Cautions and Warnings

Please be noted that this spec is only for reference if you have projects designed with the product number listed in. If you are looking for new project design-in, please find BWCM Series specification/datasheet on Chilisin website. Or you may find our sales contact for more information on old part number at your convenience. Appreciated your attention and understanding.

Note: Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

CM Series

Due to accurate wire winding technology, these chip inductors are designed for filtering impedance matching, resonance and choke circuits for RF designer. Both standard series and custom designs are available.

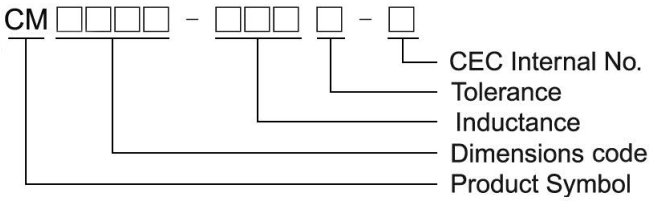
Features

- RoHS Compliant
- Ceramic body and wire wound construction provide high SRFs
- Exceptional Q value even at high frequencies
- Ceramic construction delivers the highest possible SRFs as well as high Q value
- Low DC resistance design supports low loss, high output and low power consumption
- CM series is standard for RF designers

Applications

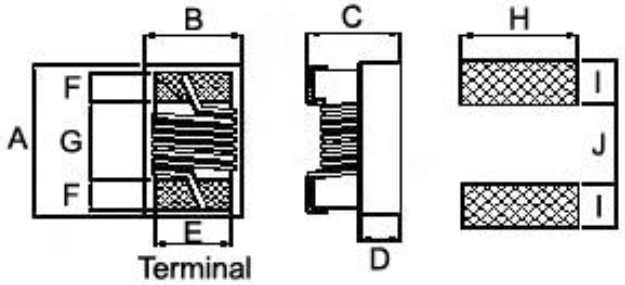
- RF products for cellular phone
- GPS receiver
- Base Station
- Repeater
- Wireless LAN/ mouse/ keyboard/ earphone
- Remote control
- Security system and other RF modules

Product Identification

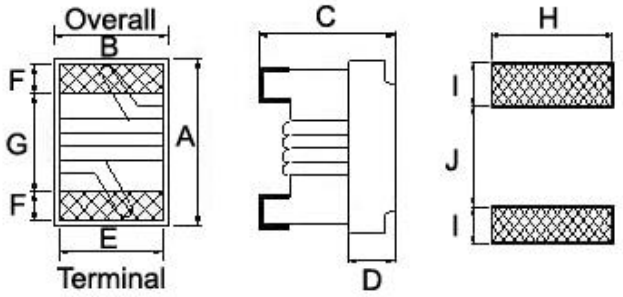


Shape and Dimensions / Recommended Pattern

CM0402



CM0603



Dimensions

	A Max	B Max	C Max	D	E	F	G	H	I	J
CM0402	1.19	0.70	0.66	0.25	0.51	0.23	0.56	0.66	0.36	0.46
CM0603	$1.6^{+0.2}_{-0.1}$	1.0260.1	$0.82^{+0.2}_{-0.1}$	0.35	0.70	0.30	0.95	1.02	0.64	0.64

CHILISIN ELECTRONICS CORP.

