

FEATURES:

- Closed magnetic circuit configuration avoids crosstalk and is suitable for high density PCBs
- Size range: 0201(0603-mm), 0402 (1005-mm), 0603 (1608-mm)
- Perfect shape for automatic mounting with no directionality
- Stable performance characteristics
- Ceramic core



PART NUMBER STRUCTURE

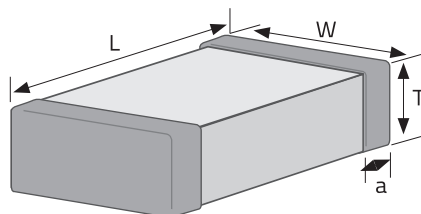
LMCI	1608	-	3N9	K	T
Series	Size		Inductance	Tolerance	Packaging
	0201		3N9 = 3.9nH	S = $\pm 0.3\text{nH}$	T = Tape & Reel
	1005		10N = 10nH	H = $\pm 3\%$	
	1608		R10 = 100nH	J = $\pm 5\%$	
				K = $\pm 10\%$	
				M = $\pm 20\%$	

Standard termination finish is 100% matte Tin (Sn) over Nickel.

Example P/N: LMC1608-3N9KT

DIMENSIONS

Unit: mm (inches)



SIZE	L	W	T	a
0603 (mm) (0201) (in)	0.60 $\pm$ 0.03 (0.024 $\pm$.0012)	0.30 $\pm$ 0.03 (0.012 $\pm$.0012)	0.3 $\pm$ 0.03 (0.012 $\pm$.0012)	0.15 $\pm$ 0.05 (0.006 $\pm$.002)
1005 (mm) (0402) (in)	1.0 $\pm$ 0.05 (0.040 $\pm$.002)	0.5 $\pm$ 0.05 (0.020 $\pm$.001)	0.5 $\pm$ 0.05 (0.014 $\pm$.002)	0.25 $\pm$ 0.1 (0.007 $\pm$.004)
1608 (mm) (0603) (in)	1.6 $\pm$ 0.15 (0.064 $\pm$.006)	0.8 $\pm$ 0.15 (0.032 $\pm$.006)	0.8 $\pm$ 0.15 (0.032 $\pm$.006)	0.3 $\pm$ 0.2 (0.012 $\pm$.008)

OPERATING / STORAGE TEMPERATURE RANGE

Operating Temperature Range	-55- +125° C
Temperature Coefficient of Inductance (TCL)	± 250 ppm
Storage Temperature Range	-10 to +40° C

ELECTRICAL SPECIFICATION & RANGE

0603 (0201mm)

