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 BSCQ 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.

CHQ Series

CHQ Series supports miniaturized devices. Its low inductance, high precision and high Q enables easy impedance matching at both RF and IF circuits and compact high frequency circuit designing.

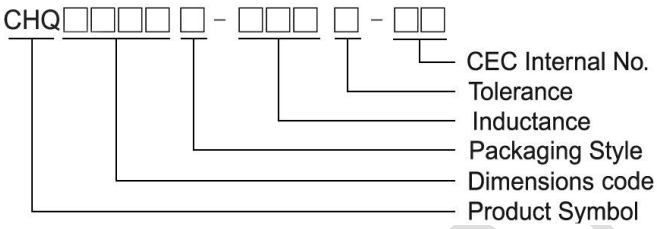
Features

- Excellent high frequency application
- High Q factor and SRF value
- Miniaturization
- Tight tolerance
- Wide inductance range

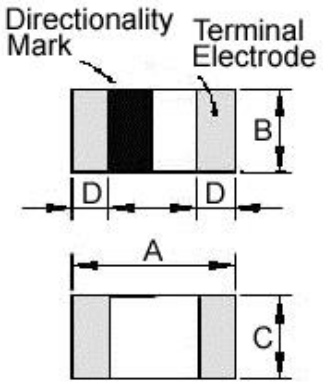
Applications

- RF matching circuit requiring Q value
- Bluetooth, WLAN, UWB, digital TV tuners and high-frequency circuit and module

Product Identification



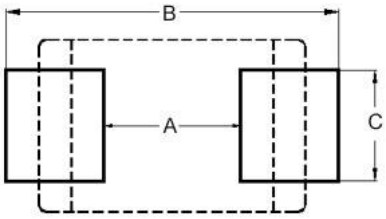
Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D
CHQ0603	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05
CHQ1005	1.0±0.10	0.5±0.10	0.5±0.10	0.25±0.10