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Max
CM0402-1N5□-N	1.5	±0.1nH/±0.2nH/±0.5nH	100	10	250	18.0	0.03	1000
CM0402-2N4□-N	2.4	±0.1nH/±0.2nH/±0.5nH	100	20	250	15.0	0.05	850
CM0402-2N5□-N	2.5	±0.1nH/±0.2nH/±0.5nH	100	20	250	15.0	0.05	850
CM0402-2N7□-N	2.7	±0.1nH/±0.2nH/±0.5nH	100	20	250	15.0	0.05	850
CM0402-2N9□-N	2.9	±0.1nH/±0.2nH/±0.5nH	100	20	250	15.0	0.07	750
CM0402-3N9□-N	3.9	3 / 5	100	25	250	10.0	0.07	750
CM0402-4N1□-N	4.1	3 / 5	100	25	250	10.0	0.07	750
CM0402-4N3□-N	4.3	3 / 5	100	25	250	10.0	0.07	750
CM0402-4N7□-N	4.7	3 / 5	100	25	250	8.0	0.07	750
CM0402-5N1□-N	5.1	3 / 5	100	25 typ	250	8.0	0.12	600
CM0402-5N8□-N	5.8	3 / 5	100	25	250	8.0	0.12	700
CM0402-6N2□-N	6.2	3 / 5	100	25	250	8.0	0.09	700
CM0402-6N8□-N	6.8	3 / 5	100	25	250	6.0	0.09	700
CM0402-7N3□-N	7.3	3 / 5	100	25	250	6.0	0.13	570
CM0402-7N5□-N	7.5	3 / 5	100	25	250	6.0	0.13	570
CM0402-8N2□-N	8.2	3 / 5	100	25	250	5.5	0.14	540
CM0402-8N7□-N	8.7	3 / 5	100	25	250	5.5	0.14	540
CM0402-9N1□-N	9.1	3 / 5	100	25	250	5.5	0.14	540
CM0402-9N5□-N	9.5	3 / 5	100	25	250	5.5	0.14	540
CM0402-10N□-N	10	2 / 3 / 5	100	25	250	5.5	0.17	500
CM0402-11N□-N	11	2 / 3 / 5	100	30	250	5.5	0.14	500
CM0402-12N□-N	12	2 / 3 / 5	100	30	250	5.5	0.14	500
CM0402-13N□-N	13	2 / 3 / 5	100	25	250	5.0	0.21	430
CM0402-15N□-N	15	2 / 3 / 5	100	30	250	5.0	0.16	460
CM0402-16N□-N	16	2 / 3 / 5	100	25	250	4.5	0.24	370
CM0402-18N□-N	18	2 / 3 / 5	100	25	250	4.5	0.27	370
CM0402-19N□-N	19	2 / 3 / 5	100	25	250	4.5	0.27	370
CM0402-20N□-N	20	2 / 3 / 5	100	25	250	4.0	0.27	370
CM0402-22N□-N	22	2 / 3 / 5	100	25	250	4.0	0.30	310
CM0402-23N□-N	23	2 / 3 / 5	100	25	250	3.8	0.30	310
CM0402-24N□-N	24	2 / 3 / 5	100	25	250	3.5	0.52	280
CM0402-27N□-N	27	2 / 3 / 5	100	25	250	3.5	0.52	280
CM0402-30N□-N	30	2 / 3 / 5	100	25	250	3.3	0.58	270
CM0402-33N□-N	33	2 / 3 / 5	100	25	250	3.2	0.63	260
CM0402-36N□-N	36	2 / 3 / 5	100	25	250	3.1	0.63	260
CM0402-39N□-N	39	2 / 3 / 5	100	25	250	3.0	0.70	250
CM0402-40N□-N	40	2 / 3 / 5	100	25	250	3.0	0.70	250
CM0402-47N□-N	47	2 / 3 / 5	100	25	200	2.9	1.08	210
CM0402-51N□-N	51	2 / 3 / 5	100	25	200	2.85	1.08	210
CM0402-56N□-N	56	2 / 3 / 5	100	25	200	2.80	1.17	200
CM0402-62N□-N	62	2 / 3 / 5	100	20	200	2.60	1.82	145

Note: When ordering, please specify tolerance code. Tolerance : B=±0.1nH , C=±0.2nH , D=±0.5nH , G=±2% , H=±3% , J=±5%

- Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
- Irms for a 15℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

  L & Q：Agilent E4991A+Agilent HP16197A

  SRF：Agilent HP8753D/Agilent HP8722ES

  RDC：Chroma 16502

  Irms：HP4284A+HP42841A/HP4285A+HP42841A

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Max
CM0402-68N□-N	68	2 / 3 / 5	100	20	200	2.50	1.96	140
CM0402-72N□-N	72	2 / 3 / 5	100	20	150	2.50	2.10	135
CM0402-75N□-N	75	2 / 3 / 5	100	20	150	2.40	2.10	135
CM0402-82N□-N	82	2 / 3 / 5	100	20	150	2.30	2.24	130
CM0402-91N□-N	91	2 / 3 / 5	100	20	150	2.10	2.38	125
CM0402-R10□-N	100	2 / 3 / 5	100	20	150	1.50	2.52	120
CM0402-R12□-N	120	2 / 3 / 5	100	20	150	1.00	2.66	110

Note: When ordering, please specify tolerance code. Tolerance : B=±0.1nH , C=±0.2nH , D=±0.5nH , G=±2% , H=±3% , J=±5%