INDUCTANCE (NH) @ 100 MHZ	TOLERANCE (□)	Q MIN.	Q (TYPICAL) FREQ. (MHZ)			SELF-RESONANT FREQUENCY (GHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
			500	800	2000				
0.6	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	24	32	57	10.00	0.06	600	LMCIO201-0N6□T
0.7	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	24	32	57	10.00	0.06	550	LMCIO201-0N7□T
0.8	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	24	32	57	10.00	0.07	550	LMCIO201-0N8□T
0.9	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	24	32	57	10.00	0.07	550	LMCIO201-0N9□T
1	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	24	32	57	10.00	0.08	520	LMCIO201-1N0□T
1.1	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	19	26	47	10.00	0.11	440	LMCIO201-1N1□T
1.2	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	19	25	44	10.00	0.12	420	LMCIO201-1N2□T
1.3	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	19	25	42	10.00	0.12	420	LMCIO201-1N3□T
1.4	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	19	24	41	10.00	0.11	440	LMCIO201-1N4□T
1.5	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	19	24	41	10.00	0.12	420	LMCIO201-1N5□T
1.6	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	19	24	41	10.00	0.13	410	LMCIO201-1N6□T
1.7	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	19	24	41	10.00	0.15	380	LMCIO201-1N7□T
1.8	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	19	24	41	10.00	0.15	380	LMCIO201-1N8□T
1.9	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	18	24	40	10.00	0.18	350	LMCIO201-1N9□T
2	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	24	39	10.00	0.23	300	LMCIO201-2N0□T
2.1	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	24	39	10.00	0.24	300	LMCIO201-2N1□T
2.2	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	24	40	10.00	0.25	290	LMCIO201-2N2□T
2.3	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	24	39	10.00	0.20	330	LMCIO201-2N3□T
2.4	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	23	38	10.00	0.22	310	LMCIO201-2N4□T
2.5	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	23	36	9.60	0.20	330	LMCIO201-2N5□T
2.6	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	22	35	9.40	0.20	330	LMCIO201-2N6□T
2.7	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	22	35	9.20	0.22	310	LMCIO201-2N7□T
2.8	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	22	35	8.90	0.24	300	LMCIO201-2N8□T
2.9	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	22	35	8.80	0.26	280	LMCIO201-2N9□T
3	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	22	35	8.60	0.26	280	LMCIO201-3N0□T
3.1	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	22	35	8.50	0.28	270	LMCIO201-3N1□T
3.2	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	22	35	8.20	0.28	270	LMCIO201-3N2□T
3.3	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	18	23	36	8.10	0.30	270	LMCIO201-3N3□T
3.4	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	23	35	8.00	0.30	270	LMCIO201-3N4□T
3.5	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	23	35	7.90	0.34	250	LMCIO201-3N5□T
3.6	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	16	23	35	7.70	0.38	240	LMCIO201-3N6□T
3.7	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	16	23	35	7.60	0.40	230	LMCIO201-3N7□T
3.8	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	16	22	35	7.50	0.42	230	LMCIO201-3N8□T
3.9	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	16	22	35	7.40	0.42	230	LMCIO201-3N9□T
4.3	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	16	21	34	6.80	0.44	220	LMCIO201-4N3□T
4.7	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	16	22	35	6.20	0.45	220	LMCIO201-4N7□T
5.1	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	17	22	36	5.90	0.46	210	LMCIO201-5N1□T
5.6	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	16	21	34	5.50	0.46	210	LMCIO201-5N6□T
6.2	±0.1nH,±0.2nH,±0.3nH	13 @ 500MHz	18	23	35	5.10	0.48	210	LMCIO201-6N2□T
6.8	±2%,±3%,±5%	13 @ 500MHz	17	22	33	4.90	0.50	200	LMCIO201-6N8□T
7.5	±2%,±3%,±5%	13 @ 500MHz	16	21	33	4.70	0.50	200	LMCIO201-7N5□T
8.2	±2%,±3%,±5%	13 @ 500MHz	16	21	32	4.30	0.56	190	LMCIO201-8N2□T
9.1	±2%,±3%,±5%	13 @ 500MHz	16	20	31	4.10	0.72	170	LMCIO201-9N1□T

* L and Q derived at 300MHz

ELECTRICAL SPECIFICATION & RANGE

0603 (0201mm)

INDUCTANCE (NH) @ 100 MHZ	TOLERANCE (□)	Q MIN.	Q (TYPICAL) FREQ. (MHZ)			SELF-RESONANT FREQUENCY (GHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
			500	800	2000				
10	±2%,±3%,±5%	13 @ 500MHz	16	20	29	3.80	0.80	160	LMCIO201-10N□T
12	±2%,±3%,±5%	13 @ 500MHz	16	20	28	3.40	0.80	160	LMCIO201-12N□T
15	±2%,±3%,±5%	13 @ 500MHz	15	19	24	2.60	0.85	160	LMCIO201-15N□T
18	±2%,±3%,±5%	13 @ 500MHz	15	19	24	2.30	1.00	140	LMCIO201-18N□T
22	±2%,±3%,±5%	13 @ 500MHz	15	19	23	1.90	1.20	130	LMCIO201-22N□T
27	±2%,±3%,±5%	13 @ 500MHz	15	19	13	1.80	1.60	120	LMCIO201-27N□T
33	±2%,±3%,±5%	11 @ 300MHz	14	15	5	1.80	2.20	110	LMCIO201-33N□T
39	±2%,±3%,±5%	11 @ 300MHz	14	15	-	1.60	2.30	100	LMCIO201-39N□T
47	±2%,±3%,±5%	11 @ 300MHz	14	15	-	1.50	2.60	100	LMCIO201-47N□T
56	±2%,±3%,±5%	11 @ 300MHz	13	13	-	1.40	2.80	80	LMCIO201-56N□T
68	±2%,±3%,±5%	11 @ 300MHz	13	11	-	1.20	3.20	80	LMCIO201-68N□T
82	±2%,±3%,±5%	10 @ 300MHz	12	10	-	1.10	3.80	70	LMCIO201-82N□T
100	±2%,±3%,±5%	10 @ 300MHz	12	10	-	1.00	4.00	60	LMCIO201-R10□T