Recommended Pattern



Dimensions in mm

TYPE	A	B	C
CHQ0603	0.3	0.75 ~ 1.05	0.3
CHQ1005	0.4	1.2 ~ 1.4	0.5

Electrical Characteristics

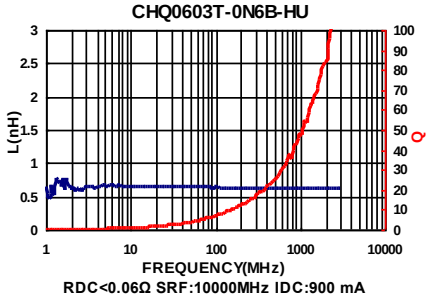
Part Number	Inductance (nH)	Tolerance (±%)	Q Min	Test Frequency (MHz)	Q Typical 500 MHz	800 MHz	1.8 GHz	2.0 GHz	2.4 GHz	SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Max
CHQ0603T-0N6□-HU	0.6	±0.1nH/±0.2nH/±0.3nH	14	500	>35	>47	>75	>80	>88	10000	0.06	900
CHQ0603T-0N7□-HU	0.7	±0.1nH/±0.2nH/±0.3nH	14	500	>35	>47	>75	>80	>88	10000	0.06	900
CHQ0603T-0N8□-HU	0.8	±0.1nH/±0.2nH/±0.3nH	14	500	>35	>47	>75	>80	>88	10000	0.06	900
CHQ0603T-0N9□-HU	0.9	±0.1nH/±0.2nH/±0.3nH	14	500	>35	>47	>75	>80	>88	10000	0.06	900
CHQ0603T-1N0□-HU	1.0	±0.1nH/±0.2nH/±0.3nH	14	500	>35	>47	>75	>80	>88	10000	0.07	850
CHQ0603T-1N1□-HU	1.1	±0.1nH/±0.2nH/±0.3nH	14	500	>35	>47	>75	>80	>88	10000	0.07	850
CHQ0603T-1N2□-HU	1.2	±0.1nH/±0.2nH/±0.3nH	14	500	35	47	75	80	88	10000	0.08	800
CHQ0603T-1N3□-HU	1.3	±0.1nH/±0.2nH/±0.3nH	14	500	32	43	70	74	82	10000	0.09	760
CHQ0603T-1N4□-HU	1.4	±0.1nH/±0.2nH/±0.3nH	14	500	29	39	63	67	75	10000	0.12	640
CHQ0603T-1N5□-HU	1.5	±0.1nH/±0.2nH/±0.3nH	14	500	27	36	59	62	69	10000	0.15	600
CHQ0603T-1N6□-HU	1.6	±0.1nH/±0.2nH/±0.3nH	14	500	25	33	54	57	63	10000	0.19	510
CHQ0603T-1N7□-HU	1.7	±0.1nH/±0.2nH/±0.3nH	14	500	25	32	52	54	61	10000	0.11	680
CHQ0603T-1N8□-HU	1.8	±0.1nH/±0.2nH/±0.3nH	14	500	25	32	51	53	59	10000	0.12	640
CHQ0603T-1N9□-HU	1.9	±0.1nH/±0.2nH/±0.3nH	14	500	24	31	50	53	58	10000	0.13	620
CHQ0603T-2N0□-HU	2.0	±0.1nH/±0.2nH/±0.3nH	14	500	24	31	50	53	58	10000	0.15	600
CHQ0603T-2N1□-HU	2.1	±0.1nH/±0.2nH/±0.3nH	14	500	24	31	50	53	58	10000	0.16	550
CHQ0603T-2N2□-HU	2.2	±0.1nH/±0.2nH/±0.3nH	14	500	24	31	50	53	58	10000	0.20	500
CHQ0603T-2N3□-HU	2.3	±0.1nH/±0.2nH/±0.3nH	14	500	24	31	49	52	58	10000	0.24	460
CHQ0603T-2N4□-HU	2.4	±0.1nH/±0.2nH/±0.3nH	14	500	22	28	45	48	53	10000	0.26	430
CHQ0603T-2N5□-HU	2.5	±0.1nH/±0.2nH/±0.3nH	14	500	22	29	46	49	54	10000	0.28	415
CHQ0603T-2N6□-HU	2.6	±0.1nH/±0.2nH/±0.3nH	14	500	21	27	44	46	51	10000	0.30	405
CHQ0603T-2N7□-HU	2.7	±0.1nH/±0.2nH/±0.3nH	14	500	20	26	41	43	48	10000	0.32	400
CHQ0603T-2N8□-HU	2.8	±0.1nH/±0.2nH/±0.3nH	14	500	20	26	41	43	47	9500	0.20	500
