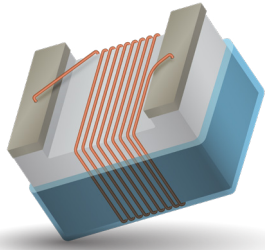


WIRE WOUND CHIP INDUCTOR

LCWC Series



APPLICATIONS

RF Products:

- Cellular Phone (CDMA/GSM/PHS)
- Cordless Phone (DECT/CT1CT2)
- 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
- Set Top Box

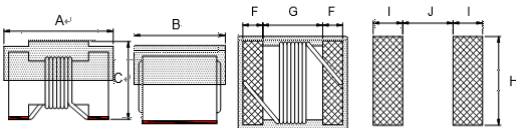
IT Applications:

- USB 2.0
- IEEE 1394

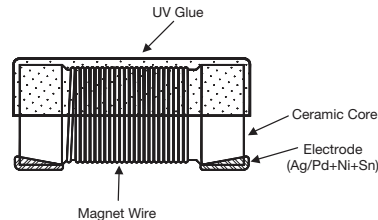
FEATURES

- Ceramic base provides high SRF
- Ultra-compact inductors provide high Q factors
- High current range available
- Miniature SMD chip inductor for fully automated assembly
- Outstanding endurance from Pull-up force, mechanical shock and pressure
- Tighter tolerance down to $\pm 2\%$
- -40°C to $+125^{\circ}\text{C}$

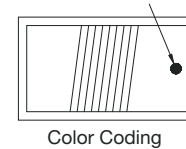
DIMENSIONS



CONSTRUCTION



COLOR CODING



Standard

mm (inches)

Type	Size (inch)	A Max.	B Max.	C Max.	F	G	H	I	J	Weight (g) (1000pcs)
LCWC 0402	0402	1.19	0.66	0.64	0.23	0.56	0.66	0.36	0.46	0.84
LCWC 0603	0603	1.8	1.02	1.12	0.33	0.86	1.02	0.64	0.64	3.13
LCWC 0805	0805	2.29	1.52	1.73	0.51	1.02	1.78	1.02	0.76	10.42
LCWC 1008	1008	2.92	2.1	2.79	0.51	1.52	2.54	1.27	1.27	33.40
LCWC 1210	1210	3.42	2.3	2.8	0.5	2.05	2.2	1.02	1.78	43.30

High Current/High Q

mm (inches)

Type	Size (inch)	A Max.	B Max.	C Max.	F	G	H	I	J
LCWC 0603	0603	1.80 (0.071)	1.12 (0.044)	1.02 (0.040)	0.33 (0.013)	0.86 (0.034)	1.02 (0.040)	0.64 (0.025)	0.64 (0.025)
LCWC 0805	0805	2.29 (0.090)	1.73 (0.068)	1.52 (0.060)	0.44 (0.017)	1.02 (0.040)	1.78 (0.070)	1.02 (0.040)	0.76 (0.030)
LCWC 1008	1008	2.92 (0.115)	2.79 (0.110)	2.03 (0.080)	0.51 (0.020)	1.52 (0.060)	2.54 (0.100)	1.02 (0.040)	1.27 (0.050)

HOW TO ORDER

LC	WC	0402	K	101	G	T	A	R
Family	Series	Size	Tolerance	Inductance	Style	Termination	Special	Packaging
LC = Chip Inductor	WC = Wire Wound Ceramic	0402 0603 0805 1008 1210	G = 2% J = 5% K = 10% W = ± 0.5 U = ± 0.2 Z = ± 0.1	3N9 = 3.9nH 39N = 39nH R39 = 390nH 3R9 = 3900nH 153 = 15000nH	G = Standard Q = High Q/ High Current	T = Sn Plating	A = Standard	R = 7" Reel



The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

WIRE WOUND CHIP INDUCTOR

LCWC Series



STANDARD ELECTRICAL SPECIFICATIONS

0402

Inductance (nH)	Tolerance	L Freq. (MHz)	Quality Factor Min.	SRF (GHz)	DCR (Ω) max.	IDC (mA) max.	900MHz		1.7GHz	
							L	Q	L	Q
1	±0.5nH, ±0.2nH, ±0.1nH	250	16	12.7	0.045	1360	1.02	75	1.02	70
1.2	±0.5nH, ±0.2nH, ±0.1nH	250	16	12.9	0.09	740	1.17	30	1.17	40
1.8	±0.5nH, ±0.2nH, ±0.1nH	250	16	12	0.07	1040	2.08	59	1.94	74
1.9	±0.5nH, ±0.2nH, ±0.1nH	250	16	11.3	0.07	1040	1.72	65	1.74	80
2	±0.5nH, ±0.2nH, ±0.1nH	250	16	11.1	0.07	1040	1.93	54	1.93	75
2.2	±0.5nH, ±0.2nH, ±0.1nH	250	19	10.8	0.07	960	2.19	55	2.23	82
2.4	±0.5nH, ±0.2nH, ±0.1nH	250	15	10.5	0.068	790	2.24	51	2.27	70
2.5	±0.5nH, ±0.2nH, ±0.1nH	250	15	10.4	0.15	660	2.37	33	2.38	53
2.7	±0.5nH, ±0.2nH, ±0.1nH	250	16	10.4	0.12	640	2.58	42	2.6	61
3.3	±0.5nH, ±0.2nH, ±0.1nH	250	19	7	0.066	840	3.1	65	3.12	80
3.6	±0.5nH, ±0.2nH, ±0.1nH	250	19	6.8	0.066	840	3.56	45	3.62	71
3.9	±0.5nH, ±0.2nH, ±0.1nH	250	19	6	0.066	840	3.89	50	4.14	72
4.1	±0.5nH, ±0.2nH, ±0.1nH	250	18	6	0.066	700	3.89	50	4.14	72
4.3	±0.5nH, ±0.2nH, ±0.1nH	250	18	6	0.091	700	4.19	40	4.3	71
4.7	±0.5nH, ±0.2nH, ±0.1nH	250	15	4.7	0.13	640	4.78	47	4.59	62
5.1	±0.5nH, ±0.2nH, ±0.1nH	250	20	4.8	0.083	800	5.16	52	5.19	76
5.6	2%, 5%, 10%	250	20	4.8	0.083	760	5.2	48	5.28	75
5.8	2%, 5%, 10%	250	20	4.8	0.083	760	5.6	48	5.63	74
6.2	2%, 5%, 10%	250	20	4.8	0.083	760	6.15	50	6.2	73
6.8	2%, 5%, 10%	250	20	4.8	0.083	680	6.73	65	6.95	70
7.3	2%, 5%, 10%	250	20	4.8	0.1	680	7.51	60	7.89	80
7.5	2%, 5%, 10%	250	22	4.8	0.1	680	7.91	60	8.22	85
8.2	2%, 5%, 10%	250	22	4.4	0.1	680	8.53	64	8.81	88
8.7	2%, 5%, 10%	250	18	4.1	0.2	480	8.78	54	9.21	73
9	2%, 5%, 10%	250	22	4.16	0.1	680	9.07	65	9.53	83
9.1	2%, 5%, 10%	250	22	4.16	0.1	680	9.27	63	8.61	73
9.5	2%, 5%, 10%	250	18	4	0.2	480	9.64	62	9.93	56
10	2%, 5%, 10%	250	21	3.9	0.2	480	10.16	50	9.72	85
11	2%, 5%, 10%	250	24	3.68	0.12	640	10.89	53	11.46	77
12	2%, 5%, 10%	250	24	3.6	0.12	640	12.71	62	12.87	77
13	2%, 5%, 10%	250	24	3.45	0.21	440	13.4	51	14.63	57
15	2%, 5%, 10%	250	24	3.28	0.17	560	15.2	55	16.88	76
16	2%, 5%, 10%	250	24	3.1	0.22	560	16.43	45	18.79	49
18	2%, 5%, 10%	250	25	3.1	0.23	420	17.39	52	22.18	64
19	2%, 5%, 10%	250	24	3.04	0.2	480	19.51	60	21.85	72
20	2%, 5%, 10%	250	25	3	0.25	420	20.7	52	23.66	53
22	2%, 5%, 10%	250	25	2.8	0.3	400	22.33	57	26.54	53
23	2%, 5%, 10%	250	22	2.72	0.3	400	23.8	49	26.85	64
24	2%, 5%, 10%	250	25	2.7	0.3	400	25.59	59	31.06	56
27	2%, 5%, 10%	250	24	2.48	0.3	400	29.26	45	32.56	62
30	2%, 5%, 10%	250	25	2.35	0.3	400	31.9	45	40.38	41
33	2%, 5%, 10%	250	24	2.35	0.44	400	34.12	35	40.32	36
36	2%, 5%, 10%	250	24	2.32	0.44	320	39.5	45	48.4	53
39	2%, 5%, 10%	250	25	2.1	0.55	200	42.65	45	50.96	42
40	2%, 5%, 10%	250	24	2.24	0.44	320	39	44	47.41	35
43	2%, 5%, 10%	250	25	2.03	0.81	100	45.8	46	61.55	35
47	2%, 5%, 10%	250	20	2.1	0.83	150	52.85	42	-	-
51	2%, 5%, 10%	250	25	1.75	0.82	100	56.6	40	-	-
56	2%, 5%, 10%	250	22	1.76	0.97	100	58.59	40	-	-
57	2%, 5%, 10%	250	22	1.76	0.97	100	60.15	40	-	-
62	2%, 5%, 10%	250	22	1.76	1.62	100	64.95	40	-	-
68	2%, 5%, 10%	250	22	1.62	1.12	100	72.17	40	-	-
72	2%, 5%, 10%	250	20	1.26	2	30	-	-	-	-
75	2%, 5%, 10%	250	20	1.62	2	50	-	-	-	-
82	2%, 5%, 10%	250	20	1.26	1.55	50	-	-	-	-
91	2%, 5%, 10%	250	22	1.26	2	50	-	-	-	-
100	2%, 5%, 10%	250	20	1.16	2	30	-	-	-	-
120	2%, 5%, 10%	250	20	1.9	2.2	50	-	-	-	-