0402 (1005mm)

INDUCTANCE (NH) @ 100 MHZ	TOLERANCE (□)	Q MIN.	Q (TYPICAL) FREQ. (MHZ)			SELF-RESONANT FREQUENCY (GHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
			100	800	1000				
1	±0.3nH	8 @ 100MHz	11	34	36	10.00	0.10	400	LMCI1005-1N0ST
1.1	±0.3nH	8 @ 100MHz	11	34	36	10.00	0.10	400	LMCI1005-1N1ST
1.2	±0.3nH	8 @ 100MHz	11	34	36	10.00	0.10	400	LMCI1005-1N2ST
1.3	±0.3nH	8 @ 100MHz	11	34	36	10.00	0.10	400	LMCI1005-1N3ST
1.5	±0.3nH	8 @ 100MHz	11	34	36	6.00	0.10	300	LMCI1005-1N5ST
1.6	±0.3nH	8 @ 100MHz	11	32	35	6.00	0.10	300	LMCI1005-1N6ST
1.8	±0.3nH	8 @ 100MHz	11	30	34	6.00	0.10	300	LMCI1005-1N8ST
2	±0.3nH	8 @ 100MHz	10	29	33	6.00	0.20	300	LMCI1005-2N0ST
2.2	±0.3nH	8 @ 100MHz	10	29	33	6.00	0.20	300	LMCI1005-2N2ST
2.4	±0.3nH	8 @ 100MHz	10	29	32	6.00	0.20	300	LMCI1005-2N4ST
2.7	±0.3nH	8 @ 100MHz	10	29	32	6.00	0.20	300	LMCI1005-2N7ST
3	±0.3nH	8 @ 100MHz	10	29	32	6.00	0.20	300	LMCI1005-3N0ST
3.3	±0.3nH	8 @ 100MHz	10	29	32	6.00	0.20	300	LMCI1005-3N3ST
3.6	±0.3nH	8 @ 100MHz	10	28	31	4.00	0.20	300	LMCI1005-3N6ST
3.9	±0.3nH	8 @ 100MHz	10	28	31	4.00	0.20	300	LMCI1005-3N9ST
4.3	±0.3nH	8 @ 100MHz	10	28	31	4.00	0.20	300	LMCI1005-4N3ST
4.7	±0.3nH	8 @ 100MHz	10	28	31	4.00	0.20	300	LMCI1005-4N7ST
5.1	±0.3nH	8 @ 100MHz	10	28	30	4.00	0.30	300	LMCI1005-5N1ST
5.6	±0.3nH	8 @ 100MHz	10	28	30	4.00	0.30	300	LMCI1005-5N6ST
6.2	±0.3nH	8 @ 100MHz	10	27	30	3.90	0.30	300	LMCI1005-6N2ST
6.8	±5%, ±10%	8 @ 100MHz	10	27	30	3.90	0.30	300	LMCI1005-6N8□T
7.5	±5%, ±10%	8 @ 100MHz	10	27	30	3.70	0.40	300	LMCI1005-7N5□T
8.2	±5%, ±10%	8 @ 100MHz	10	27	30	3.60	0.40	300	LMCI1005-8N2□T
10	±5%, ±10%	8 @ 100MHz	10	27	30	3.20	0.40	300	LMCI1005-10N□T
12	±5%, ±10%	8 @ 100MHz	10	26	29	2.70	0.50	300	LMCI1005-12N□T
15	±5%, ±10%	8 @ 100MHz	10	26	28	2.30	0.50	300	LMCI1005-15N□T
18	±5%, ±10%	8 @ 100MHz	10	25	27	2.10	0.60	300	LMCI1005-18N□T