CHQ0603T-2N9□-HU	2.9	±0.1nH/±0.2nH/±0.3nH	14	500	20	26	41	43	47	9300	0.22	480
CHQ0603T-3N0□-HU	3.0	±0.1nH/±0.2nH/±0.3nH	14	500	20	26	41	43	47	9100	0.24	460
CHQ0603T-3N1□-HU	3.1	±0.1nH/±0.2nH/±0.3nH	14	500	20	26	41	43	47	8900	0.25	450
CHQ0603T-3N2□-HU	3.2	±0.1nH/±0.2nH/±0.3nH	14	500	20	26	40	43	47	8700	0.28	415
CHQ0603T-3N3□-HU	3.3	±0.1nH/±0.2nH/±0.3nH	14	500	20	26	40	43	47	8600	0.28	415
CHQ0603T-3N4□-HU	3.4	±0.1nH/±0.2nH/±0.3nH	14	500	20	25	40	43	47	8400	0.29	410
CHQ0603T-3N5□-HU	3.5	±0.1nH/±0.2nH/±0.3nH	14	500	20	25	40	42	46	8200	0.30	405
CHQ0603T-3N6□-HU	3.6	±0.1nH/±0.2nH/±0.3nH	14	500	19	25	40	42	46	8100	0.32	400
CHQ0603T-3N7□-HU	3.7	±0.1nH/±0.2nH/±0.3nH	14	500	19	25	40	42	46	8000	0.36	370
CHQ0603T-3N8□-HU	3.8	±0.1nH/±0.2nH/±0.3nH	14	500	19	25	39	41	45	7800	0.40	355
CHQ0603T-3N9□-HU	3.9	±0.1nH/±0.2nH/±0.3nH	14	500	19	25	39	41	45	7700	0.41	350
CHQ0603T-4N3□-HU	4.3	±0.2nH/±0.3nH	14	500	18	24	37	39	43	6500	0.48	320
CHQ0603T-4N7□-HU	4.7	±0.2nH/±0.3nH	14	500	19	24	37	39	42	6400	0.42	350
CHQ0603T-5N1□-HU	5.1	±0.2nH/±0.3nH	14	500	19	24	37	39	42	6100	0.45	330
CHQ0603T-5N6□-HU	5.6	±0.2nH/±0.3nH	14	500	18	24	36	37	41	5500	0.47	325
CHQ0603T-6N2□-HU	6.2	±0.2nH/±0.3nH	14	500	18	23	35	36	39	5100	0.52	305
CHQ0603T-6N8□-HU	6.8	3 / 5	14	500	18	23	35	36	39	4800	0.55	305
CHQ0603T-7N5□-HU	7.5	3 / 5	14	500	18	23	34	35	38	4600	0.55	305
CHQ0603T-8N2□-HU	8.2	3 / 5	14	500	17	22	33	34	36	4300	0.57	290
CHQ0603T-9N1□-HU	9.1	3 / 5	14	500	17	22	33	34	36	4000	0.65	270
CHQ0603T-10N□-HU	10	3 / 5	14	500	17	22	33	34	36	3800	0.85	230
CHQ0603T-12N□-HU	12	3 / 5	14	500	17	22	31	32	33	3300	0.85	230
CHQ0603T-15N□-HU	15	3 / 5	14	500	17	21	28	29	29	2600	0.89	220
CHQ0603T-18N□-HU	18	3 / 5	14	500	16	21	26	26	25	2300	1.05	205
CHQ0603T-22N□-HU	22	3 / 5	14	500	16	21	26	26	24	1900	1.29	190

Note: When ordering, please specify tolerance code. Tolerance : B=±0.1nH , C=±0.2nH , S=±0.3nH , H=±3% , J=±5%

- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- IDC：Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0.48nH
- Measure Equipment：
  L & Q：Agilent E4991A+Agilent 16197A
  SRF：Agilent E4991A or HP19196C
  RDC：HP4338B or CHEN HWA 502

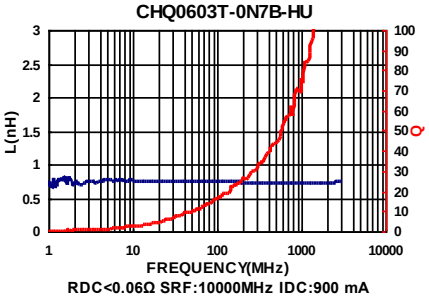
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CHQ0603T-0N6B-HU



