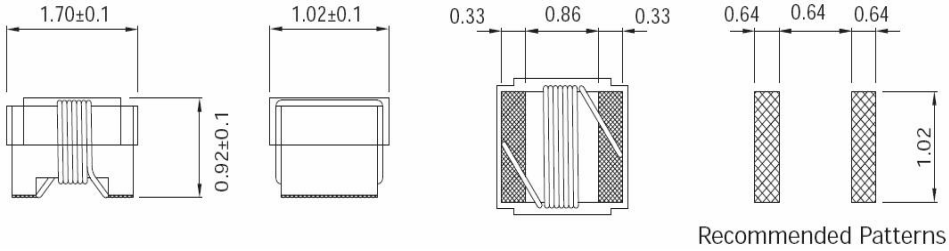
◆ Dimension

» FLCS0603



Unit: mm

◆ Electrical Specifications

» FLCS0603

Inductance (nH)	Tolerance (±%)	Q Min.	Test Frequency (MHz)	SRF (GHz) Min.	DCR (Ohm) Max.	Irms (mA)
1.6	10/5	24	250	12.50	0.030	700
1.8	10/5	16	250	12.50	0.045	700
2.1	10/5	20	250	5.80	0.005	700
2.2	10/5	20	250	5.80	0.005	700
3.3	10/5	20	250	5.50	0.070	700
3.6	10/5	22	250	5.90	0.063	700
3.9	10/5	22	250	5.90	0.080	700
4.3	10/5	22	250	5.90	0.063	700
4.7	10/5	20	250	5.80	0.116	700
5.1	10/5	20	250	5.70	0.140	700
5.6	10/5	20	250	5.80	0.150	700
6.1	10/5	25	250	5.80	0.110	700
6.8	10/5/2	27	250	5.80	0.110	700
7.5	10/5/2	28	250	4.80	0.106	700
8.2	10/5/2	25	250	5.80	0.120	700
8.4	10/5/2	28	250	4.60	0.109	700
8.5	10/5/2	28	250	4.60	0.109	700
8.7	5/2	28	250	4.60	0.109	700
9.5	5/2	28	250	5.40	0.135	700
10	5/2	31	250	4.80	0.130	700
11	5/2	33	250	4.00	0.086	700
12	5/2	35	250	4.00	0.130	700
14	5/2	35	250	4.00	0.170	700
15	5/2	35	250	4.00	0.170	700
16	5/2	34	250	3.30	0.104	700

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» FLCS0603

Inductance (nH)	Tolerance (±%)	Q Min.	Test Frequency (MHz)	SRF (GHz) Min.	DCR (Ohm) Max.	Irms (mA)
18	5/2	35	250	3.10	0.170	700
22	5/2	38	250	3.00	0.190	700
23	5/2	38	250	2.85	0.190	700
24	5/2	37	250	2.65	0.135	700
27	5/2	40	250	2.80	0.220	600
30	5/2	37	250	2.25	0.144	600
33	5/2	40	250	2.30	0.220	600
36	5/2	38	250	2.08	0.250	600
39	5/2	40	250	2.20	0.250	600
43	5/2	39	250	2.00	0.280	600
47	5/2	38	200	2.00	0.280	600
51	5/2	35	200	1.90	0.270	600
56	5/2	38	200	1.90	0.310	600
68	5/2	37	200	1.70	0.340	600
72	5/2	34	150	1.70	0.490	400
82	5/2	34	150	1.70	0.540	400
100	5/2	34	150	1.40	0.580	400
110	5/2	32	150	1.35	0.610	300
120	5/2	32	150	1.30	0.650	300
150	5/2	28	150	0.99	0.920	280
180	5/2	25	100	0.99	1.250	240
200	5/2	25	100	0.99	1.980	200
210	5/2	27	100	0.895	2.060	200
220	5/2	25	100	0.900	1.900	200
250	5/2	25	100	0.822	3.550	120
270	5/2	24	100	0.900	2.300	170
330	5/2	24	100	0.900	2.300	100
390	5/2	25	100	0.900	4.350	100

a. Tolerance：K=±10% ; J=±5% ; G=±2%
b. Operating Temp : -40℃ TO +125℃
c. For 15℃ Temperature Rise.
d. Inductance & Q measured using the HP4291B.
e. SRF measured using the HP8753E or HP8720D.
f. DCR measured using the 16502 milli-ohm meter.
g. Unspecified values available on request.
h. Special specification are available for costumer's requirement.