WIRE WOUND CHIP INDUCTOR

LCWC Series



0603

Inductance (nH)	Tolerance	L Freq. (MHz)	Quality Factor Min.	SRF (GHz)	DCR (Ω) max.	IDC (mA) max.	900MHz		1.7GHz		Color Code
							L	Q	L	Q	
1.6	±5, ±10%	250	24	12.5	0.030	700	1.53	35	1.58	55	Blue
1.8	±5, ±10%	250	16	12.5	0.045	700	1.63	35	1.66	50	Black
2.2	±5, ±10%	250	15	6.00	0.100	700	2.18	41	2.20	64	White
2.3	±5, ±10%	250	16	>4.00	0.140	700	2.32	32	2.35	40	Yellow
3.3	±2, ±5, ±10%	250	22	>6.00	0.080	700	3.35	47	3.40	65	Red
3.6	±2, ±5, ±10%	250	22	5.80	0.063	700	3.53	49	3.58	65	Violet
3.9	±2, ±5, ±10%	250	22	>6.00	0.080	700	3.95	49	3.96	67	Brown
4.3	±2, ±5, ±10%	250	22	5.80	0.063	700	4.32	49	4.43	67	Orange
4.5	±2, ±5, ±10%	250	20	5.80	0.120	700	4.74	55	4.87	92	Gray
4.7	±2, ±5, ±10%	250	25	5.80	0.120	700	4.65	53	4.80	67	Violet
5.1	±2, ±5, ±10%	250	20	5.80	0.160	700	5.13	47	5.36	56	Green
5.6	±2, ±5, ±10%	250	20	5.80	0.170	700	5.53	56	5.86	77	Yellow
6.2	±2, ±5, ±10%	250	25	5.80	0.110	700	6.28	60	6.40	85	Black
6.3	±2, ±5, ±10%	250	25	5.80	0.110	700	6.67	41	6.86	61	Black
6.8	±2, ±5, ±10%	250	27	5.80	0.110	700	6.75	60	7.10	81	Red
7.5	±2, ±5, ±10%	250	28	4.80	0.106	700	7.70	60	7.82	65	Brown
8.2	±2, ±5, ±10%	250	27	4.80	0.110	700	8.25	64	8.40	81	Green
8.7	±2, ±5, ±10%	250	28	4.80	0.109	700	8.86	62	9.32	58	Yellow
9.1	±2, ±5, ±10%	250	35	4.80	0.130	700	9.20	70	9.70	80	Black
9.5	±2, ±5, ±10%	250	28	5.40	0.135	700	9.70	59	9.92	61	Blue
10	±2, ±5, ±10%	250	31	4.80	0.130	700	10.0	66	10.6	83	Orange
11	±2, ±5, ±10%	250	31	4.00	0.086	700	11.3	53	12.1	56	Gray
12	±2, ±5, ±10%	250	35	4.00	0.130	700	12.3	72	13.5	83	Yellow
15	±2, ±5, ±10%	250	35	4.00	0.170	700	15.4	64	16.8	89	Green
16	±2, ±5, ±10%	250	35	3.30	0.110	700	16.5	55	18.0	52	White
17	±2, ±5, ±10%	250	35	3.20	0.170	700	17.6	56	19.4	44	Red
18	±2, ±5, ±10%	250	35	3.10	0.170	700	18.7	70	21.4	69	Blue
20	±2, ±5, ±10%	250	40	3.00	0.190	700	20.7	80	23.5	30	Green
22	±2, ±5, ±10%	250	38	3.00	0.190	700	22.8	73	26.1	71	Violet
23	±2, ±5, ±10%	250	38	2.85	0.190	700	24.1	71	28.0	71	Orange
24	±2, ±5, ±10%	250	38	2.80	0.130	700	25.7	45	30.9	40	Black
27	±2, ±5, ±10%	250	40	2.80	0.220	600	29.2	74	34.6	65	Gray
30	±2, ±5, ±10%	250	40	2.80	0.150	600	31.4	47	39.8	28	Brown
33	±2, ±5, ±10%	250	40	2.30	0.220	600	36.0	67	49.5	42	White
36	±2, ±5, ±10%	250	37	2.30	0.250	600	39.1	47	48.9	24	Red
39	±2, ±5, ±10%	250	40	2.20	0.250	600	42.7	60	60.2	40	Black
43	±2, ±5, ±10%	200	38	2.00	0.280	600	46.9	44	60.3	21	Orange
47	±2, ±5, ±10%	200	38	2.00	0.280	600	52.2	62	77.2	35	Brown
51	±2, ±5, ±10%	200	38	1.90	0.280	600	55.5	69	82.2	34	Blue
56	±2, ±5, ±10%	200	38	1.90	0.310	600	62.5	56	97.0	26	Red
62	±2, ±5, ±10%	200	37	1.80	0.340	600	68.0	40	110	10	Gray
68	±2, ±5, ±10%	200	37	1.70	0.340	600	80.5	54	168	21	Orange
72	±2, ±5, ±10%	150	34	1.70	0.490	600	82.0	53	135	20	Yellow
82	±2, ±5, ±10%	150	34	1.70	0.540	400	96.2	54	177	21	Green
91	±2, ±5, ±10%	150	30	1.70	0.500	400	110.0	50	416.4	6	Brown
100	±2, ±5, ±10%	150	34	1.40	0.580	400	124.0	49	319.5	13	Blue
110	±2, ±5, ±10%	150	32	1.35	0.610	300	138.0	43	342.7	15	Violet
120	±2, ±5, ±10%	150	32	1.30	0.650	300	166.0	39	529.3	8	Gray
130	±2, ±5, ±10%	150	30	1.40	0.720	300	185.0	60	-	-	White
140	±2, ±5, ±10%	100	28	1.30	0.870	280	190.0	80	-	-	Blue
150	±2, ±5, ±10%	100	28	1.30	0.950	280	230.0	25	-	-	White
160	±2, ±5, ±10%	100	25	1.30	1.400	280	215.0	20	-	-	Yellow
180	±2, ±5, ±10%	100	25	1.25	1.400	250	305.0	22	-	-	Black
220	±2, ±5, ±10%	100	25	1.20	1.600	250	377.0	21	-	-	Brown
260	±2, ±5, ±10%	100	25	1.00	2.000	200	469.0	21	-	-	Violet
270	±2, ±5, ±10%	100	25	0.90	2.100	200	523.0	19	-	-	Red
280	±2, ±5, ±10%	100	25	1.00	2.400	100	524.0	18	-	-	Green
300	±2, ±5, ±10%	100	25	0.75	2.500	150	539.7	21	-	-	Orange
330	±2, ±5, ±10%	100	25	0.90	3.800	100	680.4	20	-	-	Blue
390	±2, ±5, ±10%	100	25	0.90	4.350	100	734.5	29	-	-	Yellow
470	±2, ±5, ±10%	100	23	0.60	3.600	80	-	-	-	-	White