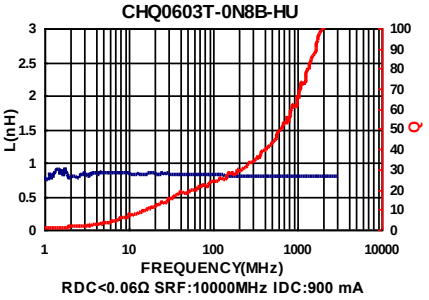
RDC<0.06Ω SRF:10000MHz IDC:900 mA

CHQ0603T-0N7B-HU



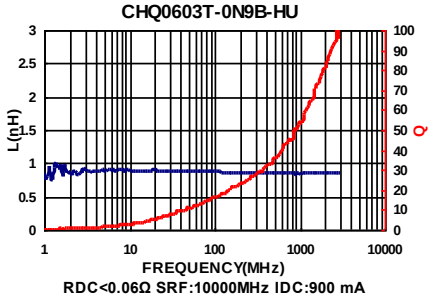
RDC<0.06Ω SRF:10000MHz IDC:900 mA

CHQ0603T-0N8B-HU



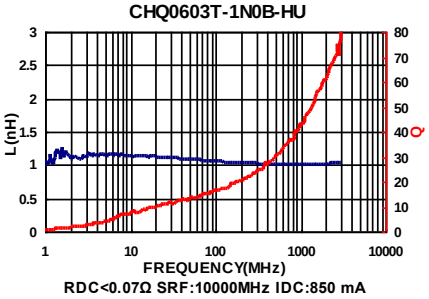
RDC<0.06Ω SRF:10000MHz IDC:900 mA

CHQ0603T-0N9B-HU



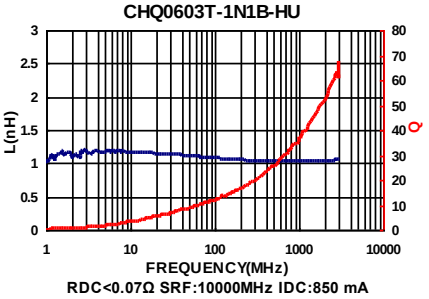
RDC<0.06Ω SRF:10000MHz IDC:900 mA

CHQ0603T-1N0B-HU



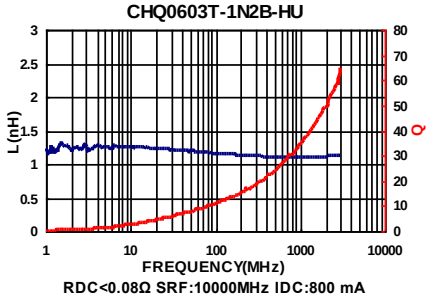
RDC<0.07Ω SRF:10000MHz IDC:850 mA

CHQ0603T-1N1B-HU



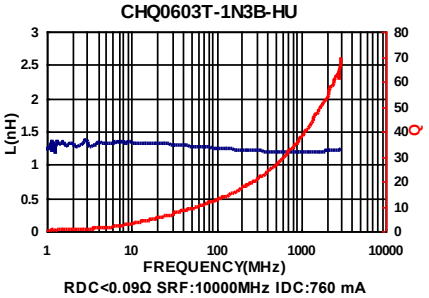
RDC<0.07Ω SRF:10000MHz IDC:850 mA

CHQ0603T-1N2B-HU



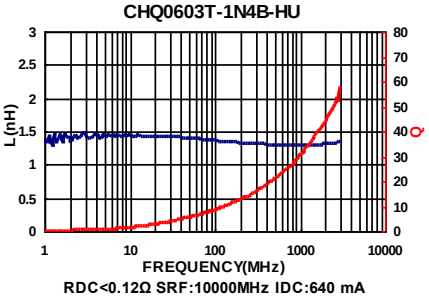
RDC<0.08Ω SRF:10000MHz IDC:800 mA

CHQ0603T-1N3B-HU



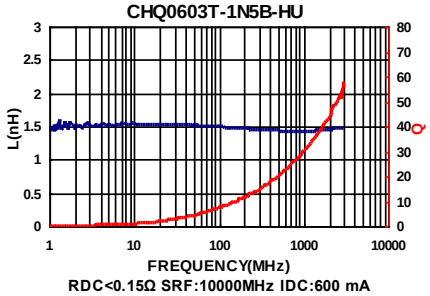
RDC<0.09Ω SRF:10000MHz IDC:760 mA

CHQ0603T-1N4B-HU



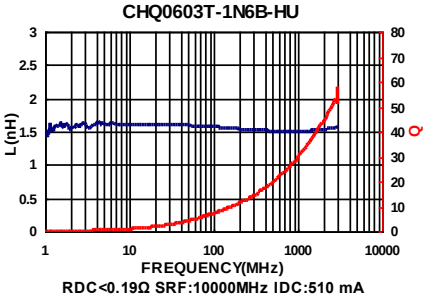
RDC<0.12Ω SRF:10000MHz IDC:640 mA

CHQ0603T-1N5B-HU



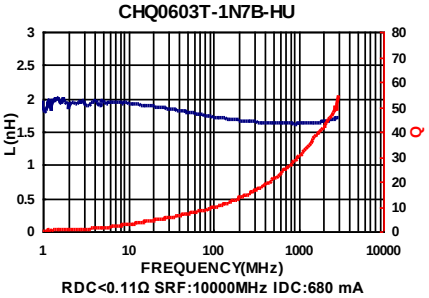
RDC<0.15Ω SRF:10000MHz IDC:600 mA

CHQ0603T-1N6B-HU



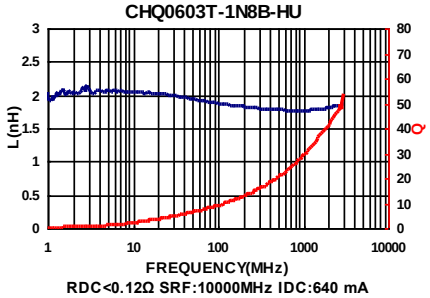
RDC<0.19Ω SRF:10000MHz IDC:510 mA

CHQ0603T-1N7B-HU



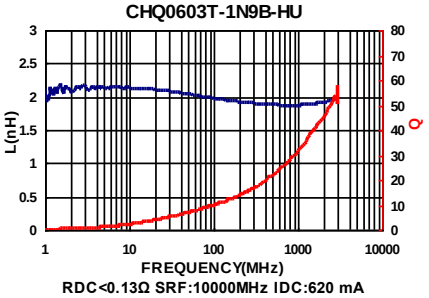
RDC<0.11Ω SRF:10000MHz IDC:680 mA

CHQ0603T-1N8B-HU



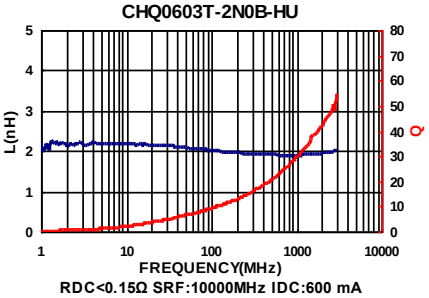
RDC<0.12Ω SRF:10000MHz IDC:640 mA

CHQ0603T-1N9B-HU



RDC<0.13Ω SRF:10000MHz IDC:620 mA

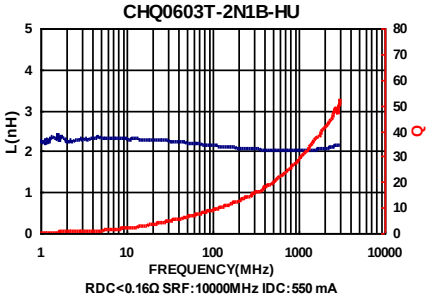
CHQ0603T-2N0B-HU



RDC<0.15Ω SRF:10000MHz IDC:600 mA

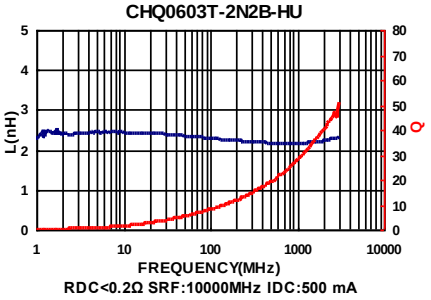
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CHQ0603T-2N1B-HU