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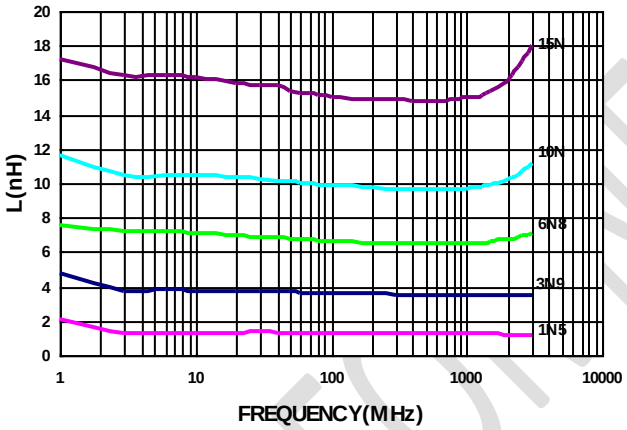
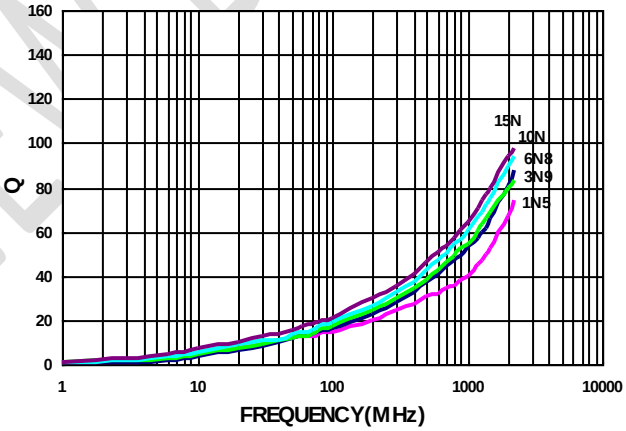
  RDC：Chroma 16502

  Irms：HP4284A+HP42841A/HP4285A+HP42841A

Typical L vs. Frequency



Typical Q vs. Frequency



Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Max
CM0603-2N2□-N	2.2	±0.1nH/±0.2nH/±0.5nH	100	16	250	6.0	0.049	700
CM0603-3N6□-N	3.6	3 / 5	100	25	250	6.0	0.059	850
CM0603-3N9□-N	3.9	3 / 5	100	35	250	6.0	0.059	850
CM0603-4N3□-N	4.3	3 / 5	100	35	250	6.0	0.059	850
CM0603-4N7□-N	4.7	3 / 5	100	35	250	6.0	0.059	850
CM0603-5N6□-N	5.6	3 / 5	100	35	250	6.0	0.082	750
CM0603-6N2□-N	6.2	3 / 5	100	35	250	6.0	0.082	750
CM0603-6N8□-N	6.8	3 / 5	100	35	250	6.0	0.082	750
CM0603-7N5□-N	7.5	3 / 5	100	35	250	6.0	0.082	750
CM0603-8N2□-N	8.2	3 / 5	100	35	250	6.0	0.110	650
CM0603-8N7□-N	8.7	3 / 5	100	35	250	6.0	0.110	650
CM0603-9N1□-N	9.1	3 / 5	100	35	250	6.0	0.110	650
CM0603-9N5□-N	9.5	3 / 5	100	35	250	6.0	0.110	650
CM0603-10N□-N	10	2 / 3 / 5	100	35	250	6.0	0.110	650
CM0603-11N□-N	11	2 / 3 / 5	100	35	250	6.0	0.110	650
CM0603-12N□-N	12	2 / 3 / 5	100	35	250	6.0	0.130	600
CM0603-13N□-N	13	2 / 3 / 5	100	35	250	6.0	0.130	600
CM0603-15N□-N	15	2 / 3 / 5	100	40	250	6.0	0.130	600
CM0603-16N□-N	16	2 / 3 / 5	100	40	250	5.5	0.160	550
CM0603-18N□-N	18	2 / 3 / 5	100	40	250	5.5	0.160	550
CM0603-20N□-N	20	2 / 3 / 5	100	40	250	4.9	0.160	550
CM0603-22N□-N	22	2 / 3 / 5	100	40	250	4.6	0.170	500
CM0603-24N□-N	24	2 / 3 / 5	100	40	250	3.8	0.210	500
CM0603-27N□-N	27	2 / 3 / 5	100	40	250	3.7	0.210	440
CM0603-30N□-N	30	2 / 3 / 5	100	40	250	3.3	0.230	420
CM0603-33N□-N	33	2 / 3 / 5	100	40	250	3.2	0.230	420
CM0603-36N□-N	36	2 / 3 / 5	100	40	250	2.9	0.260	400
CM0603-39N□-N	39	2 / 3 / 5	100	40	250	2.8	0.260	400
CM0603-43N□-N	43	2 / 3 / 5	100	40	200	2.7	0.290	380
CM0603-47N□-N	47	2 / 3 / 5	100	38	200	2.6	0.290	380
CM0603-51N□-N	51	2 / 3 / 5	100	38	200	2.5	0.330	370
CM0603-56N□-N	56	2 / 3 / 5	100	38	200	2.4	0.350	360
CM0603-62N□-N	62	2 / 3 / 5	100	38	200	2.3	0.510	280
CM0603-68N□-N	68	2 / 3 / 5	100	38	200	2.2	0.380	340
CM0603-72N□-N	72	2 / 3 / 5	100	34	150	2.1	0.560	270
CM0603-75N□-N	75	2 / 3 / 5	100	34	150	2.05	0.560	270
CM0603-82N□-N	82	2 / 3 / 5	100	34	150	2.00	0.600	250
CM0603-91N□-N	91	2 / 3 / 5	100	34	150	1.90	0.640	230
CM0603-R10□-N	100	2 / 3 / 5	100	34	150	1.80	0.680	220
CM0603-R11□-N	110	2 / 3 / 5	100	32	150	1.70	1.200	200