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WIRE WOUND CHIP INDUCTOR

LCWC Series



0805

Inductance (nH)	Tolerance	L Freq. (MHz)	Quality Factor Min.	SRF (GHz) min	DCR (Ω) max.	IDC (mA) max.	Color Code
2.7	±5, ±10%	250	80 @ 1500MHz	7.900	0.06	800	Brown
2.8	±5, ±10%	250	80 @ 1500MHz	7.900	0.06	800	Gray
3.0	±5, ±10%	250	65 @ 1500MHz	7.900	0.06	800	White
3.3	±5, ±10%	250	50 @ 1500MHz	6.000	0.08	600	Black
5.6	±5, ±10%	250	65 @ 1000MHz	5.500	0.08	600	Orange
6.2	±5, ±10%	250	50 @ 1000MHz	5.500	0.11	600	Green
6.8	±5, ±10%	250	50 @ 1000MHz	5.500	0.11	600	Brown
7.5	±5, ±10%	250	50 @ 1000MHz	4.500	0.14	600	Green
8.2	±5, ±10%	250	50 @ 1000MHz	4.700	0.12	600	Red
8.7	±5, ±10%	250	50 @ 1000MHz	4.000	0.21	400	White
10	±2, ±5, ±10%	250	60 @ 500MHz	4.200	0.10	600	Blue
12	±2, ±5, ±10%	250	50 @ 500MHz	4.000	0.15	600	Orange
15	±2, ±5, ±10%	250	50 @ 500MHz	3.400	0.17	600	Yellow
18	±2, ±5, ±10%	250	50 @ 500MHz	3.300	0.20	600	Green
22	±2, ±5, ±10%	250	55 @ 500MHz	2.600	0.22	500	Blue
24	±2, ±5, ±10%	250	50 @ 500MHz	2.000	0.22	500	Gray
27	±2, ±5, ±10%	250	55 @ 500MHz	2.500	0.25	500	Violet
33	±2, ±5, ±10%	250	60 @ 500MHz	2.050	0.27	500	Gray
36	±2, ±5, ±10%	250	55 @ 500MHz	1.700	0.27	500	Orange
39	±2, ±5, ±10%	250	60 @ 500MHz	2.000	0.29	500	White
43	±2, ±5, ±10%	200	60 @ 500MHz	1.650	0.34	500	Yellow
47	±2, ±5, ±10%	200	60 @ 500MHz	1.650	0.31	500	Black
56	±2, ±5, ±10%	200	60 @ 500MHz	1.550	0.34	500	Brown
68	±2, ±5, ±10%	200	60 @ 500MHz	1.450	0.38	500	Red
72	±2, ±5, ±10%	150	65 @ 500MHz	1.400	0.40	500	Green
82	±2, ±5, ±10%	150	65 @ 500MHz	1.300	0.42	400	Orange
91	±2, ±5, ±10%	150	65 @ 500MHz	1.200	0.48	400	Black
100	±2, ±5, ±10%	150	65 @ 500MHz	1.200	0.46	400	Yellow
110	±2, ±5, ±10%	150	50 @ 250MHz	1.000	0.48	400	Brown
120	±2, ±5, ±10%	150	50 @ 250MHz	1.100	0.51	400	Green
150	±2, ±5, ±10%	100	50 @ 250MHz	0.920	0.56	400	Blue
180	±2, ±5, ±10%	100	50 @ 250MHz	0.870	0.64	400	Violet
200	±2, ±5, ±10%	100	50 @ 250MHz	0.860	0.66	400	Orange
220	±2, ±5, ±10%	100	50 @ 250MHz	0.850	0.70	400	Gray
240	±2, ±5, ±10%	100	44 @ 250MHz	0.690	1.00	350	Red
250	±2, ±5, ±10%	100	50 @ 250MHz	0.680	1.00	350	Green
270	±2, ±5, ±10%	100	48 @ 250MHz	0.650	1.00	350	White
300	±2, ±5, ±10%	100	48 @ 250MHz	0.620	1.20	330	Yellow
330	±2, ±5, ±10%	100	48 @ 250MHz	0.600	1.40	310	Black
360	±2, ±5, ±10%	100	48 @ 250MHz	0.580	1.45	300	Green
390	±2, ±5, ±10%	100	48 @ 250MHz	0.560	1.50	290	Brown
430	±2, ±5, ±10%	50	33 @ 100MHz	0.430	1.70	230	Blue
470	±2, ±5, ±10%	50	33 @ 100MHz	0.375	1.70	250	Red
560	±2, ±5, ±10%	25	23 @ 50MHz	0.340	1.90	230	Orange
600	±2, ±5, ±10%	25	23 @ 50MHz	0.260	1.60	450	White
620	±2, ±5, ±10%	25	23 @ 50MHz	0.220	2.20	210	Yellow
680	±2, ±5, ±10%	25	23 @ 50MHz	0.200	2.20	190	Green
750	±2, ±5, ±10%	25	23 @ 50MHz	0.200	2.30	180	Blue
820	±2, ±5, ±10%	25	23 @ 50MHz	0.200	2.35	180	Violet
1000	±2, ±5, ±10%	25	20 @ 50MHz	0.100	2.50	170	Gray
1200	±2, ±5, ±10%	7.9	18 @ 25MHz	0.100	2.50	170	White
1500	±2, ±5, ±10%	7.9	16 @ 25MHz	0.100	2.50	170	Black
1800	±2, ±5, ±10%	7.9	16 @ 7.9MHz	0.080	2.50	170	Brown
2200	±2, ±5, ±10%	7.9	16 @ 7.9MHz	0.060	2.70	160	Red
2700	±2, ±5, ±10%	7.9	16 @ 7.9MHz	0.050	3.10	150	Orange
3300	±2, ±5, ±10%	7.9	15 @ 7.9MHz	0.040	4.40	90	Blue
4700	±2, ±5, ±10%	7.9	15 @ 7.9MHz	0.040	6.40	90	Green

