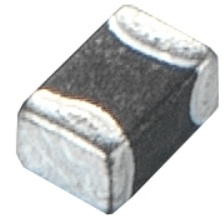


FLCL series

SMD Multilayer Ferrite Chip Inductors



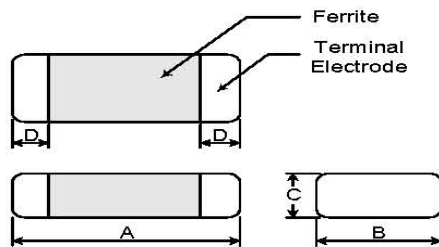
◆ Features

- » RoHS Compliant.
- » High mounting density of compact circuit due to crosstalk elimination that results from a closed magnetic flux in a ferrite material
- » Suitable for flow and re-flow soldering
- » Available in 5 sizes

◆ Applications

- » Personal computers, HDDs, other various electronic devices
- » Any portable device where compact size and high mounting densities are required

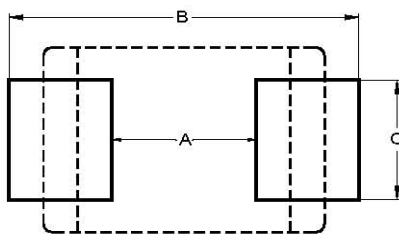
◆ Shape and Dimensions



Type	A	B	C	D
FLCL040205	1.0±0.10	0.50±0.10	0.50±0.10	0.25±0.10
FLCL060308	1.6±0.20	0.80±0.20	0.80±0.20	0.30±0.20
FLCL080509	2.0±0.20	1.25±0.20	0.90±0.20	0.50±0.30
FLCL080512	2.0±0.20	1.25±0.20	1.25±0.20	0.50±0.30
FLCL120611	3.2±0.20	1.60±0.20	1.10±0.20	0.50±0.30

Unit:mm

◆ Recommended pattern



Type	A	B	C
FLCL040205	0.4	1.2 ~ 1.4	0.5
FLCL060308	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8
FLCL080509	1.0 ~ 1.2	2.6 ~ 4.0	1.0 ~ 1.2
FLCL080512	1.0 ~ 1.2	2.6 ~ 4.0	1.0 ~ 1.2
FLCL120611	2.0	4.2 ~ 5.2	1.2

Unit: mm

◆ Part Number

FLCL	060308	T	1R0	□	N
Type	Size	Packing	Inductance	Tolerance	Internal No.
FLCL	040205	T: Tapeing	1uH = 1R0	K = ± 10%	
	060308		0.01uH = 10NM	M = ± 20%	
	080509		0.22uH = R22		
	080512				
	120611				

◆ Electrical Characteristics

FLCL040205

Inductance (μH)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	DC Resistance (Ω) Max	IDC (mA) Max
0.010	20	8	50	500	0.45	50
0.012	20	8	50	500	0.45	50
0.047	20	10	50	500	0.45	50
0.068	20	10	50	480	0.45	50
0.082	20	10	50	480	0.45	50
0.10	20 / 10	15	25	450	0.60	50
0.12	20 / 10	15	25	400	0.70	25
0.15	20 / 10	15	25	350	0.80	25
0.18	20 / 10	15	25	320	0.90	25
0.22	20 / 10	15	25	290	1.10	25
0.27	20 / 10	15	25	260	1.30	25
0.33	20 / 10	15	25	230	1.50	25
0.39	20 / 10	25	10	210	0.41	10
0.47	20 / 10	20	10	190	0.65	10
0.56	20 / 10	20	10	170	0.70	10
0.68	20 / 10	20	10	150	0.80	10
0.82	20 / 10	20	10	130	0.90	10
1.00	20 / 10	20	10	120	1.00	15
1.20	20 / 10	20	10	110	1.10	15
1.50	20 / 10	20	10	100	1.20	10
1.80	20 / 10	20	10	90	1.30	10
2.20	20 / 10	20	10	80	1.40	10

When ordering, please specify tolerance and packaging codes.

