



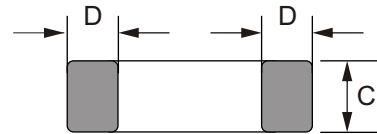
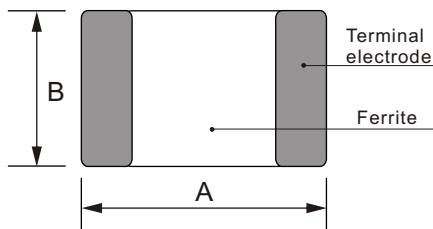
### Features

- Supports operating frequency bands up to 10GHz
- Provides high Q characteristics
- Monolithic structure for high reliability
- Excellent solderability and high heat resistance for either flow or reflow soldering

### Applications

- Mobile phones
- Personal computers
- Cordless phones
- Pagers

## ► Dimensions & Configurations (Unit:mm)



Type	A	B	C	D
MCL0603(0201)	0.6±0.03	0.3±0.03	0.33Max	0.1~0.2
MCL1005(0402)	1.0±0.05	0.5±0.05	0.5±0.05	0.1~0.3
MCL1608(0603)	1.6±0.15	0.8±0.15	0.8±0.15	0.2~0.6
MCL2012(0805)	2.0±0.2	1.25±0.2	*	0.2~0.8

## ▶ Electrical Characteristics For MCL0603 Series

Part Number	Inductance [nH]	Tolerance	Q (min)	Test Freq L,Q [MHz]	SRF(min) [GHz]	DCR(max) [ $\Omega$ ]	IDC(max) [mA]	Thickness [mm]
MCL0603-1N0	1	$\pm 0.3\text{nH}$	4	100	10	0.14	250	0.33Max
MCL0603-1N2	1.2	$\pm 0.3\text{nH}$	4	100	10	0.14	250	0.33Max
MCL0603-1N5	1.5	$\pm 0.3\text{nH}$	4	100	10	0.18	230	0.33Max
MCL0603-1N8	1.8	$\pm 0.3\text{nH}$	4	100	10	0.19	200	0.33Max
MCL0603-2N2	2.2	$\pm 0.3\text{nH}$	4	100	8.8	0.22	200	0.33Max
MCL0603-2N7	2.7	$\pm 0.3\text{nH}$	5	100	7.7	0.25	200	0.33Max
MCL0603-3N3	3.3	$\pm 0.3\text{nH}$	5	100	6.7	0.30	180	0.33Max
MCL0603-3N9	3.9	$\pm 0.3\text{nH}$	5	100	6.0	0.30	170	0.33Max
MCL0603-4N7	4.7	$\pm 0.3\text{nH}$	5	100	5.3	0.40	150	0.33Max
MCL0603-5N1	5.1	$\pm 0.3\text{nH}$	5	100	4.7	0.40	150	0.33Max
MCL0603-5N6	5.6	$\pm 0.3\text{nH}$	5	100	4.2	0.40	150	0.33Max
MCL0603-6N8J	6.8	$\pm 5\%$	5	100	3.5	0.50	150	0.33Max
MCL0603-8N2J	8.2	$\pm 5\%$	5	100	3.2	0.55	150	0.33Max
MCL0603-10NJ	10	$\pm 5\%$	5	100	2.8	0.65	150	0.33Max
MCL0603-12NJ	12	$\pm 5\%$	5	100	2.4	0.70	100	0.33Max
MCL0603-15NJ	15	$\pm 5\%$	5	100	2.2	0.80	100	0.33Max
MCL0603-18NJ	18	$\pm 5\%$	5	100	2.1	0.90	100	0.33Max
MCL0603-22NJ	22	$\pm 5\%$	5	100	1.8	1.20	100	0.33Max
MCL0603-27NJ	27	$\pm 5\%$	4	100	1.8	1.80	50	0.33Max
MCL0603-33NJ	33	$\pm 5\%$	4	100	1.7	2.10	50	0.33Max
MCL0603-39NJ	39	$\pm 5\%$	4	100	1.5	2.40	50	0.33Max