WIRE WOUND CHIP INDUCTOR

LCWC Series



1008

Inductance (nH)	Tolerance	L Freq. (MHz)	Quality Factor Min.	SRF (GHz) min	DCR (Ω) max.	IDC (mA) max.	Color Code
*5.6	±5, ±10%	50	50 @ 1500MHz	4.000	0.15	1000	Black
*10	±2, ±5, ±10%	50	50 @ 500MHz	4.100	0.08	1000	Brown
*12	±2, ±5, ±10%	50	50 @ 500MHz	3.300	0.09	1000	Red
*15	±2, ±5, ±10%	50	50 @ 500MHz	2.500	0.11	1000	Orange
*18	±2, ±5, ±10%	50	50 @ 350MHz	2.400	0.12	1000	Yellow
*22	±2, ±5, ±10%	50	55 @ 350MHz	2.400	0.12	1000	Green
24	±2, ±5, ±10%	50	55 @ 350MHz	1.900	0.13	1000	Blue
*27	±2, ±5, ±10%	50	55 @ 350MHz	1.600	0.13	1000	Violet
*33	±2, ±5, ±10%	50	60 @ 350MHz	1.600	0.14	1000	Gray
36	±2, ±5, ±10%	50	60 @ 350MHz	1.600	0.15	1000	Orange
*39	±2, ±5, ±10%	50	60 @ 350MHz	1.500	0.15	1000	White
*47	±2, ±5, ±10%	50	65 @ 350MHz	1.500	0.16	1000	Black
*56	±2, ±5, ±10%	50	65 @ 350MHz	1.300	0.18	1000	Brown
*62	±2, ±5, ±10%	50	65 @ 350MHz	1.250	0.20	1000	Blue
*68	±2, ±5, ±10%	50	65 @ 350MHz	1.300	0.20	1000	Red
75	±2, ±5, ±10%	50	60 @ 350MHz	1.100	0.21	1000	White
*82	±2, ±5, ±10%	50	60 @ 350MHz	1.000	0.22	1000	Orange
91	±2, ±5, ±10%	50	50 @ 350MHz	1.000	0.45	1000	White
*100	±2, ±5, ±10%	25	60 @ 350MHz	1.000	0.56	650	Yellow
*120	±2, ±5, ±10%	25	60 @ 350MHz	0.950	0.63	650	Green
*150	±2, ±5, ±10%	25	45 @ 100MHz	0.850	0.70	800	Blue
*180	±2, ±5, ±10%	25	45 @ 100MHz	0.750	0.77	620	Violet
*220	±2, ±5, ±10%	25	45 @ 100MHz	0.700	0.84	500	Gray
*240	±2, ±5, ±10%	25	45 @ 100MHz	0.650	0.88	500	White
*270	±2, ±5, ±10%	25	45 @ 100MHz	0.600	0.91	690	Black
*300	±2, ±5, ±10%	25	45 @ 100MHz	0.585	1.00	450	Brown
*330	±2, ±5, ±10%	25	45 @ 100MHz	0.570	1.05	450	Red
*360	±2, ±5, ±10%	25	45 @ 100MHz	0.530	1.10	470	Orange
*390	±2, ±5, ±10%	25	45 @ 100MHz	0.500	1.12	630	Yellow
*430	±2, ±5, ±10%	25	45 @ 100MHz	0.480	1.15	470	Green
*470	±2, ±5, ±10%	25	45 @ 100MHz	0.450	1.19	470	Blue
*560	±2, ±5, ±10%	25	45 @ 100MHz	0.415	1.33	580	Violet
*620	±2, ±5, ±10%	25	45 @ 100MHz	0.375	1.40	300	Gray
*680	±2, ±5, ±10%	25	45 @ 100MHz	0.375	1.47	540	White
*750	±2, ±5, ±10%	25	45 @ 100MHz	0.360	1.54	360	Black
*820	±2, ±5, ±10%	25	45 @ 100MHz	0.350	1.61	400	Brown
*910	±2, ±5, ±10%	25	35 @ 50MHz	0.320	1.68	380	Red
*1000	±2, ±5, ±10%	25	35 @ 50MHz	0.290	1.75	370	Orange
*1200	±2, ±5, ±10%	7.9	35 @ 50MHz	0.250	2.00	310	Yellow
*1500	±2, ±5, ±10%	7.9	28 @ 50MHz	0.200	2.30	330	Green
*1800	±2, ±5, ±10%	7.9	28 @ 50MHz	0.160	2.60	300	Blue
*2200	±2, ±5, ±10%	7.9	28 @ 50MHz	0.160	2.80	280	Violet
*2700	±2, ±5, ±10%	7.9	22 @ 25MHz	0.140	3.20	290	Gray
*3300	±2, ±5, ±10%	7.9	22 @ 25MHz	0.110	3.40	290	White
*3900	±2, ±5, ±10%	7.9	18 @ 25MHz	0.100	3.60	260	Black
*4700	±2, ±5, ±10%	7.9	18 @ 25MHz	0.090	4.00	260	Brown
5600	±2, ±5, ±10%	7.9	16 @ 7.96MHz	0.020	4.00	240	Red
6800	±2, ±5, ±10%	7.9	15 @ 7.96MHz	0.040	4.90	200	Orange
8200	±2, ±5, ±10%	7.9	15 @ 7.96MHz	0.025	6.00	170	Yellow
10000	±2, ±5, ±10%	2.52	15 @ 7.96MHz	0.020	9.00	150	Green
12000	±2, ±5, ±10%	2.52	15 @ 7.96MHz	0.018	10.5	130	Blue
15000	±2, ±5, ±10%	2.52	15 @ 7.96MHz	0.015	11.5	120	Violet

* Test Method/Instrument: Network/Spectrum Analyzer



WIRE WOUND CHIP INDUCTOR

LCWC Series



1210

Part No.	Ind. (nH)	Test Freq. (MHz)	Inductance Tolerance	Q Min	Test Freq. (MHz)	SRF (MHz) Min	DCR (OHM) Max	Irms (mA)	COLOR CODE		
									1st	2nd	multiplier
LCWC1210K5N6GTAR	5.6	100	K, J	50	1000	5500	0.08	600	Green	Blue	Black
LCWC1210K12NGTAR	12	100	K, J, G	60	500	3400	0.06	600	Brown	Red	Brown
LCWC1210K15NGTAR	15	100	K, J, G	60	500	3200	0.06	600	Brown	Green	Brown
LCWC1210K22NGTAR	22	100	K, J, G	60	300	2300	0.08	600	Red	Red	Brown
LCWC1210K27NGTAR	27	100	K, J, G	60	300	2000	0.08	600	Red	Violet	Brown
LCWC1210K33NGTAR	33	100	K, J, G	60	300	1800	0.08	600	Orange	Orange	Brown
LCWC1210K47NGTAR	47	100	K, J, G	60	300	1600	0.08	600	Yellow	Violet	Brown
LCWC1210K56NGTAR	56	100	K, J, G	60	300	1500	0.10	600	Green	Blue	Brown
LCWC1210K68NGTAR	68	100	K, J, G	60	300	1300	0.10	600	Blue	Gray	Brown
LCWC1210K82NGTAR	82	100	K, J, G	60	300	1200	0.10	600	Gray	Red	Brown
LCWC1210KR10GTAR	100	100	K, J, G	60	300	1100	0.10	1000	Brown	Black	Red
LCWC1210KR15GTAR	150	50	K, J, G	60	300	800	0.18	500	Brown	Green	Red
LCWC1210KR22GTAR	220	50	K, J, G	60	300	760	0.27	500	Red	Red	Red
LCWC1210KR27GTAR	270	50	K, J, G	50	300	660	0.33	500	Red	Violet	Red
LCWC1210KR33GTAR	330	50	K, J, G	50	100	650	0.37	500	Orange	Orange	Red
LCWC1210KR39GTAR	390	50	K, J, G	50	100	600	0.63	500	Orange	White	Red
LCWC1210KR47GTAR	470	50	K, J, G	50	100	550	0.69	400	Yellow	Violet	Red
LCWC1210KR56GTAR	560	50	K, J, G	50	100	470	0.90	400	Green	Blue	Red
LCWC1210KR68GTAR	680	25	K, J, G	50	100	450	1.05	400	Blue	Gray	Red
LCWC1210KR82GTAR	820	25	K, J, G	50	100	400	1.45	350	Gray	Red	Red
LCWC1210K1R0GTAR	1000	25	K, J, G	45	100	340	2.10	280	Brown	Black	Orange
LCWC1210K1R2GTAR	1200	7.96	K, J, G	45	50	320	2.40	250	Brown	Red	Orange