Tolerance: K = ± 10% M = ± 20%

◆ Electrical Characteristics

FLCL060308

Inductance (μH)	Tolerance ($\pm\%$)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	DC Resistance (Ω) Max	IDC (mA) Max
0.010	20 / 15	15	50	300	0.2	50
0.033	20 / 15	15	50	270	0.2	50
0.047	20 / 15	15	50	260	0.3	50
0.056	20 / 15	15	50	255	0.3	50
0.068	20 / 15	15	50	250	0.3	50
0.082	20 / 15	15	50	245	0.3	50
0.10	20 / 15 / 10	25	25	240	0.5	50
0.12	20 / 15 / 10	25	25	205	0.5	50
0.15	20 / 15 / 10	25	25	180	0.6	50
0.18	20 / 15 / 10	25	25	165	0.6	50
0.22	20 / 15 / 10	25	25	150	0.8	50
0.27	20 / 15 / 10	25	25	136	0.8	50
0.33	20 / 15 / 10	25	25	125	0.85	35
0.39	20 / 15 / 10	25	25	110	1.00	35
0.47	20 / 15 / 10	25	25	105	1.35	35
0.56	20 / 15 / 10	25	25	95	1.50	35
0.68	20 / 15 / 10	25	25	85	1.70	35
0.82	20 / 15 / 10	25	25	75	2.10	35
1.0	20 / 15 / 10	35	10	65	0.60	25
1.2	20 / 15 / 10	35	10	60	0.80	25
1.5	20 / 15 / 10	35	10	55	0.80	25
1.8	20 / 15 / 10	35	10	50	0.95	25
2.2	20 / 15 / 10	35	10	45	1.00	15
2.7	20 / 15 / 10	35	10	40	1.15	15
3.3	20 / 15 / 10	35	10	38	1.30	15
3.9	20 / 15 / 10	35	10	36	1.50	15
4.7	20 / 15 / 10	35	10	33	1.60	15
5.6	20 / 15 / 10	35	4	22	1.10	5
6.8	20 / 15 / 10	35	4	20	1.30	5
8.2	20 / 15 / 10	30	4	18	1.50	5
10	20 / 15 / 10	30	2	17	1.70	5
12	20 / 15 / 10	30	2	15	1.80	3
15	20 / 15 / 10	20	1	14	1.50	1
18	20 / 15 / 10	20	1	13	1.60	1
22	20 / 15 / 10	20	1	11	1.70	1

When ordering, please specify tolerance and packaging codes.

Tolerance: K = $\pm 10\%$ L = $\pm 15\%$ M = $\pm 20\%$

FLCL080509

Inductance (μH)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	DC Resistance (Ω) Max	IDC (mA) Max
0.022	20 / 15	20	50	320	0.20	300
0.033	20 / 15	20	50	320	0.20	300
0.047	20 / 15	20	50	320	0.20	300
0.068	20 / 15	20	50	280	0.20	300
0.082	20 / 15	20	50	255	0.20	300
0.10	20 / 15 / 10	25	25	235	0.30	250
0.12	20 / 15 / 10	25	25	220	0.30	250
0.15	20 / 15 / 10	25	25	200	0.40	250
0.18	20 / 15 / 10	25	25	185	0.40	250
0.22	20 / 15 / 10	25	25	170	0.50	250
0.27	20 / 15 / 10	25	25	150	0.50	250
0.33	20 / 15 / 10	25	25	145	0.55	250
0.39	20 / 15 / 10	25	25	135	0.65	250
0.47	20 / 15 / 10	25	25	125	0.65	250
0.56	20 / 15 / 10	25	25	115	0.75	150
0.68	20 / 15 / 10	25	25	105	0.80	150
0.82	20 / 15 / 10	25	25	100	1.00	150
1.0	20 / 15 / 10	45	10	75	0.40	50
1.2	20 / 15 / 10	45	10	65	0.50	50
1.5	20 / 15 / 10	45	10	60	0.50	50
1.8	20 / 15 / 10	45	10	55	0.60	30
2.2	20 / 15 / 10	45	10	50	0.65	30

When ordering, please specify tolerance and packaging codes.

Tolerance: K = ± 10% L = ± 15% M = ± 20%

FLCL080512

Inductance (μH)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	DC Resistance (Ω) Max	IDC (mA) Max
2.7	20 / 15 / 10	45	10	45	0.75	30
3.3	20 / 15 / 10	45	10	41	0.80	30
3.9	20 / 15 / 10	45	10	38	0.90	30
4.7	20 / 15 / 10	45	10	35	1.00	30
5.6	20 / 15 / 10	45	4	32	0.90	15
6.8	20 / 15 / 10	45	4	29	1.00	15
8.2	20 / 15 / 10	45	4	26	1.10	15
10	20 / 15 / 10	45	2	24	1.10	15
12	20 / 15 / 10	45	2	22	1.20	15
15	20 / 15 / 10	30	1	19	0.80	5
18	20 / 15 / 10	30	1	18	0.90	5
22	20 / 15 / 10	30	1	16	1.10	5

When ordering, please specify tolerance and packaging codes.