* L and Q derived at 300MHz

ELECTRICAL SPECIFICATION & RANGE

0402 (1005mm)

INDUCTANCE (NH) @ 100 MHZ	TOLERANCE (□)	Q MIN.	Q (TYPICAL) FREQ. (MHZ)			SELF-RESONANT FREQUENCY (GHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
			100	800	1000				
22	±5%, ±10%	8 @ 100MHz	10	25	25	1.90	0.60	300	LMCI1005-22N□T
27	±5%, ±10%	8 @ 100MHz	10	25	23	1.60	0.70	300	LMCI1005-27N□T
33	±5%, ±10%	8 @ 100MHz	10	22	22	1.30	0.80	200	LMCI1005-33N□T
39	±5%, ±10%	8 @ 100MHz	10	22	19	1.20	1.00	200	LMCI1005-39N□T
47	±5%, ±10%	8 @ 100MHz	10	21	16	1.00	1.10	200	LMCI1005-47N□T
56	±5%, ±10%	8 @ 100MHz	10	18	13	0.75	1.20	200	LMCI1005-56N□T
68	±5%, ±10%	8 @ 100MHz	10	18	9	0.75	1.40	180	LMCI1005-68N□T
82	±5%, ±10%	8 @ 100MHz	10	13	-	0.75	2.40	150	LMCI1005-82N□T
100	±5%, ±10%	8 @ 100MHz	10	12	-	0.70	2.60	150	LMCI1005-R10□T
120	±5%, ±10%	8 @ 100MHz	10	-	-	0.60	2.80	150	LMCI1005-R12□T
150	±5%, ±10%	8 @ 100MHz	10	-	-	0.55	3.20	100	LMCI1005-R15□T
180	±5%, ±10%	8 @ 100MHz	10	-	-	0.50	3.70	100	LMCI1005-R18□T
220	±5%, ±10%	8 @ 100MHz	12	-	-	0.45	4.00	100	LMCI1005-R22□T
270	±5%, ±10%	8 @ 100MHz	12	-	-	0.40	4.50	100	LMCI1005-R27□T
330	±5%, ±10%	6 @ 50MHz	-	-	-	0.35	7.00	50	LMCI1005-R33□T

0603 (1608mm)