□ TOLERANCE: K = $\pm 10\%$; J = $\pm 5\%$; G = $\pm 2\%$

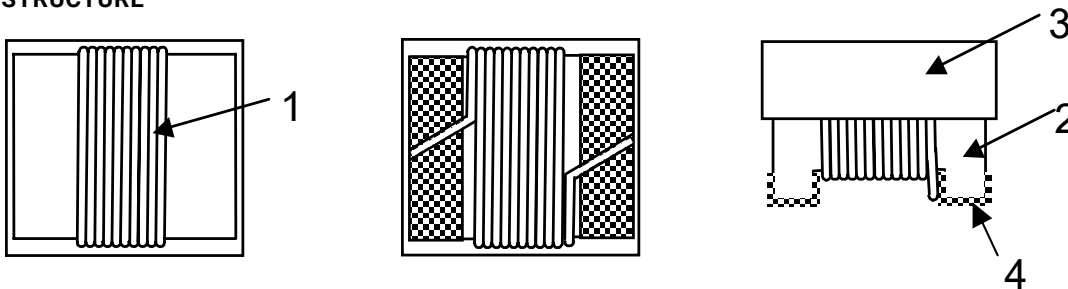
• MSL: LEVEL 1

- This is a RoHS and REACH compliant product whose related document are available on request.
- Graphic is only for dimensionally application.

1. RATING TEMPERATURE

OPERATING TEMPERATURE: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

2. STRUCTURE



3. MATERIAL LIST

Item	Material Category	Material Type	UL NO.
1	Wire	Polysol	E143312
2	Core	Ceramic Core	
3	UV	UV	
4	Terminal Plateing	AgPd+Au+Ni	

4. TEST INSTRUMENT

8-1 L,Q TEST BY HP4291B

8-2 SRF TEST BY HP9753E

8-3 DCR TEST BY ZENTECH 502BC

WIRE WOUND CHIP INDUCTOR

LCWC Series



RELIABILITY PERFORMANCE

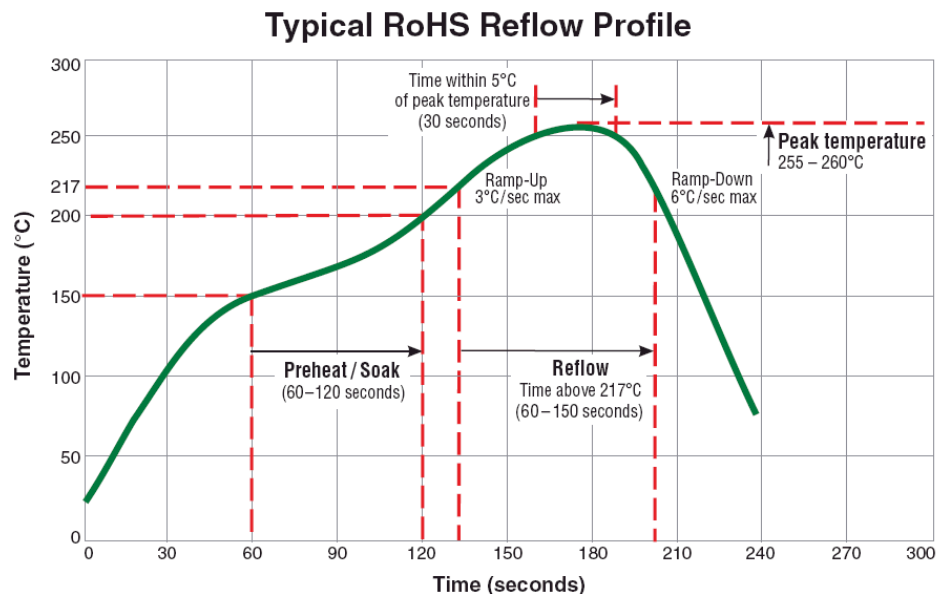
RELIABILITY EXPERIMENT FOR ELECTRICAL

Test Item	Test Condition	Standard Source
Humidity Test	+40°C ± 2°C, humidity of 90%±5% (total 96 hours).	MIL-STD-202G Method 103B Test Condition B
High Temperature Test	Temperature: +125°C ± 2°C. Test time: 48±2hrs.	IEC 68-2 Test Condition B
Low Temperature Test	Temperature: -40°C ± 2°C. Test time: 48±2hrs.	IEC 68-2 Test Condition A
Thermal Shock	+125°C ± 5° (30 minutes) ~ -40 ± 5°C (30 minutes), temperature switch time: 5 minutes (total 50 cycles) Wind speeds 10m/sec.	Reference MIL-STD-202G Method 107G Test Condition B-2
Life Test	+70°C ± 5°C (300Hours).	Reference MIL-STD-202G Method 108A Test Condition B

RELIABILITY EXPERIMENT FOR PHYSICAL

Test Item	Test Condition	Standard Source
Vibration Test	10-55-10HZ, amplitude: 1.5mm, direction: X, Y, Z axes, each axis 2 hours (total 6 hours).	MIL-STD-202G Method 201A
Solder Heat Resistance Test	IR/convection reflow: Peak Temp 255°C~260°C for 3~5 Sec. in air, Through 2 Cycle. Temperature Ramp:+1~4°C/sec.; Above 217°C, must keep 90 s - 120 s.	Reference MIL-STD-202G Method 210F Test Condition K (Reflow)
Solder Ability Test	Soak in 245°C solder pot of 3~5 Sec., PAD must have 95% above coverage.	Reference J-STD-002D

TYPICAL RoHS REFLOW PROFILE



WIRE WOUND CHIP INDUCTOR

LCWC Series



HIGH CURRENT ELECTRICAL SPECIFICATIONS

0603

Inductance (nH)	Tolerance	L Freq. (MHz)	Quality Factor Min.	SRF (GHz) min	DCR (Ω) max.	IDC (mA) max.	Color Code
1.6	$\pm 5, \pm 10\%$	250	24	12.50	0.030	2400	Black
3.6	$\pm 5, \pm 10\%$	250	24	5.90	0.048	2300	Brown
3.9	$\pm 5, \pm 10\%$	250	25	5.90	0.054	2200	Red
6.8	$\pm 5, \pm 10\%$	250	35	5.80	0.054	2100	Orange
7.5	$\pm 5, \pm 10\%$	250	38	3.70	0.059	2100	Yellow
8.2	$\pm 5, \pm 10\%$	250	38	3.70	0.060	2000	White
10	$\pm 2, \pm 5, \pm 10\%$	250	38	3.70	0.071	2000	Green
12	$\pm 2, \pm 5, \pm 10\%$	250	38	3.00	0.075	2000	Blue
15	$\pm 2, \pm 5, \pm 10\%$	250	38	2.80	0.080	1900	Violet
18	$\pm 2, \pm 5, \pm 10\%$	250	40	2.80	0.099	1900	Gray
22	$\pm 2, \pm 5, \pm 10\%$	250	42	2.40	0.099	1800	White
24	$\pm 2, \pm 5, \pm 10\%$	250	42	2.40	0.105	1800	Black