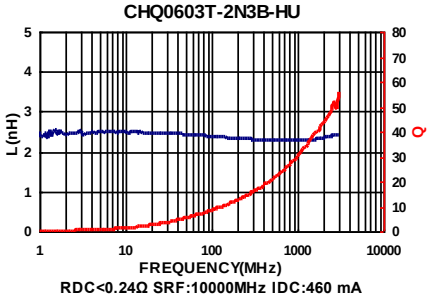
RDC<0.16Ω SRF:10000MHz IDC:550 mA

CHQ0603T-2N2B-HU



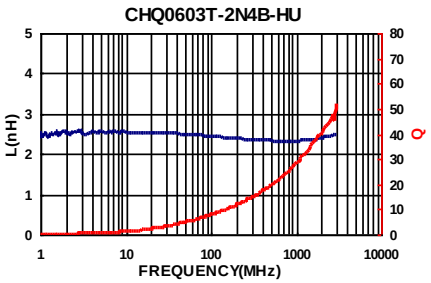
RDC<0.2Ω SRF:10000MHz IDC:500 mA

CHQ0603T-2N3B-HU



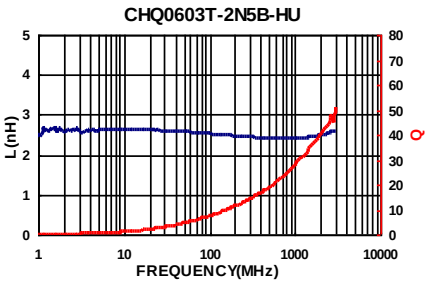
RDC<0.24Ω SRF:10000MHz IDC:460 mA

CHQ0603T-2N4B-HU



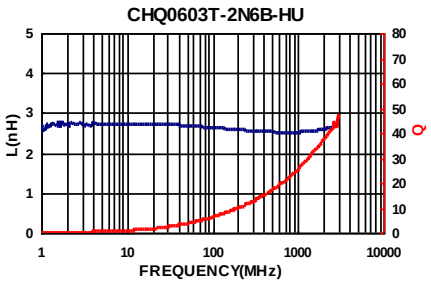
RDC<0.26Ω SRF:10000MHz IDC:430 mA

CHQ0603T-2N5B-HU



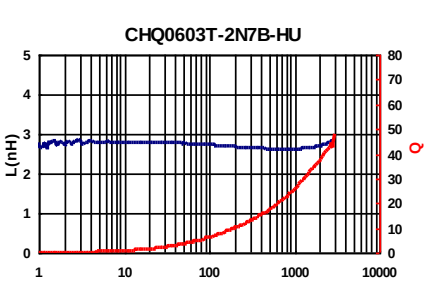
RDC<0.28Ω SRF:10000MHz IDC:415 mA

CHQ0603T-2N6B-HU



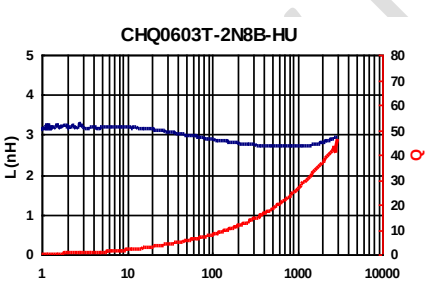
RDC<0.3Ω SRF:10000MHz IDC:405 mA

CHQ0603T-2N7B-HU



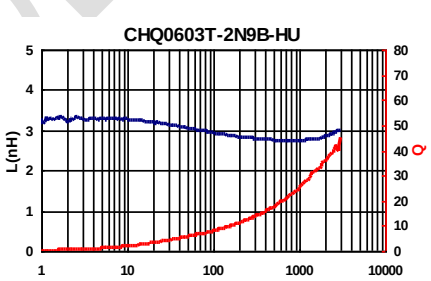
RDC<0.32Ω SRF:10000MHz IDC:400 mA

CHQ0603T-2N8B-HU



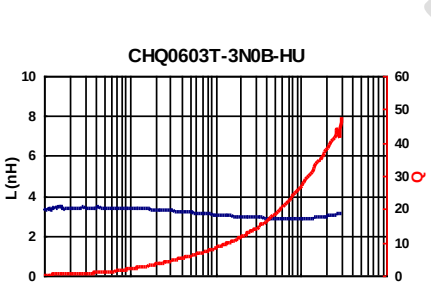
RDC<0.2Ω SRF:9500MHz IDC:500 mA

CHQ0603T-2N9B-HU



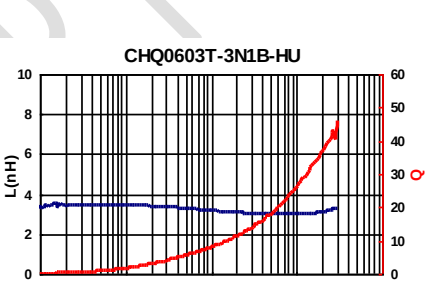
RDC<0.22Ω SRF:9300MHz IDC:480 mA

CHQ0603T-3N0B-HU



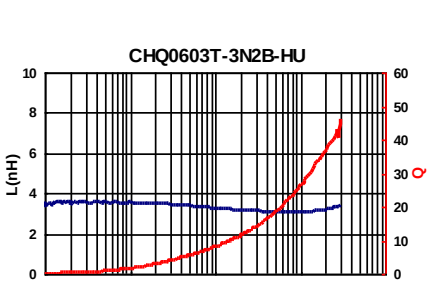
RDC<0.24Ω SRF:9100MHz IDC:460 mA

CHQ0603T-3N1B-HU



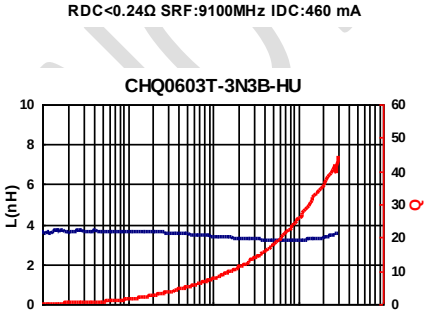
RDC<0.25Ω SRF:8900MHz IDC:450 mA

CHQ0603T-3N2B-HU



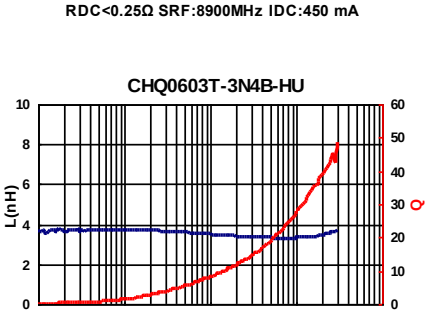
RDC<0.28Ω SRF:8700MHz IDC:415 mA

CHQ0603T-3N3B-HU



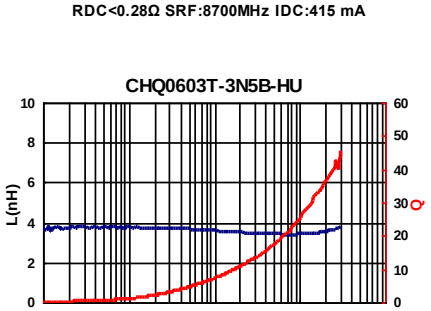
RDC<0.28Ω SRF:8600MHz IDC:415 mA

CHQ0603T-3N4B-HU



RDC<0.29Ω SRF:8400MHz IDC:410 mA

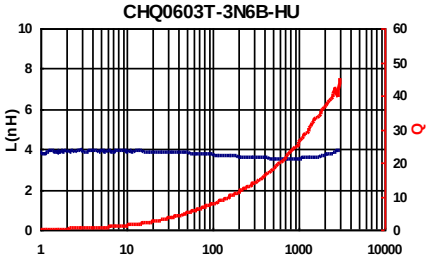
CHQ0603T-3N5B-HU



RDC<0.3Ω SRF:8200MHz IDC:405 mA

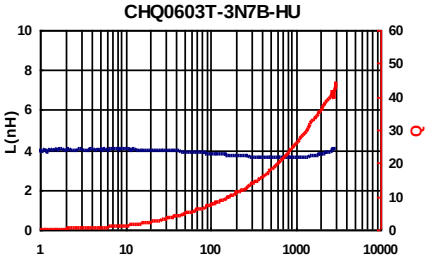
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CHQ0603T-3N6B-HU