Tolerance: K = $\pm 10\%$ L = $\pm 15\%$ M = $\pm 20\%$

FLCL120611

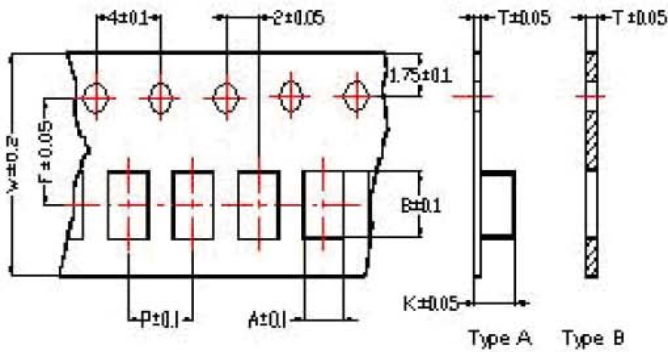
Inductance (μH)	Tolerance ($\pm\%$)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	DC Resistance (Ω) Max	IDC (mA) Max
0.047	20 / 15	20	50	320	0.15	300
0.068	20 / 15	20	50	280	0.25	300
0.082	20 / 15	20	50	250	0.25	300
0.10	20 / 15 / 10	25	25	235	0.25	250
0.12	20 / 15 / 10	25	25	220	0.30	250
0.15	20 / 15 / 10	25	25	200	0.30	250
0.18	20 / 15 / 10	25	25	185	0.40	250
0.22	20 / 15 / 10	25	25	170	0.40	250
0.27	20 / 15 / 10	25	25	150	0.50	250
0.33	20 / 15 / 10	25	25	145	0.60	250
0.39	20 / 15 / 10	25	25	135	0.50	200
0.47	20 / 15 / 10	25	25	125	0.60	200
0.56	20 / 15 / 10	25	25	115	0.70	150
0.68	20 / 15 / 10	25	25	105	0.80	150
0.82	20 / 15 / 10	25	25	100	0.90	150
1.0	20 / 15 / 10	45	10	75	0.40	100
1.2	20 / 15 / 10	45	10	65	0.50	100
1.5	20 / 15 / 10	45	10	60	0.50	80
1.8	20 / 15 / 10	45	10	55	0.50	70
2.2	20 / 15 / 10	45	10	50	0.60	60
2.7	20 / 15 / 10	45	10	45	0.60	60
3.3	20 / 15 / 10	45	10	41	0.70	60
3.9	20 / 15 / 10	45	10	38	0.80	50
4.7	20 / 15 / 10	45	10	35	0.90	50
5.6	20 / 15 / 10	45	4	32	0.70	25
6.8	20 / 15 / 10	45	4	29	0.80	25
8.2	20 / 15 / 10	45	4	26	0.90	25
10	20 / 15 / 10	45	2	24	1.00	25
12	20 / 15 / 10	45	2	22	1.00	15
15	20 / 15 / 10	35	1	19	0.70	5
18	20 / 15 / 10	35	1	18	0.75	5
22	20 / 15 / 10	35	1	16	0.90	5
27	20 / 15 / 10	35	1	14	0.90	5

When ordering, please specify tolerance and packaging codes.

Tolerance: K = $\pm 10\%$ L = $\pm 15\%$ M = $\pm 20\%$

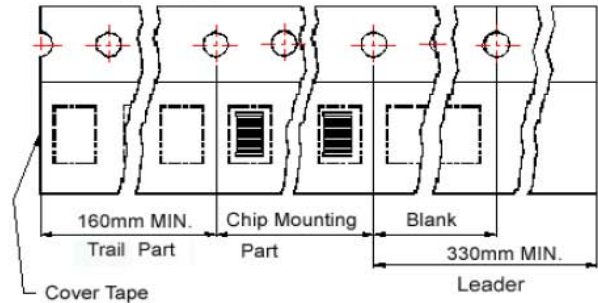
◆ Packing

Tape Dimensions

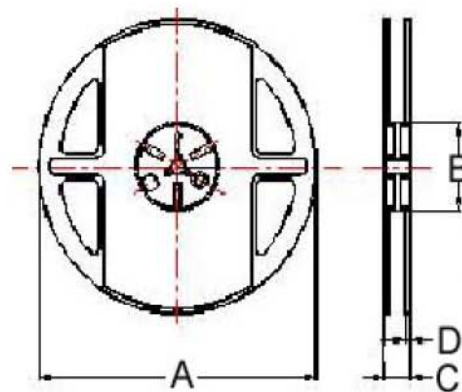


Tape Material

Carrier Tape: Polycarbonate (Tape A)
 Carrier Tape: Paper (Tape B)
 Cover Tape: Polystyrene



Reel Dimensions



Dimensions

Unit: mm

TYPE	Tape Dimensions								Reel Dimensions				Quantity Pcs/Reel
	A	B	T	W	P	F	K	Tape	A	B	C	D	
FLCL040205	0.65	1.15	0.60	8	2	3.5	-	B	178	60	12	1.5	10000
FLCL060308	1.05	1.85	0.95	8	4	3.5	-	B	178	60	12	1.5	4000
FLCL080509	1.50	2.30	0.97	8	4	3.5	-	B	178	60	12	1.5	4000
FLCL080512	1.35	2.25	0.22	8	4	3.5	1.35	A	178	60	12	1.5	3000
FLCL120611	1.88	3.50	0.22	8	4	3.5	1.27	A	178	60	12	1.5	3000

All product specification and data are subject to change without notice