HIGH Q ELECTRICAL SPECIFICATIONS

0805

Inductance (nH)	Tolerance	L Freq. (MHz)	Quality Factor Min.	SRF (GHz) min	DCR (Ω) max.	IDC (mA) max.	Color Code
2.5	$\pm 5, \pm 10\%$	250	80 @ 1500MHz	6.00	0.020	1600	Black
5.6	$\pm 5, \pm 10\%$	250	98 @ 1500MHz	6.00	0.035	1600	Brown
6.2	$\pm 5, \pm 10\%$	250	88 @ 1000MHz	4.75	0.035	1600	Red
6.8	$\pm 5, \pm 10\%$	250	80 @ 1000MHz	4.40	0.035	1600	White
8.2	$\pm 5, \pm 10\%$	250	75 @ 1000MHz	3.00	0.075	1000	Gray
10	$\pm 5, \pm 10\%$	250	80 @ 1000MHz	3.00	0.060	1600	Black
12	$\pm 5, \pm 10\%$	250	80 @ 1000MHz	3.00	0.045	1600	Orange
15	$\pm 2, \pm 5, \pm 10\%$	250	80 @ 1000MHz	2.80	0.100	1200	Black
16	$\pm 2, \pm 5, \pm 10\%$	250	72 @ 500MHz	2.95	0.060	1500	Yellow
18	$\pm 2, \pm 5, \pm 10\%$	250	75 @ 500MHz	2.55	0.060	1400	Green
20	$\pm 2, \pm 5, \pm 10\%$	250	70 @ 500MHz	2.05	0.055	1400	Blue
22	$\pm 2, \pm 5, \pm 10\%$	250	80 @ 500MHz	2.00	0.100	1200	Black
27	$\pm 2, \pm 5, \pm 10\%$	250	75 @ 500MHz	2.00	0.070	1300	Violet
30	$\pm 2, \pm 5, \pm 10\%$	250	65 @ 500MHz	1.95	0.095	1200	Gray
39	$\pm 2, \pm 5, \pm 10\%$	250	65 @ 500MHz	1.60	0.110	1100	White
48	$\pm 2, \pm 5, \pm 10\%$	200	65 @ 500MHz	1.40	0.095	1200	Black
51	$\pm 2, \pm 5, \pm 10\%$	200	65 @ 500MHz	1.40	0.120	1000	Brown

1008

Inductance (nH)	Tolerance	L Freq. (MHz)	Quality Factor Min.	SRF (GHz) min	DCR (Ω) max.	IDC (mA) max.	Color Code
3.0	$\pm 5, \pm 10\%$	50	70 @ 1500MHz	6.00	0.04	1600	Black
3.9	$\pm 5, \pm 10\%$	50	75 @ 1500MHz	6.00	0.05	1600	White
4.1	$\pm 5, \pm 10\%$	50	75 @ 1500MHz	6.00	0.05	1600	Brown
7.8	$\pm 5, \pm 10\%$	50	75 @ 500MHz	3.80	0.05	1600	Red
10	$\pm 2, \pm 5, \pm 10\%$	50	60 @ 500MHz	3.60	0.06	1600	Orange
12	$\pm 2, \pm 5, \pm 10\%$	50	70 @ 500MHz	2.80	0.06	1500	Yellow
18	$\pm 2, \pm 5, \pm 10\%$	50	62 @ 350MHz	2.70	0.07	1400	Green
22	$\pm 2, \pm 5, \pm 10\%$	50	62 @ 350MHz	2.05	0.07	1400	Blue
33	$\pm 2, \pm 5, \pm 10\%$	50	75 @ 350MHz	1.70	0.09	1300	Violet
39	$\pm 2, \pm 5, \pm 10\%$	50	75 @ 350MHz	1.30	0.09	1300	Gray
47	$\pm 2, \pm 5, \pm 10\%$	50	75 @ 350MHz	1.45	0.12	1200	White
56	$\pm 2, \pm 5, \pm 10\%$	50	75 @ 350MHz	1.23	0.12	1200	Black
68	$\pm 2, \pm 5, \pm 10\%$	50	80 @ 350MHz	1.15	0.13	1100	Brown
82	$\pm 2, \pm 5, \pm 10\%$	50	80 @ 350MHz	1.06	0.16	1100	Red
100	$\pm 2, \pm 5, \pm 10\%$	50	50 @ 350MHz	0.82	0.16	1000	Orange

WIRE WOUND CHIP INDUCTOR

LCWC Series



ENVIRONMENTAL CHARACTERISTICS

MECHANICAL PERFORMANCE TEST

Items	Requirement	Test Methods
Inductance	Refer to standard electrical characteristic spec.	HP4286
Q		HP4286
SRF		HP4287
DC Resistance RDC		Micro-Ohm meter (Gom-801G)
Rated Current IDC		Applied the current to coils, The inductance change should be less than 10% to initial value
Over Load	Inductors shall have no evidence of electrical and mechanical damage	Applied 2 times of rated allowed DC current to inductor for a period of 5 minutes
Withstanding Voltage	Inductors shall be no evidence of electrical and mechanical damage.	AC voltage of 500 VAC applied between inductors terminal and case for 1 min.
Insulation Resistance	1000M ohm min.	100 VDC applied between inductor terminal and case and case

MECHANICAL PERFORMANCE TEST

Items	Requirement	Test Methods
Vibration	Appearance: No damage L change: within $\pm 5\%$ Q change: within $\pm 10\%$	Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1 min. Amplitude: 1.5 mm Time: 2 hrs for each axis (X, Y & Z), total 6 hrs
Resistance to Soldering Heat		Solder Temperature: $260 \pm 50^\circ\text{C}$ Immersion Time: 10 ± 2 seconds
Component Adhesion (Push Test)	1 lbs. For 0402 2 lbs. For 0603 3 lbs. For the rest	The device should be soldered (260 ± 5 for 10 seconds) to a tinned copper subs rate. A dynamiter force gauge should be applied to the side of the component. The device must with stand a minimum force of 2 or 4 pounds without a failure of adhesion on termination
Drop	No damage	Dropping chip by each side and each corner. Drop 10 times in total Drop height: 100 cm Drop weight: 125 g
Solderability	90% covered with solder	Inductor shall be dipped in a melted solder bath at 245 ± 5 for 3 seconds
Resistance to Solvent	No damage on appearance and marking	MIL-STD202F, Method 215D

CLIMATIC TEST

Items	Requirement	Test Methods														
Temperature Characteristic	Appearance: No damage L change: within ±10% Q change: within ±20%	-40 ~ +125°C														
Humidity		Temperature: 40±2°C Relative Humidity: 90 ~ 95% Time: 96±2 hrs Measured after exposure in the room condition for 2 hrs														
Low Temperature Storage		Temperature: -40±2°C Time: 96±2 hrs Inductors are tested after 1 hour at room temperature														
Thermal Shock		One cycle: <table><tr><td>Step</td><td>Temperature (°C)</td><td>Time (min.)</td></tr><tr><td>1</td><td>-25±3</td><td>30</td></tr><tr><td>2</td><td>25±2</td><td>15</td></tr><tr><td>3</td><td>125±3</td><td>30</td></tr><tr><td>4</td><td>25±2</td><td>15</td></tr></table> Total: 5 cycles	Step	Temperature (°C)	Time (min.)	1	-25±3	30	2	25±2	15	3	125±3	30	4	25±2
Step	Temperature (°C)	Time (min.)														
1	-25±3	30														
2	25±2	15														
3	125±3	30														
4	25±2	15														
High Temperature Storage		Temperature: 125±2°C Time: 96±2 hrs Measured after exposure in the room condition for 1 hour														
High Temperature Load Life	There should be no evidence of short or open circuit.	Temperature: 85±2°C Time: 1000±12 hrs Load: Allowed DC current														
Damp Heat with Load		Temperature: 40±2°C Relative Humidity: 90 ~ 95% Time: 1000±12 hrs Load: Allowed DC current														