INDUCTANCE (NH) @ 100 MHZ	TOLERANCE (□)	Q MIN.	Q (TYPICAL) FREQ. (MHZ)			SELF-RESONANT FREQUENCY (GHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
			100	800	1000				
1	±0.3nH	8 @ 100MHz	13	70	80	10.0GHz	0.05	500	LMCI1608-1N□ST
1.2	±0.3nH	8 @ 100MHz	13	60	70	10.0GHz	0.05	500	LMCI1608-1N2ST
1.5	±0.3nH	8 @ 100MHz	13	47	68	6.00GHz	0.10	500	LMCI1608-1N5ST
1.8	±0.3nH	8 @ 100MHz	13	45	61	6.00GHz	0.10	500	LMCI1608-1N8ST
2.2	±0.3nH	8 @ 100MHz	13	45	60	6.00GHz	0.10	500	LMCI1608-2N2ST
2.7	±0.3nH	10 @ 100MHz	13	44	55	6.00GHz	0.12	500	LMCI1608-2N7ST
3.3	±0.3nH	10 @ 100MHz	13	43	50	6.00GHz	0.15	500	LMCI1608-3N3ST
3.9	±0.3nH	10 @ 100MHz	13	43	50	6.00GHz	0.16	500	LMCI1608-3N9ST
4.7	±0.3nH	10 @ 100MHz	13	43	50	6.00GHz	0.20	500	LMCI1608-4N7ST
5.6	±0.3nH	10 @ 100MHz	14	42	48	5.00GHz	0.25	500	LMCI1608-5N6ST
6.8	±5%, ±10%	10 @ 100MHz	14	43	50	5.00GHz	0.30	500	LMCI1608-6N8□T
8.2	±5%, ±10%	10 @ 100MHz	14	43	48	4.50GHz	0.35	500	LMCI1608-8N2□T
10	±5%, ±10%	12 @ 100MHz	15	45	50	3.50GHz	0.40	300	LMCI1608-10N□T
12	±5%, ±10%	12 @ 100MHz	18	48	50	3.00GHz	0.45	300	LMCI1608-12N□T
15	±5%, ±10%	12 @ 100MHz	18	48	50	2.30GHz	0.50	300	LMCI1608-15N□T
18	±5%, ±10%	12 @ 100MHz	16	48	51	2.20GHz	0.55	300	LMCI1608-18N□T
22	±5%, ±10%	12 @ 100MHz	16	45	48	2.00GHz	0.60	300	LMCI1608-22N□T
27	±5%, ±10%	12 @ 100MHz	16	45	45	1.70GHz	0.65	300	LMCI1608-27N□T
33	±5%, ±10%	12 @ 100MHz	16	45	41	1.50GHz	0.70	300	LMCI1608-33N□T
39	±5%, ±10%	12 @ 100MHz	17	40	48	1.40GHz	0.70	300	LMCI1608-39N□T
47	±5%, ±10%	12 @ 100MHz	17	35	35	1.20GHz	0.70	300	LMCI1608-47N□T
56	±5%, ±10%	12 @ 100MHz	17	35	30	1.10GHz	0.75	300	LMCI1608-56N□T
68	±5%, ±10%	12 @ 100MHz	17	30	20	0.90GHz	0.85	300	LMCI1608-68N□T
82	±5%, ±10%	8 @ 100MHz	15	22	-	0.80GHz	1.00	300	LMCI1608-82N□T
100	±5%, ±10%	8 @ 100MHz	15	16	-	0.70GHz	1.20	300	LMCI1608-R10□T
120	±5%, ±10%	8 @ 50MHz	15	-	-	0.60GHz	1.40	200	LMCI1608-R12□T

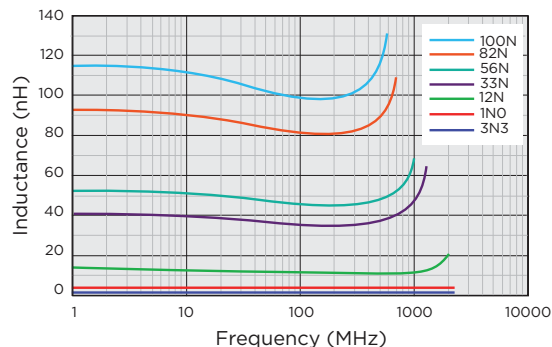
ELECTRICAL SPECIFICATION & RANGE

0603 (1608mm)

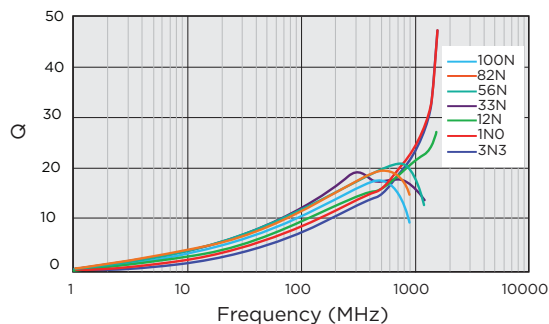
INDUCTANCE (NH) @ 100 MHZ	TOLERANCE (□)	Q MIN.	Q (TYPICAL) FREQ. (MHZ)			SELF-RESONANT FREQUENCY (GHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
			100	800	1000				
150	±5%, ±10%	8 @ 50MHz	15	-	-	0.50GHz	1.60	200	LMCI1608-R15□T
180	±5%, ±10%	8 @ 50MHz	15	-	-	0.40GHz	1.90	200	LMCI1608-R18□T
220	±5%, ±10%	8 @ 50MHz	15	-	-	0.35GHz	2.40	200	LMCI1608-R22□T
270	±5%, ±10%	8 @ 50MHz	16	-	-	0.35GHz	2.60	150	LMCI1608-R27□T
330	±5%, ±10%	8 @ 50MHz	16	-	-	0.35GHz	2.80	150	LMCI1608-R33□T
390	±5%, ±10%	8 @ 50MHz	16	-	-	0.30GHz	3.20	150	LMCI1608-R39□T
430	±5%, ±10%	8 @ 50MHz	16	-	-	0.28GHz	3.40	150	LMCI1608-R43□T
470	±5%, ±10%	8 @ 50MHz	15	-	-	0.25GHz	3.60	150	LMCI1608-R47□T
560	±5%, ±10%	8 @ 50MHz	15	-	-	0.25GHz	4.00	100	LMCI1608-R56□T
680	±5%, ±10%	8 @ 50MHz	15	-	-	0.25GHz	4.50	100	LMCI1608-R68□T