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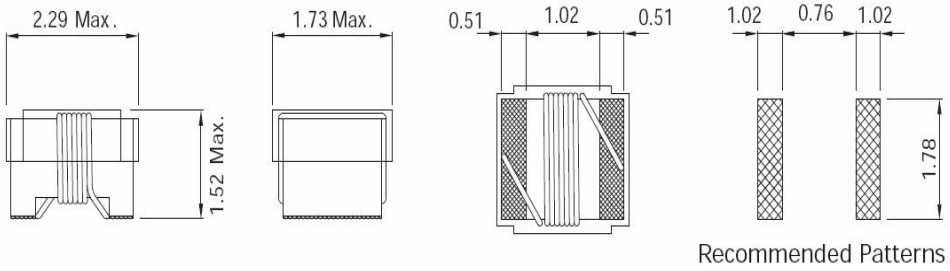
◆ Dimension

» FLCS0805



Unit: mm

◆ Electrical Specifications

» FLCS0805

Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min.	Test Frequency (MHz)	SRF (GHz) Min.	DCR (Ohm) Max.	Irms (mA)
2.20	10/5	250	35	1500	3.00	0.08	600
2.70	10/5	250	35	1000	6.00	0.03	600
2.80	10/5	250	80	1000	7.90	0.06	600
2.90	10/5	250	50	1000	4.70	0.05	600
3.00	10/5	250	65	1500	7.90	0.06	800
3.30	10/5	250	50	1500	7.90	0.08	600
5.60	10/5	250	65	1000	5.50	0.08	600
6.80	10/5	250	50	1000	5.50	0.11	600
7.50	10/5	250	50	1000	4.50	0.14	600
8.20	10/5/2	250	50	1000	4.70	0.12	600
10	10/5/2	250	60	500	4.20	0.10	600
11	10/5/2	700	45	500	3.00	0.15	600
12	10/5/2	250	50	500	4.00	0.15	600
15	10/5/2	250	50	500	3.40	0.17	600
18	10/5/2	250	50	500	3.30	0.20	600
22	10/5/2	250	55	500	2.60	0.22	500
24	10/5/2	250	50	500	2.00	0.22	500
27	10/5/2	250	55	500	2.50	0.25	500
33	10/5/2	250	60	500	2.05	0.27	500
36	10/5/2	250	55	500	1.70	0.27	500
37	10/5/2	350	40	500	1.80	0.27	500
38	10/5/2	350	40	500	1.80	0.27	500
39	10/5/2	250	60	500	2.00	0.29	500
43	10/5/2	200	60	500	1.65	0.34	500

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» FLCS0805

Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min.	Test Frequency (MHz)	SRF (GHz) Min.	DCR (Ohm) Max.	Irms (mA)
47	10/5/2	200	60	500	1.65	0.31	500
56	10/5/2	200	60	500	1.55	0.34	500
68	10/5/2	200	60	500	1.45	0.38	500
82	10/5/2	150	65	500	1.30	0.42	400
91	10/5/2	150	65	500	1.20	0.48	400
100	10/5/2	150	65	500	1.20	0.46	400
110	10/5/2	150	50	500	1.00	0.48	400
120	10/5/2	150	50	250	1.10	0.51	400
150	10/5/2	100	50	250	0.92	0.56	400
180	10/5/2	100	50	250	0.87	0.64	400
200	10/5/2	100	50	250	0.86	0.68	400
220	10/5/2	100	50	250	0.85	0.70	400
240	10/5/2	100	44	250	0.69	1.00	350
250	10/5/2	100	45	250	0.66	1.20	350
270	10/5/2	100	48	250	0.65	1.00	350
300	10/5/2	100	25	250	0.45	1.40	300
330	10/5/2	100	48	250	0.60	1.40	300
360	10/5/2	100	35	250	0.40	0.90	300
390	10/5/2	150	48	250	0.56	1.50	290
430	10/5/2	100	25	100	0.40	1.70	190
470	10/5	50	33	100	0.375	1.76	250
560	10/5	25	23	50	0.34	1.90	230
620	10/5	25	23	50	0.22	2.20	210
680	10/5	25	23	50	0.188	2.20	190
820	10/5	25	23	50	0.215	2.35	180