## ► Electrical Characteristics For MCL1005 Series

Part Number	Inductance [nH]	Q (min)	Test Freq L,Q [MHz]	SRF(min) [GHz]	DCR(max) [Ω]	IDC(max) [mA]	Thickness [mm]
MCL1005-1N0S	1.0±0.3nH	8	100	10	0.08	300	0.5±0.05
MCL1005-1N2S	1.2±0.3nH	8	100	10	0.09	300	0.5±0.05
MCL1005-1N5S	1.5±0.3nH	8	100	6	0.10	300	0.5±0.05
MCL1005-1N8S	1.8±0.3nH	8	100	6	0.12	300	0.5±0.05
MCL1005-2N0S	2.0±0.3nH	8	100	6	0.12	300	0.5±0.05
MCL1005-2N2S	2.2±0.3nH	8	100	6	0.13	300	0.5±0.05
MCL1005-2N4S	2.4±0.3nH	8	100	6	0.13	300	0.5±0.05
MCL1005-2N7S	2.7±0.3nH	8	100	6	0.13	300	0.5±0.05
MCL1005-3N0S	3.0±0.3nH	8	100	6	0.16	300	0.5±0.05
MCL1005-3N3S	3.3±0.3nH	8	100	6	0.16	300	0.5±0.05
MCL1005-3N9S	3.9±0.3nH	8	100	4	0.21	300	0.5±0.05
MCL1005-4N7S	4.7±0.3nH	8	100	4	0.21	300	0.5±0.05
MCL1005-5N6S	5.6±0.3nH	8	100	4	0.23	300	0.5±0.05
MCL1005-6N8J	6.8±5%	8	100	3.9	0.25	300	0.5±0.05
MCL1005-8N2J	8.2±5%	8	100	3.6	0.28	300	0.5±0.05
MCL1005-10NJ	10±5%	8	100	3.2	0.31	300	0.5±0.05
MCL1005-12NJ	12±5%	8	100	2.7	0.40	300	0.5±0.05
MCL1005-15NJ	15±5%	8	100	2.3	0.46	300	0.5±0.05
MCL1005-18NJ	18±5%	8	100	2.1	0.55	300	0.5±0.05
MCL1005-22NJ	22±5%	8	100	1.9	0.60	300	0.5±0.05
MCL1005-27NJ	27±5%	8	100	1.6	0.70	300	0.5±0.05
MCL1005-33NJ	33±5%	8	100	1.3	0.80	200	0.5±0.05
MCL1005-39NJ	39±5%	8	100	1.2	0.90	200	0.5±0.05
MCL1005-47NJ	47±5%	8	100	1.0	1.00	200	0.5±0.05
MCL1005-56NJ	56±5%	8	100	0.75	1.00	200	0.5±0.05
MCL1005-68NJ	68±5%	8	100	0.75	1.20	180	0.5±0.05
MCL1005-82NJ	82±5%	8	100	0.60	1.30	150	0.5±0.05
MCL1005-R10J	100±5%	8	100	0.60	1.50	150	0.5±0.05
MCL1005-R12J	120±5%	8	100	0.60	1.60	150	0.5±0.05

## ► Electrical Characteristics For MCL1608 Series

Part Number	Inductance [nH]	Q (min)	Test Freq L,Q [MHz]	SRF(min) [GHz]	DCR(max) [ $\Omega$ ]	IDC(max) [mA]	Thickness [mm]
MCL1608-1N0S	1.0 $\pm$ 0.3nH	8	100	10.0	0.05	300	0.8 $\pm$ 0.15
MCL1608-1N2S	1.2 $\pm$ 0.3nH	8	100	10.0	0.05	300	0.8 $\pm$ 0.15
MCL1608-1N5S	1.5 $\pm$ 0.3nH	8	100	6.0	0.10	300	0.8 $\pm$ 0.15
MCL1608-1N8S	1.8 $\pm$ 0.3nH	8	100	6.0	0.10	300	0.8 $\pm$ 0.15
MCL1608-2N2S	2.2 $\pm$ 0.3nH	8	100	6.0	0.10	300	0.8 $\pm$ 0.15
MCL1608-2N7S	2.7 $\pm$ 0.3nH	10	100	6.0	0.10	300	0.8 $\pm$ 0.15
MCL1608-3N3S	3.3 $\pm$ 0.3nH	10	100	6.0	0.12	300	0.8 $\pm$ 0.15
MCL1608-3N9S	3.9 $\pm$ 0.3nH	10	100	6.0	0.14	300	0.8 $\pm$ 0.15
MCL1608-4N7S	4.7 $\pm$ 0.3nH	10	100	4.0	0.16	300	0.8 $\pm$ 0.15
MCL1608-5N6S	5.6 $\pm$ 0.3nH	10	100	4.0	0.18	300	0.8 $\pm$ 0.15
MCL1608-6N8J	6.8 $\pm$ 5%	10	100	4.0	0.22	300	0.8 $\pm$ 0.15
MCL1608-8N2J	8.2 $\pm$ 5%	10	100	3.5	0.24	300	0.8 $\pm$ 0.15
MCL1608-10NJ	10 $\pm$ 5%	12	100	3.4	0.26	300	0.8 $\pm$ 0.15
MCL1608-12NJ	12 $\pm$ 5%	12	100	2.6	0.28	300	0.8 $\pm$ 0.15
MCL1608-15NJ	15 $\pm$ 5%	12	100	2.3	0.32	300	0.8 $\pm$ 0.15
MCL1608-18NJ	18 $\pm$ 5%	12	100	2.0	0.35	300	0.8 $\pm$ 0.15
MCL1608-22NJ	22 $\pm$ 5%	12	100	1.6	0.40	300	0.8 $\pm$ 0.15
MCL1608-27NJ	27 $\pm$ 5%	12	100	1.4	0.45	300	0.8 $\pm$ 0.15
MCL1608-33NJ	33 $\pm$ 5%	12	100	1.2	0.55	300	0.8 $\pm$ 0.15
MCL1608-39NJ	39 $\pm$ 5%	12	100	1.1	0.60	300	0.8 $\pm$ 0.15
MCL1608-47NJ	47 $\pm$ 5%	12	100	0.9	0.70	300	0.8 $\pm$ 0.15
MCL1608-56NJ	56 $\pm$ 5%	12	100	0.9	0.75	300	0.8 $\pm$ 0.15
MCL1608-68NJ	68 $\pm$ 5%	12	100	0.7	0.85	300	0.8 $\pm$ 0.15
MCL1608-82NJ	82 $\pm$ 5%	12	100	0.6	0.95	300	0.8 $\pm$ 0.15
MCL1608-R10J	100 $\pm$ 5%	12	100	0.6	1.00	300	0.8 $\pm$ 0.15
MCL1608-R12J	120 $\pm$ 5%	8	50	0.5	1.20	300	0.8 $\pm$ 0.15
MCL1608-R15J	150 $\pm$ 5%	8	50	0.5	1.20	300	0.8 $\pm$ 0.15
MCL1608-R18J	180 $\pm$ 5%	8	50	0.4	1.30	300	0.8 $\pm$ 0.15
MCL1608-R22J	220 $\pm$ 5%	8	50	0.4	1.50	300	0.8 $\pm$ 0.15