ELECTRICAL SPECIFICATION & RANGE

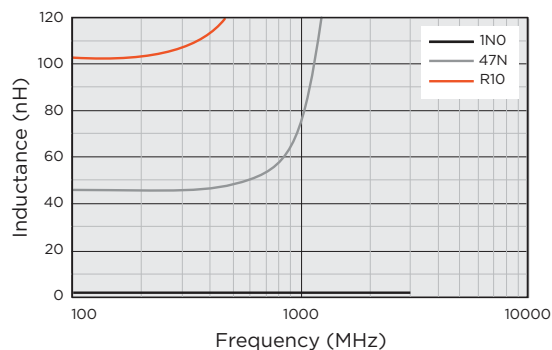
L VS FREQUENCY 0201



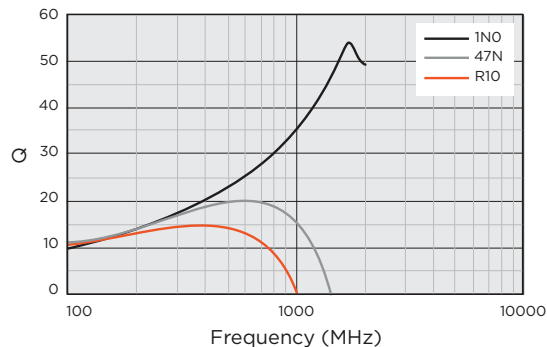
Q VS FREQUENCY 0201



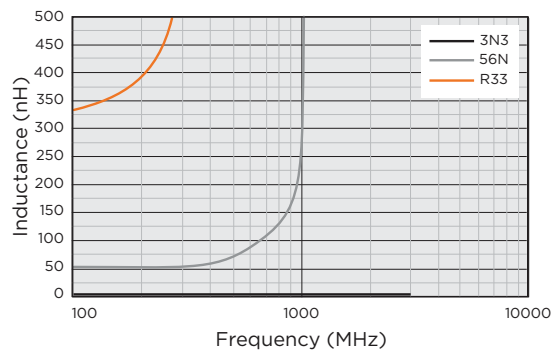
L VS FREQUENCY 0402



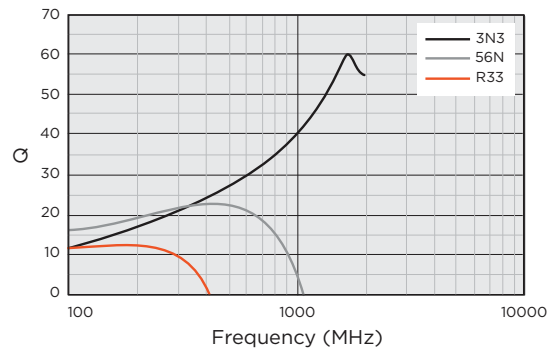
Q VS FREQUENCY 0402



L VS FREQUENCY 0603

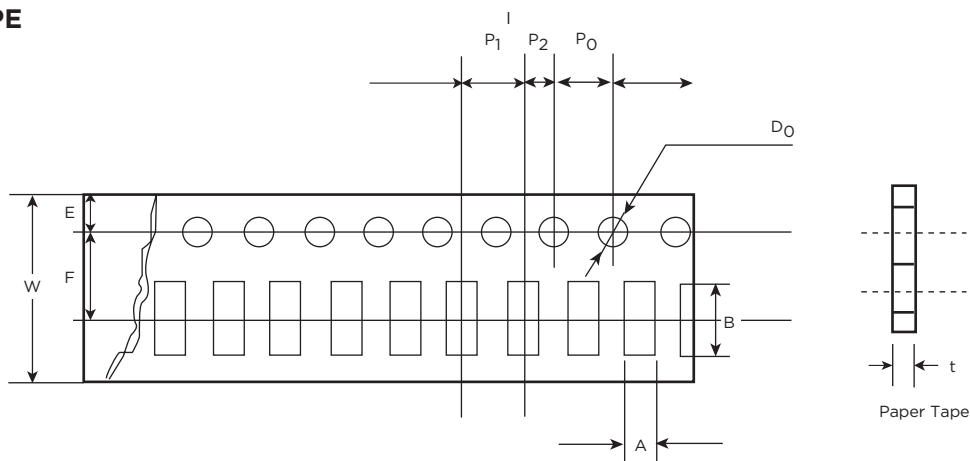


Q VS FREQUENCY 0603



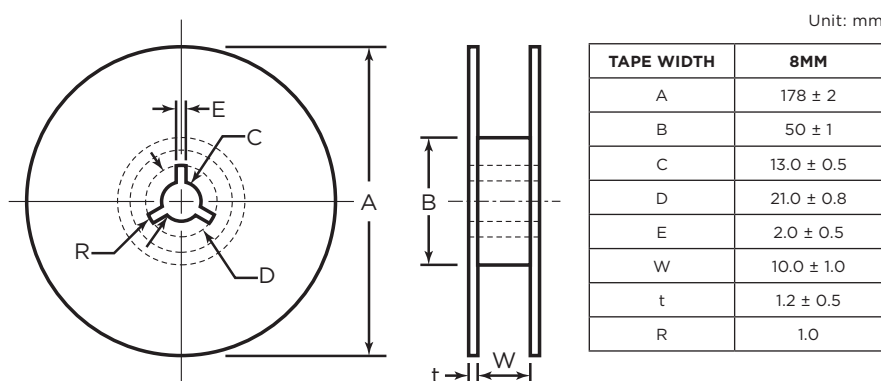
TAPE & REEL SPECIFICATIONS

CARRIER TAPE



SIZE	0201 INCHES	1005mm	1608mm
Tape	Paper Tape	Paper Tape	Paper Tape