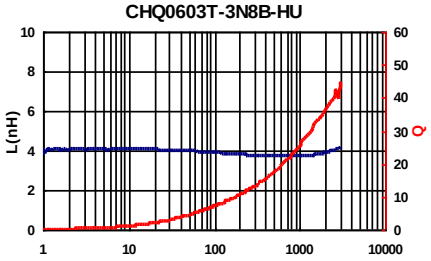
RDC<0.32Ω SRF:8100MHz IDC:400 mA

CHQ0603T-3N7B-HU



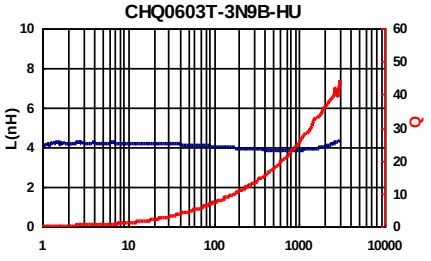
RDC<0.36Ω SRF:8000MHz IDC:370 mA

CHQ0603T-3N8B-HU



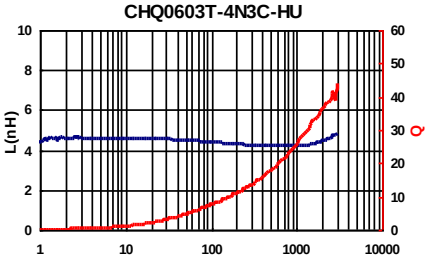
RDC<0.4Ω SRF:7800MHz IDC:355 mA

CHQ0603T-3N9B-HU



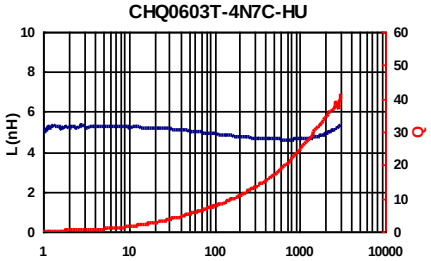
RDC<0.41Ω SRF:7700MHz IDC:350 mA

CHQ0603T-4N3C-HU



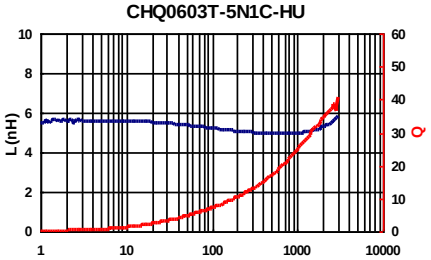
RDC<0.48Ω SRF:6500MHz IDC:320 mA

CHQ0603T-4N7C-HU



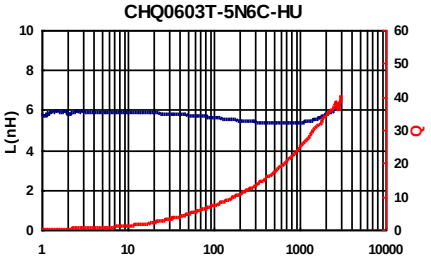
RDC<0.42Ω SRF:6400MHz IDC:350 mA

CHQ0603T-5N1C-HU



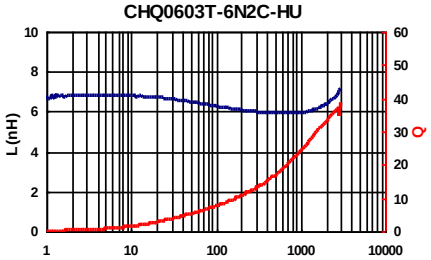
RDC<0.45Ω SRF:6100MHz IDC:330 mA

CHQ0603T-5N6C-HU



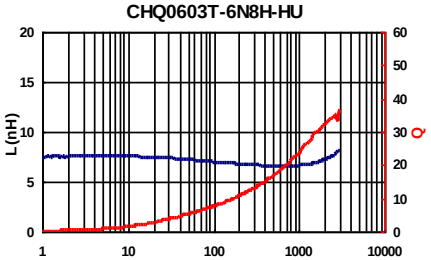
RDC<0.47Ω SRF:5500MHz IDC:325 mA

CHQ0603T-6N2C-HU



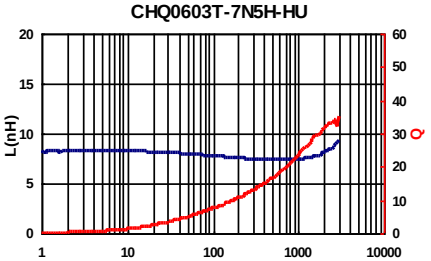
RDC<0.52Ω SRF:5100MHz IDC:305 mA

CHQ0603T-6N8H-HU



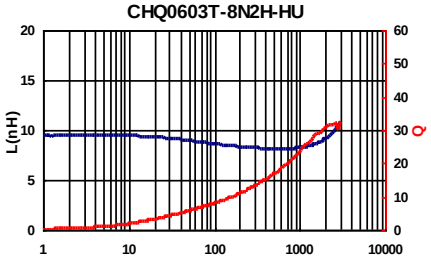
RDC<0.55Ω SRF:4800MHz IDC:305 mA

CHQ0603T-7N5H-HU



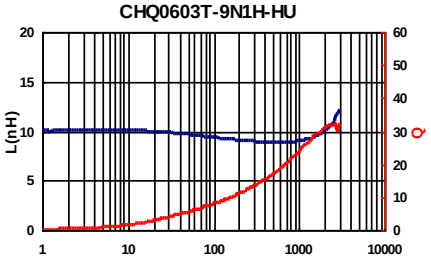
RDC<0.55Ω SRF:4600MHz IDC:305 mA

CHQ0603T-8N2H-HU



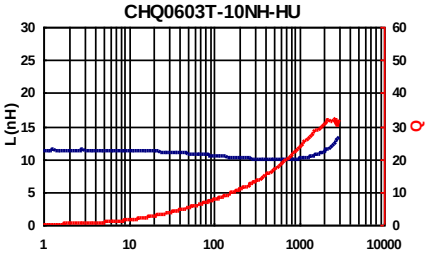
RDC<0.57Ω SRF:4300MHz IDC:290 mA

CHQ0603T-9N1H-HU



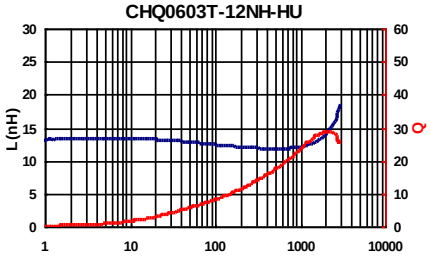
RDC<0.65Ω SRF:4000MHz IDC:270 mA