a. Tolerance：K=±10% ; J=±5% ; G=±2%
b. Operating Temp : -40℃ TO +125℃
c. For 15℃ Temperature Rise.
d. Inductance & Q measured using the HP4291B.
e. SRF measured using the HP8753E or HP8720D.
f. DCR measured using the 16502 milli-ohm meter.
g. Unspecified values available on request.
h. Special specification are available for costumer's requirement.

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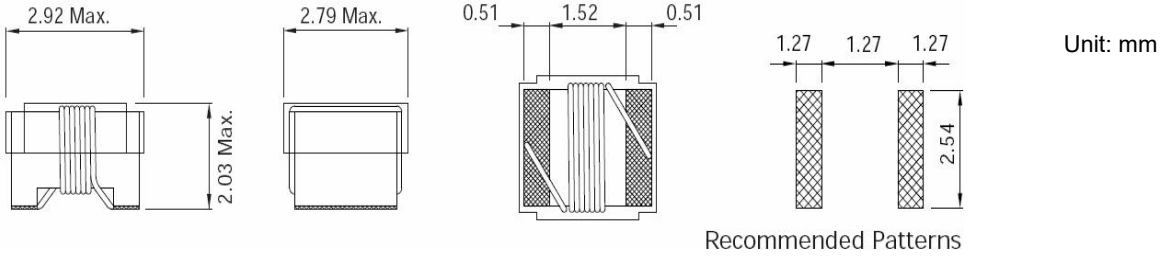
◆ Dimension

» FLCS1008



Unit: mm

Recommended Patterns

◆ Electrical Specifications

» FLCS1008

Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min.	Test Frequency (MHz)	SRF (GHz) Min.	DCR (Ohm) Max.	Irms (mA)
10	10/5	50	50	500	4.10	0.08	1000
12	10/5	50	50	500	3.30	0.09	1000
15	10/5	50	50	500	2.50	0.10	1000
18	10/5/2	50	50	350	2.50	0.11	1000
22	10/5/2	50	55	350	2.40	0.12	1000
24	10/5/2	50	50	350	1.50	0.13	1000
27	10/5/2	50	55	350	1.60	0.13	1000
33	10/5/2	50	60	350	1.60	0.14	1000
39	10/5/2	50	60	350	1.50	0.15	1000
47	10/5/2	50	65	350	1.50	0.16	1000
56	10/5/2	50	65	350	1.30	0.18	1000
68	10/5/2	50	65	350	1.30	0.20	1000
82	10/5/2	50	60	350	1.00	0.22	1000
100	10/5/2	25	60	350	1.00	0.56	650
120	10/5/2	25	60	350	0.95	0.63	650
150	10/5/2	25	45	100	0.850	0.70	580
180	10/5/2	25	45	100	0.750	0.77	620
200	10/5/2	25	50	100	0.750	0.81	500
220	10/5/2	25	45	100	0.700	0.84	500
240	10/5/2	25	50	100	0.600	0.84	500
270	10/5/2	25	45	100	0.600	0.91	500
300	10/5/2	25	40	100	0.500	1.05	660
330	10/5/2	25	45	100	0.570	1.05	450
360	10/5/2	25	40	100	0.500	1.05	660

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» FLCS1008

Inductance (nH)	Tolerance (±%)	Test Freq. (MHz)	Q Min.	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ohm) Max.	Irms (mA)
390	10/5/2	25	45	100	0.500	1.12	470
430	10/5/2	25	45	100	0.425	1.19	600
470	10/5/2	25	45	100	0.450	1.19	470
560	10/5/2	25	45	100	0.415	1.33	400
620	10/5/2	25	45	100	0.375	1.40	300
680	10/5/2	25	45	100	0.375	1.47	400
750	10/5/2	25	45	100	0.360	1.54	360
820	10/5/2	25	45	100	0.350	1.61	400
910	10/5/2	25	35	50	0.320	1.68	380
1000	10/5/2	25	35	50	0.290	1.75	370
1200	10/5/2	7.9	35	50	0.250	2.00	310
1500	10/5/2	7.9	28	50	0.200	2.30	330
1800	10/5/2	7.9	28	50	0.160	2.60	300
2000	10/5/2	7.9	25	50	0.160	2.80	280
2200	10/5/2	7.9	28	50	0.160	2.80	280
2700	10/5/2	7.9	22	25	0.140	3.20	290
3300	10/5/2	7.9	22	25	0.110	3.40	290
3900	10/5/2	7.9	20	25	0.100	3.60	260
4700	10/5/2	7.9	20	25	0.090	4.00	260