W	8.0 ± 0.2	8.0 ± 0.2	8.0 ± 0.2
F	3.5 ± 0.05	3.5 ± 0.05	3.5 ± 0.05
E	1.75 ± 0.1	1.75 ± 0.1	1.75 ± 0.1
P ₁	2.0 ± 0.05	2.0 ± 0.05	4.0 ± 0.1
P ₂	1.0 +/- 0.05	1.0 +/- 0.05	2.0 ± 0.05
P ₀	4.0 ± 0.1	4.0 ± 0.1	4.0 ± 0.1
D ₀	1.5 ± 0.1	1.5 ± 0.1	1.5 ± 0.1
A	0.38 ± 0.1	0.65 ± 0.1	1.10 ± 0.2
B	0.68 ± 0.1	1.12 ± 0.1	1.80 ± 0.20
t	0.42 ± 0.1	0.60 ± 0.1	0.95 ± 0.1
Qty/Reel	15,000	10,000	4,000

REEL



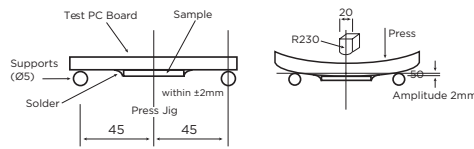
TAPE WIDTH	8MM
A	178 ± 2
B	50 ± 1
C	13.0 ± 0.5
D	21.0 ± 0.8
E	2.0 ± 0.5
W	10.0 ± 1.0
t	1.2 ± 0.5
R	1.0