CHQ0603T-10NH-HU



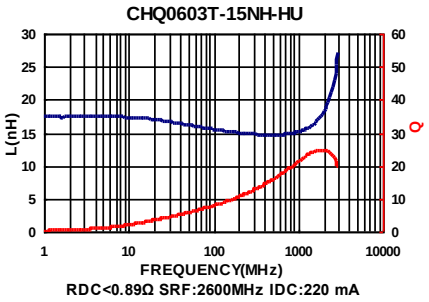
RDC<0.85Ω SRF:3800MHz IDC:230 mA

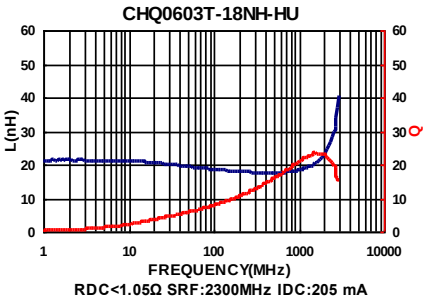
CHQ0603T-12NH-HU

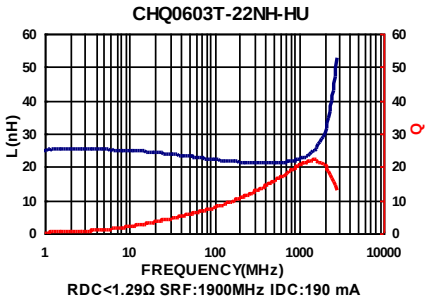


RDC<0.85Ω SRF:3300MHz IDC:230 mA

Test Instruments：Agilent E4991A Material/Impedance Analyzer







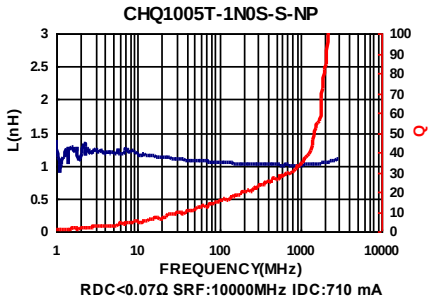
Electrical Characteristics

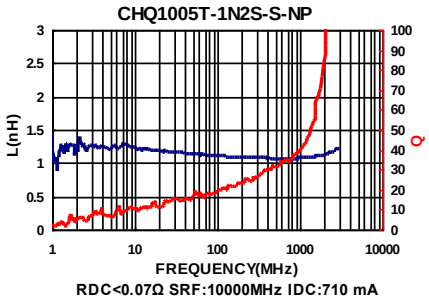
Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min 100MHz	Q Typ 250MHz	SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Max
CHQ1005T-1N0□-S-NP	1.0	±0.3nH	100	8	23	10000	0.07	710
CHQ1005T-1N2□-S-NP	1.2	±0.3nH	100	8	23	10000	0.07	710
CHQ1005T-1N5□-S-NP	1.5	±0.3nH	100	8	20	8000	0.07	710
CHQ1005T-1N8□-S-NP	1.8	±0.3nH	100	8	20	6000	0.07	710
CHQ1005T-2N0□-S-NP	2.0	±0.3nH	100	8	20	6000	0.08	660
CHQ1005T-2N2□-S-NP	2.2	±0.3nH	100	8	20	6000	0.08	660
CHQ1005T-2N4□-S-NP	2.4	±0.3nH	100	8	18	6000	0.09	630
CHQ1005T-2N7□-S-NP	2.7	±0.3nH	100	8	18	6000	0.09	630
CHQ1005T-3N0□-S-NP	3.0	±0.3nH	100	8	18	6000	0.11	570
CHQ1005T-3N3□-S-NP	3.3	±0.3nH	100	8	18	6000	0.12	540
CHQ1005T-3N6□-S-NP	3.6	±0.3nH	100	8	18	5000	0.14	500
CHQ1005T-3N9□-S-NP	3.9	±0.3nH	100	8	18	4000	0.15	490