Note: When ordering, please specify tolerance code. Tolerance : B=±0.1nH , C=±0.2nH , D=±0.5nH , G=±2% , H=±3% , J=±5%

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  Irms：HP4284A+HP42841A/HP4285A+HP42841A

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Max
CM0603-R12□-N	120	2 / 3 / 5	100	32	150	1.60	1.300	180
CM0603-R13□-N	130	2 / 3 / 5	100	32	150	1.45	1.400	170
CM0603-R15□-N	150	2 / 3 / 5	100	32	150	1.40	1.500	160
CM0603-R16□-N	160	2 / 3 / 5	100	32	150	1.35	2.100	150
CM0603-R18□-N	180	2 / 3 / 5	100	25	100	1.30	2.200	140
CM0603-R20□-N	200	2 / 3 / 5	100	25	100	1.25	2.400	120
CM0603-R22□-N	220	2 / 3 / 5	100	25	100	1.20	2.500	120
CM0603-R27□-N	270	2 / 3 / 5	100	30	100	0.96	3.400	110
CM0603-R33□-N	330	2 / 3 / 5	100	30	100	0.80	5.500	85
CM0603-R39□-N	390	2 / 3 / 5	100	30	100	0.80	6.200	80
CM0603-R47□-N	470	2 / 3 / 5	100	30	100	0.70	7.000	75

Note: When ordering, please specify tolerance code. Tolerance : B=±0.1nH , C=±0.2nH , D=±0.5nH , G=±2% , H=±3% , J=±5%

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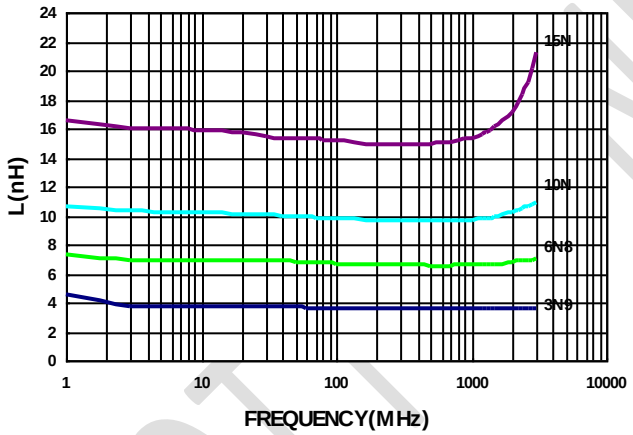
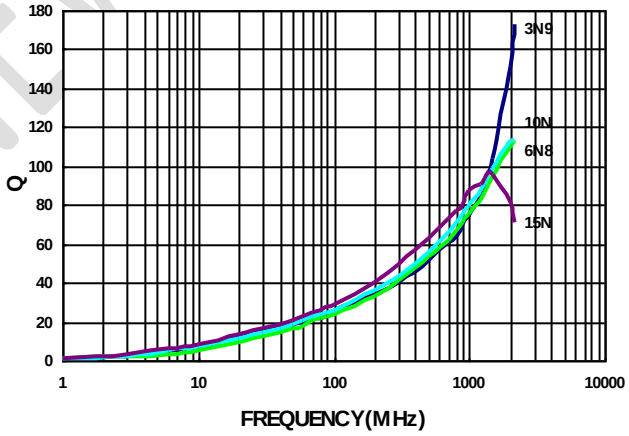
  RDC：Chroma 16502