ENVIRONMENTAL CHARACTERISTICS

ELECTRICAL PERFORMANCE TEST

TEST	REQUIREMENT	TEST METHOD
Inductance	Within specified tolerance	Temperature: 20±1°C Relative Humidity: 45 to 85%RH Atmospheric Pressure: 86 to 106kpa Measuring equipment and fixture: 0201: E991A+HP16197A 0402/0603: E991A+HP16192A Test Signal: -20dBm or 50mV Test compensation(for 0201 high Q): Product true value= test value + compensation value. for L<3.6nH, compensation value is 0.25nH; for 3.6nH≤L<6.8nH, compensation value is 0.43nH; for 6.8 nH≤L<9.1nH, compensation value is 0.5nH; for L≥9.1nH, compensation value is 0.85nH;
Q Value	In accordance with electrical specification	Temperature: 20±1°C Relative Humidity: 45 to 85%RH Atmospheric Pressure: 86 to 106kpa
DC Resistance	In accordance with electrical specification	Temperature: 20±1°C Relative Humidity: 45 to 85%RH Atmospheric Pressure: 86 to 106kpa Measuring equipment: HP 4338

MECHANICAL PERFORMANCE TEST

TEST	REQUIREMENT	TEST METHOD
Bending Strength	No mechanical damage shall be observed	MOUNTING SAMPLES units: mm Flexure: 2mm Pressurizing speed: 0.5mm/sec Keep time: 30sec 
Solderability	No visible mechanical damage Wetting shall exceed 75% coverage for 0201 series; exceed 95% coverage for others	Solder temperature: 240±2°C Time: 3 seconds Solder: Sn/3.0Ag/0.5Cu Flux: 25% resin and 75% ethanol in weight
Resistance to Soldering Heat	No visible mechanical damage Wetting shall exceed 75% coverage for 0201 series; exceed 95% coverage for others Inductance change: within±10% Q change: within±20%	Solder temperature: 260±3°C Time: 5 seconds Solder: Sn/3.0Ag/0.5Cu Flux: 25% resin and 75% ethanol in weight The chip shall be stabilized at normal condition for 1-2 hours before measuring
Dropping	No visible mechanical damage Inductance change: within±10% Q change: within±20%	Drop chip inductor 10 times on a concrete floor from a height of 100cm

ENVIRONMENTAL CHARACTERISTICS

CLIMATIC TEST

TEST	REQUIREMENT	TEST METHOD
Thermal Shock	No visible damage Inductance variation within 10% Q variation within 20%	0201/0402 series: -55°C for 30 ± 3 min $\pm 125^{\circ}\text{C}$ for 30 ± 3 min 0603 series: -40°C for 30 ± 3 min $\pm 85^{\circ}\text{C}$ for 30 ± 3 min Transforming interval: max. 20 seconds Test cycle: 100 cycles The chip shall be stabilized at normal condition for 1-2 hours Before measuring
Resistance to Low Temperature		Temperature: 0201/0402 series: $-55\pm 2^{\circ}\text{C}$; 0603 series: $-40\pm 2^{\circ}\text{C}$ Time: 1000 ± 24 hours The chip shall be stabilized at normal condition for 1-2 hours Before measuring
Resistance to High Temperature		Temperature: 0201/0402 series: $125\pm 2^{\circ}\text{C}$; 0603 series: $85\pm 2^{\circ}\text{C}$ Time: 1000 ± 24 hours The chip shall be stabilized at normal condition for 1-2 hours Before measuring
Damp Heat (Steady States)		Temperature: $60\pm 2^{\circ}\text{C}$ Humidity: 90-95% RH. Time: 1000 ± 24 hours The chip shall be stabilized at normal condition for 1-2 hours Before measuring
Loading Under Damp Heat		Temperature: $60\pm 2^{\circ}\text{C}$ Humidity: 90-95% RH. Time: 1000 ± 24 hours Applied current: Rated current The chip shall be stabilized at normal condition for 1-2 hours Before measuring
Loading at High Temperature (Life Test)		Temperature: 0201/0402 series: $125\pm 2^{\circ}\text{C}$; 0603 series: $85\pm 2^{\circ}\text{C}$ Time: 1000 ± 24 hours Applied current: Rated current The chip shall be stabilized at normal condition for 1-2 hours Before measuring