## ► Electrical Characteristics For MCL2012 Series

Part Number	Inductance [nH]	Q (min)	Test Freq L,Q [MHz]	SRF(min) [GHz]	DCR(max) [Ω]	IDC(max) [mA]	Thickness [mm]
MCL2012-1N0S	1.0±0.3nH	10	100	10	0.10	300	0.85±0.2
MCL2012-1N2S	1.2±0.3nH	10	100	10	0.10	300	0.85±0.2
MCL2012-1N5S	1.5±0.3nH	10	100	4	0.10	300	0.85±0.2
MCL2012-1N8S	1.8±0.3nH	10	100	4	0.10	300	0.85±0.2
MCL2012-2N2S	2.2±0.3nH	10	100	4	0.10	300	0.85±0.2
MCL2012-2N7S	2.7±0.3nH	12	100	4	0.10	300	0.85±0.2
MCL2012-3N3S	3.3±0.3nH	12	100	4	0.13	300	0.85±0.2
MCL2012-3N9S	3.9±0.3nH	12	100	4	0.15	300	0.85±0.2
MCL2012-4N7S	4.7±0.3nH	12	100	3.5	0.20	300	0.85±0.2
MCL2012-5N6S	5.6±0.3nH	15	100	3.2	0.23	300	0.85±0.2
MCL2012-6N8J	6.8±5%	15	100	2.8	0.25	300	0.85±0.2
MCL2012-8N2J	8.2±5%	15	100	2.4	0.28	300	0.85±0.2
MCL2012-10NJ	10±5%	15	100	2.1	0.30	300	0.85±0.2
MCL2012-12NJ	12±5%	15	100	1.9	0.35	300	0.85±0.2
MCL2012-15NJ	15±5%	15	100	1.6	0.40	300	0.85±0.2
MCL2012-18NJ	18±5%	15	100	1.5	0.45	300	0.85±0.2
MCL2012-22NJ	22±5%	18	100	1.4	0.50	300	0.85±0.2
MCL2012-27NJ	27±5%	18	100	1.3	0.55	300	0.85±0.2
MCL2012-33NJ	33±5%	18	100	1.2	0.60	300	0.85±0.2
MCL2012-39NJ	39±5%	18	100	1.0	0.65	300	0.85±0.2
MCL2012-47NJ	47±5%	18	100	0.9	0.70	300	0.85±0.2
MCL2012-56NJ	56±5%	18	100	0.8	0.75	300	0.85±0.2
MCL2012-68NJ	68±5%	18	100	0.7	0.80	300	0.85±0.2
MCL2012-82NJ	82±5%	18	100	0.6	0.90	300	0.85±0.2
MCL2012-R10J	100±5%	18	100	0.6	0.90	300	0.85±0.2
MCL2012-R12J	120±5%	13	50	0.5	0.95	300	0.85±0.2
MCL2012-R15J	150±5%	13	50	0.5	1.00	300	1.25±0.2
MCL2012-R18J	180±5%	13	50	0.4	1.10	300	1.25±0.2
MCL2012-R22J	220±5%	12	50	0.35	1.20	300	1.25±0.2
MCL2012-R27J	270±5%	12	50	0.30	1.30	300	1.25±0.2
MCL2012-R33J	330±5%	12	50	0.25	1.40	300	1.25±0.2
MCL2012-R39J	390±5%	10	50	0.25	1.40	300	1.25±0.2
MCL2012-R47J	470±5%	10	50	0.20	1.50	300	1.25±0.2
MCL2012-R56J	560±5%	10	25	0.18	5.00	50	1.25±0.2
MCL2012-R68J	680±5%	10	25	0.16	5.50	50	1.25±0.2