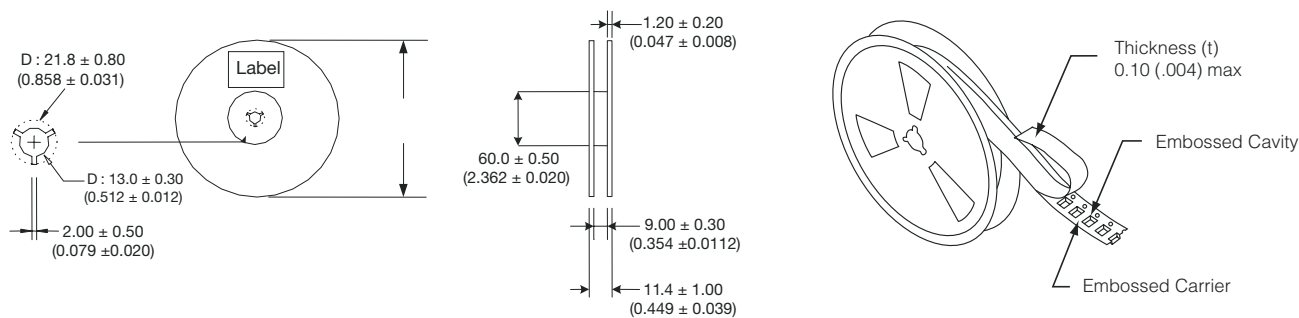


WIRE WOUND CHIP INDUCTOR

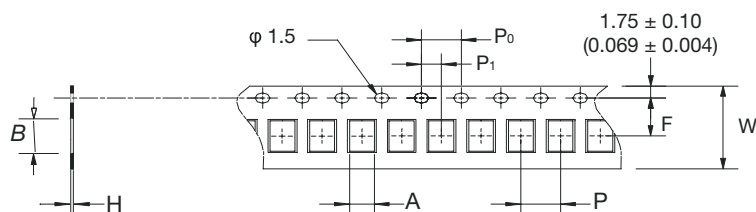
LCWC Series



REEL DIMENSIONS AND PACKAGING QUANTITY

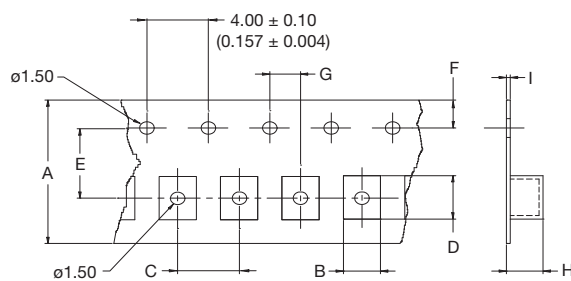


PAPER TAPE SPECIFICATION AND PACKAGING QUANTITY



mm (inches)									
Type	A	B	H	F	P	P ₀	P ₁	W	Reel (EA)
LCWC0402	0.72 (0.028)	1.19 (0.047)	0.60 (0.024)	3.50 (0.138)	4.00 (0.157)	4.00 (0.147)	2.00 (0.079)	8.00 (0.315)	4,000
LCWC0603	1.35 (0.053)	1.95 (0.077)	0.95 (0.037)	3.50 (0.138)	4.00 (0.157)	4.00 (0.147)	2.00 (0.079)	8.00 (0.315)	4,000

EMBOSSED PLASTIC PAPER TAPE SPECIFICATION AND PACKAGING QUANTITY



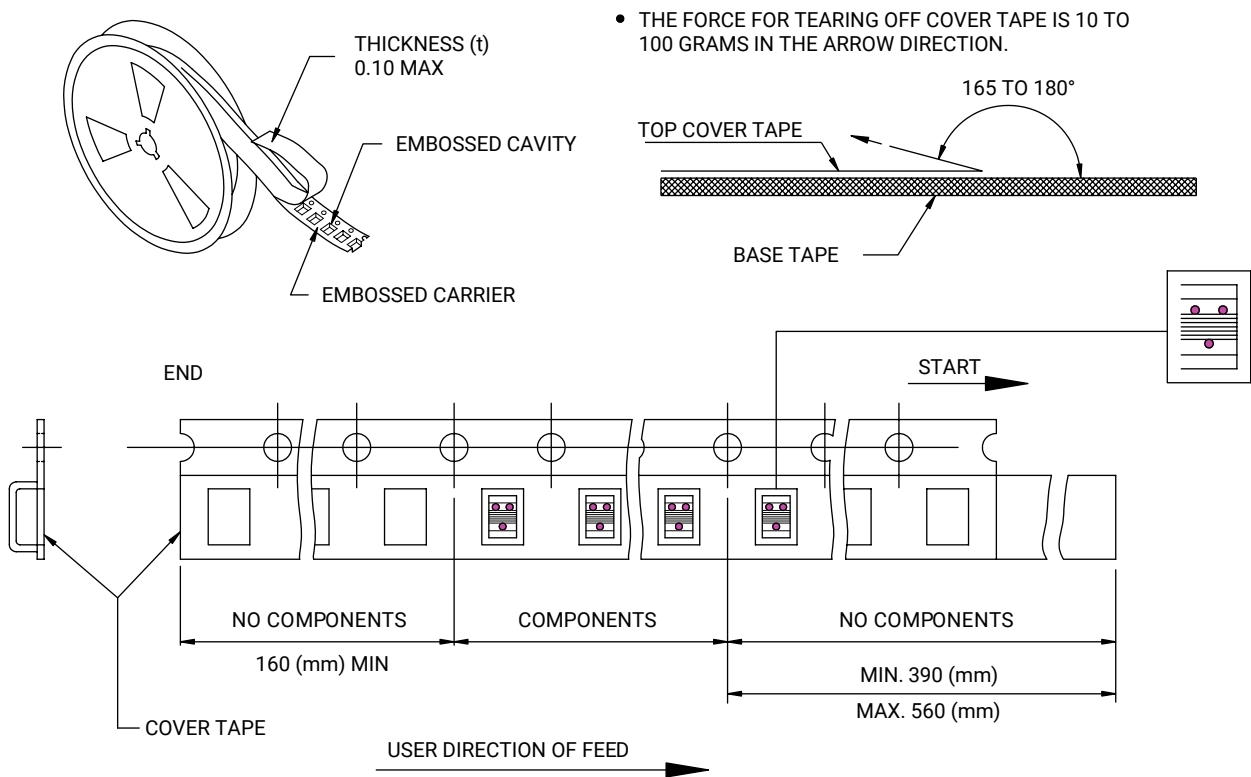
mm (inches)										
Type	A	B	C	D	E	F	G	H	I	Reel (EA)
LCWC0805	8.00 ± 0.20 (0.315 ± 0.008)	1.85 ± 0.10 (0.073 ± 0.073)	4.00 ± 0.10 (0.157 ± 0.073)	2.30 ± 0.10 (0.091 ± 0.073)	3.50 ± 0.05 (0.138 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.073)	2.00 ± 0.05 (0.079 ± 0.002)	1.45 ± 0.05 (0.057 ± 0.002)	0.23 ± 0.05 (0.009 ± 0.002)	2,000
LCWC1008	8.00 ± 0.20 (0.315 ± 0.008)	2.70 ± 0.10 (0.106 ± 0.073)	4.00 ± 0.10 (0.157 ± 0.073)	2.80 ± 0.10 (0.110 ± 0.073)	3.50 ± 0.05 (0.138 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.073)	2.00 ± 0.05 (0.079 ± 0.002)	2.00 ± 0.05 (0.079 ± 0.002)	0.23 ± 0.05 (0.009 ± 0.002)	2,000
LCWC1206	8.00 ± 0.20 (0.315 ± 0.008)	1.95 ± 0.10 (0.077 ± 0.073)	4.00 ± 0.10 (0.157 ± 0.073)	3.50 ± 0.10 (0.138 ± 0.073)	3.50 ± 0.05 (0.138 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.073)	2.00 ± 0.05 (0.079 ± 0.002)	1.50 ± 0.05 (0.059 ± 0.002)	0.23 ± 0.05 (0.009 ± 0.002)	2,000