  Irms：HP4284A+HP42841A/HP4285A+HP42841A

Typical L vs. Frequency



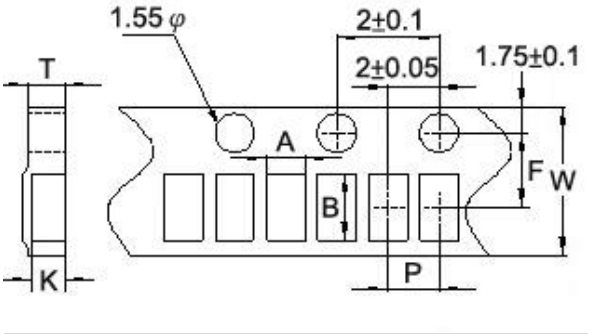
Typical Q vs. Frequency



Packaging Specifications

Tape Dimensions

Figure 1



Tape Material

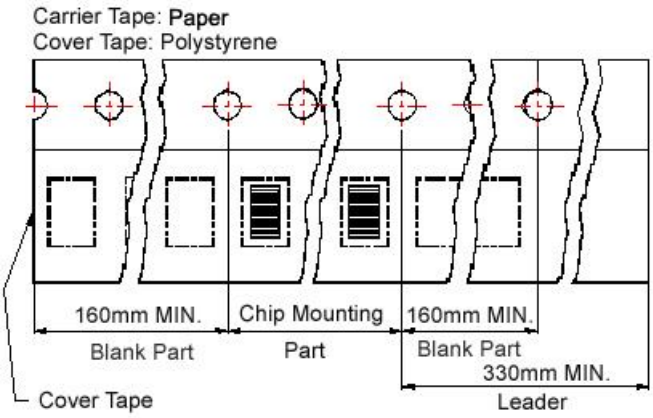
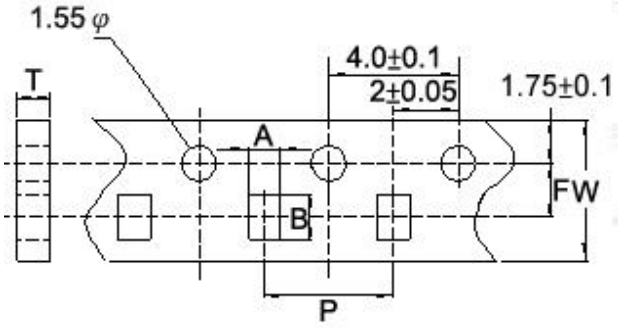
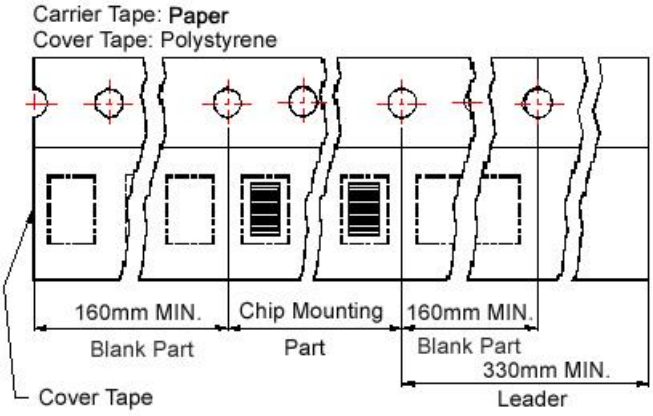
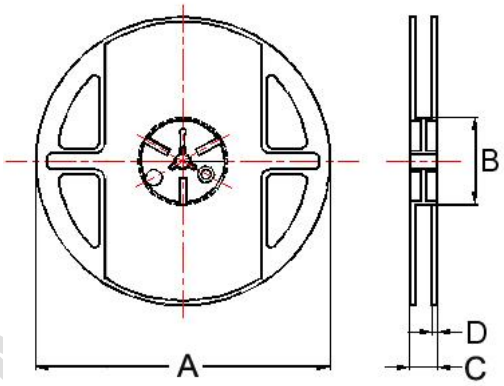


Figure 2





Reel Dimensions



Dimensions in mm

TYPE	Fig.	Tape Dimensions							Reel Dimensions				Quantity
		A	B	T	W	P	F	K	A	B	C	D	PCS / Reel
CM0402	1	0.67	1.20	0.75	8	2	3.5	0.59	178	60	12	1.5	4000
CM0603	2	1.20	1.80	1.05	8	4	3.5	-	178	60	12	1.5	4000

CHILISIN ELECTRONICS CORP.

单击下面可查看定价，库存，交付和生命周期等信息

>>CHILISIN(奇力新)