a. Tolerance：K=±10% ; J=±5% ; G=±2%
b. Operating Temp : -40℃ TO +125℃
c. For 15℃ Temperature Rise.
d. Inductance & Q measured using the HP4291B.
e. SRF measured using the HP8753E or HP8720D.
f. DCR measured using the 16502 milli-ohm meter.
g. Unspecified values available on request.
h. Special specification are available for costumer's requirement.

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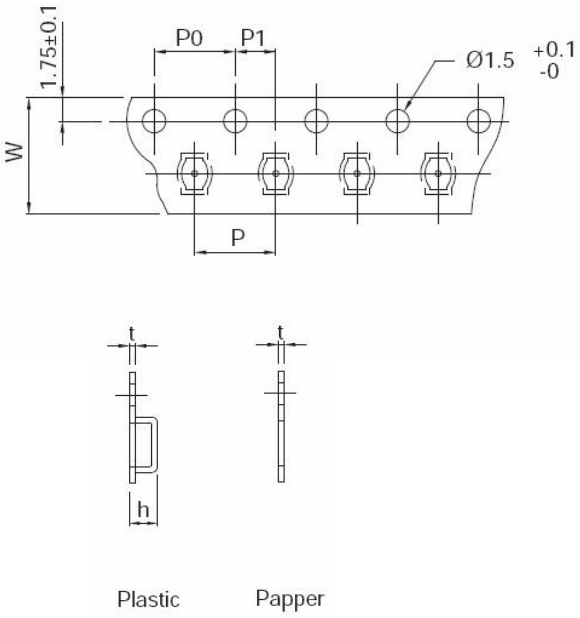
◆ Packing

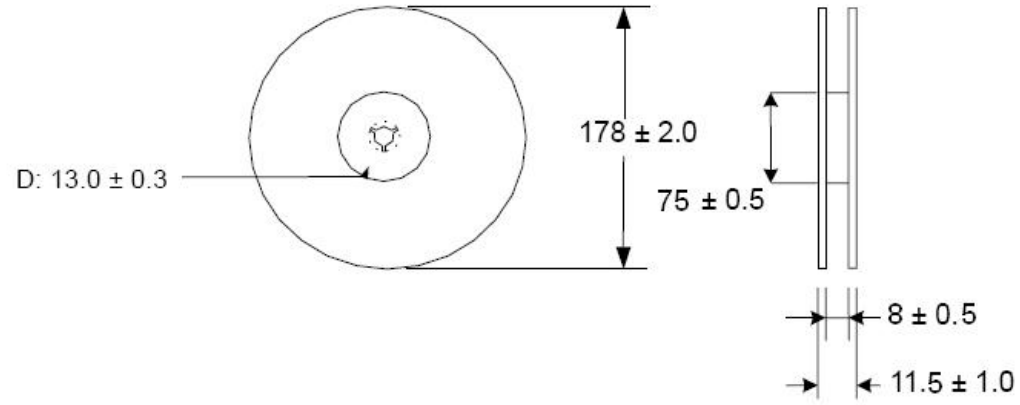
Tape Dimensions

Unit: mm



Size	Tape dimensions (mm)						Parts per reel
	W	P	P0	P1	h	t	7”
FLCS0402	8	2	4	2	---	0.60	4,000
FLCS0603	8	4	4	2	1.07	0.25	4,000
FLCS0805	8	4	4	2	1.38	0.25	3,000
FLCS1008	8	4	4	2	2.30	0.25	2,000

Reel Dimensions



All product specification and data are subject to change without notice.

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