WIRE WOUND CHIP INDUCTOR

LCWC Series



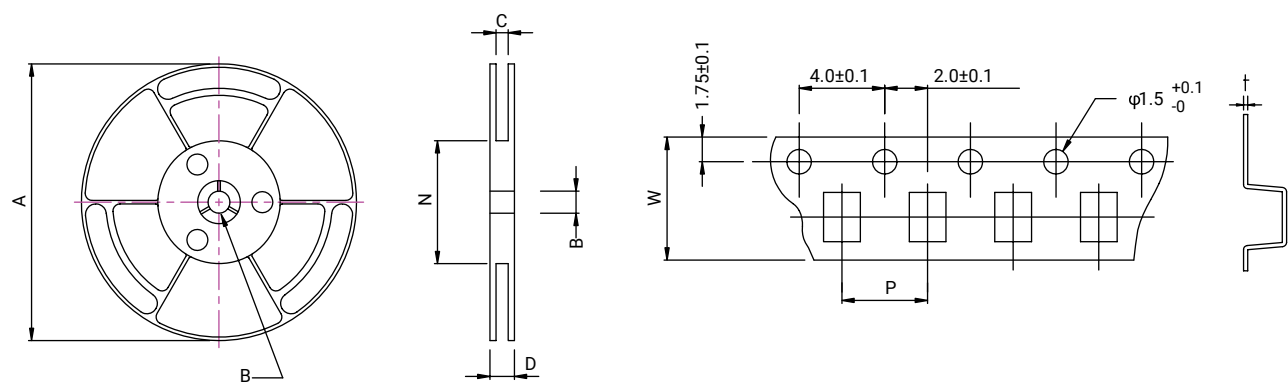
PACKAGING



CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC

DIMENSIONS OF CARRIER TAPE (mm)



UNIT: mm

	A	B	C	D	N	P	W	t
DIM.	178	13.0	8.4	12.5	50	4.0	8.0	0.23
TOL.	±2.0	±0.8	+1.0-0	MAX	MIN	±0.10	±0.2	±0.05



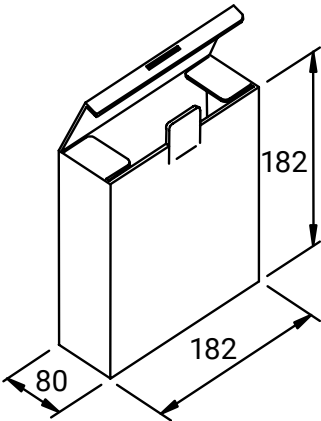
WIRE WOUND CHIP INDUCTOR

LCWC Series

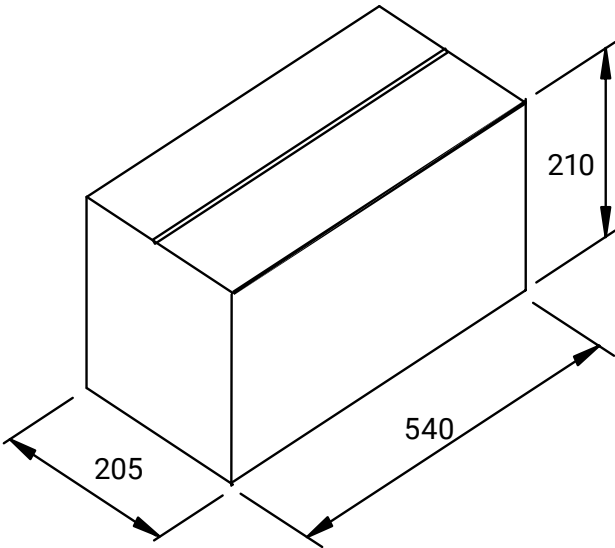


PACKAGING CONTINUED

UNIT: mm



- CONSTRUCTION:
The case contains 5-8MM WIDE CARRIER TAPES
Q'TY: 1500/Reel



TOTAL Q'TY: 45,000 PCS

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

AVX:

<u>LCWC0603J22NGTAR</u>	<u>LCWC0603K15NGTAR</u>	<u>LCWC0603G15NGTAR</u>	<u>LCWC0402J6N8GTAR</u>
<u>LCWC0603G6N8GTAR</u>	<u>LCWC0402J22NGTAR</u>	<u>LCWC1008J39NQTAR</u>	<u>LCWC0402G33NGTAR</u>
<u>LCWC1008J22NGTAR</u>	<u>LCWC1008J56NQTAR</u>	<u>LCWC0603J3N9GTAR</u>	<u>LCWC1008KR91GTAR</u>
<u>LCWC0603G33NGTAR</u>	<u>LCWC0603GR33GTAR</u>	<u>LCWC0402K10NGTAR</u>	<u>LCWC1008J68NQTAR</u>
<u>LCWC0603K18NGTAR</u>	<u>LCWC0603GR10GTAR</u>	<u>LCWC0603K68NGTAR</u>	<u>LCWC1008KR18GTAR</u>
<u>LCWC0402G10NGTAR</u>	<u>LCWC0603G4N7GTAR</u>	<u>LCWC1008K47NGTAR</u>	<u>LCWC1008JR10GTAR</u>
<u>LCWC0603GR22GTAR</u>	<u>LCWC1008JR10QTAR</u>	<u>LCWC0603JR10GTAR</u>	<u>LCWC1008G12NQTAR</u>
<u>LCWC0603K22NGTAR</u>	<u>LCWC0402K22NGTAR</u>	<u>LCWC0603GR47GTAR</u>	<u>LCWC0402K1N5GTAR</u>
<u>LCWC0603J2N2GTAR</u>	<u>LCWC0402G22NGTAR</u>	<u>LCWC0402G15NGTAR</u>	<u>LCWC0402K2N2GTAR</u>
<u>LCWC1008KR22GTAR</u>	<u>LCWC1008KR68GTAR</u>	<u>LCWC1008G18NQTAR</u>	<u>LCWC0603K3N9GTAR</u>
<u>LCWC0603J47NGTAR</u>	<u>LCWC0603G18NGTAR</u>	<u>LCWC1008G15NGTAR</u>	<u>LCWC1008KR12GTAR</u>
<u>LCWC0603KR10GTAR</u>	<u>LCWC1008J22NQTAR</u>	<u>LCWC0402G47NGTAR</u>	<u>LCWC0402K68NGTAR</u>
<u>LCWC0402K4N7GTAR</u>	<u>LCWC1008JR22GTAR</u>	<u>LCWC0603J15NGTAR</u>	<u>LCWC0603K2N2GTAR</u>
<u>LCWC0603G3N3GTAR</u>	<u>LCWC0603J18NGTAR</u>	<u>LCWC1206KR22GTAR</u>	<u>LCWC1008J33NQTAR</u>
<u>LCWC0603G47NGTAR</u>	<u>LCWC0603G3N9GTAR</u>	<u>LCWC1008J82NQTAR</u>	<u>LCWC0603J1N8GTAR</u>
<u>LCWC0402J10NGTAR</u>	<u>LCWC0603K47NGTAR</u>	<u>LCWC0603J68NGTAR</u>	<u>LCWC0603J4N7GTAR</u>
<u>LCWC0603G10NGTAR</u>	<u>LCWC1008KR15GTAR</u>	<u>LCWC0402G68NGTAR</u>	<u>LCWC1206KR33GTAR</u>
<u>LCWC0603J3N3GTAR</u>	<u>LCWC0603K1N8GTAR</u>	<u>LCWC0603K39NGTAR</u>	<u>LCWC1008G10NQTAR</u>
<u>LCWC1008J27NGTAR</u>	<u>LCWC0603G22NGTAR</u>	<u>LCWC0402J4N7GTAR</u>	<u>LCWC0603G68NGTAR</u>
<u>LCWC1008J47NGTAR</u>	<u>LCWC0603K4N7GTAR</u>	<u>LCWC0402K3N3GTAR</u>	<u>LCWC0603J10NGTAR</u>
<u>LCWC1008K22NGTAR</u>	<u>LCWC0603K10NGTAR</u>	<u>LCWC0402K1N0GTAR</u>	<u>LCWC0402J68NGTAR</u>
<u>LCWC0603GR15GTAR</u>	<u>LCWC1008J47NQTAR</u>	<u>LCWC0603G6N2GTAR</u>	<u>LCWC0402J1N0GTAR</u>
<u>LCWC0402J24NGTAR</u>			