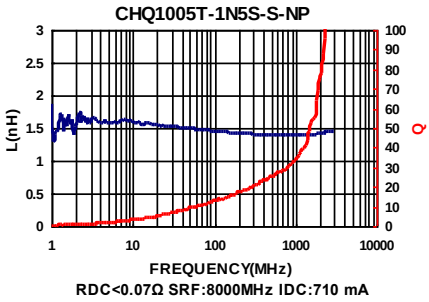
Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH

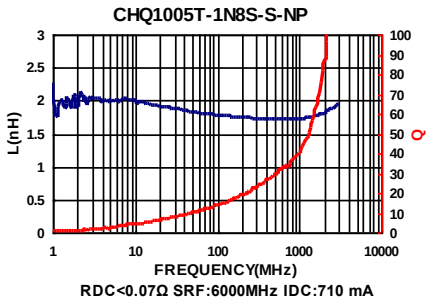
- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- IDC：Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0.19nH(Inductance ≦4.3nH) or 0.48nH(Inductance >4.3nH)
- Measure Equipment：
  L & Q：Agilent E4991A+Agilent 16197A
  SRF：Agilent E4991A or HP19196C
  RDC：HP4338B or CHEN HWA 502

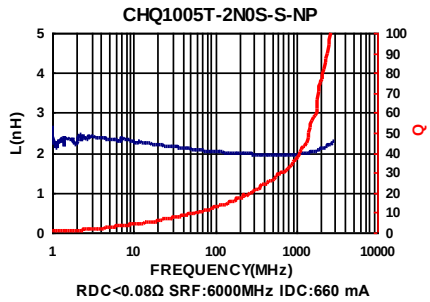
Test Instruments：Agilent E4991A Material/Impedance Analyzer

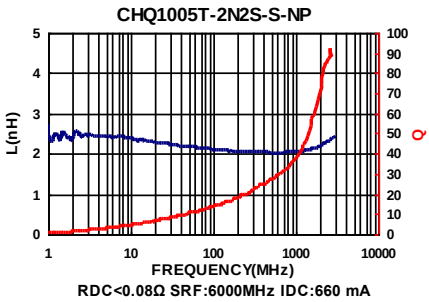


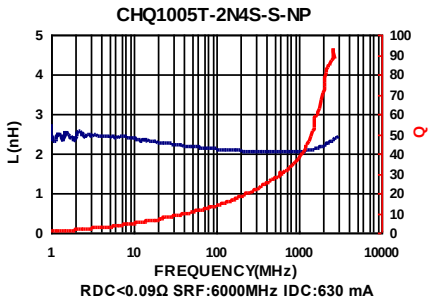


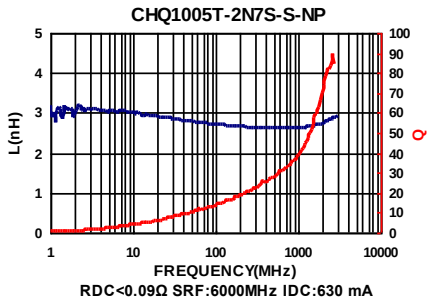


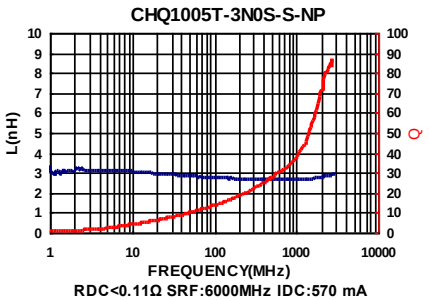




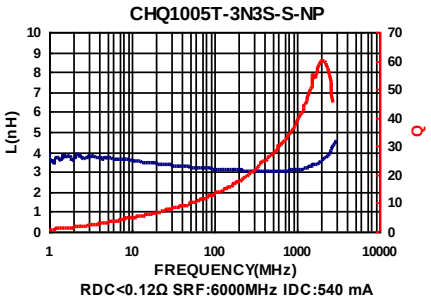


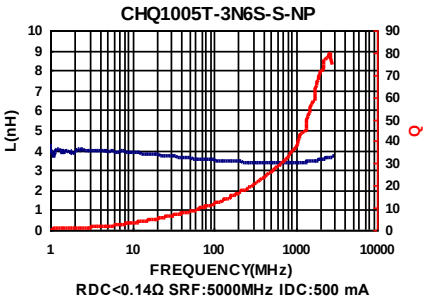


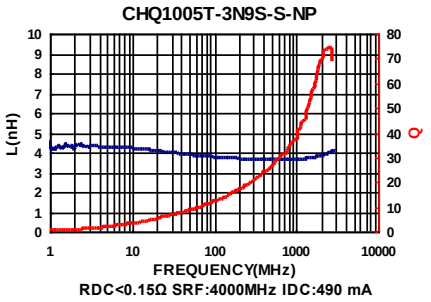




Test Instruments：Agilent E4991A Material/Impedance Analyzer







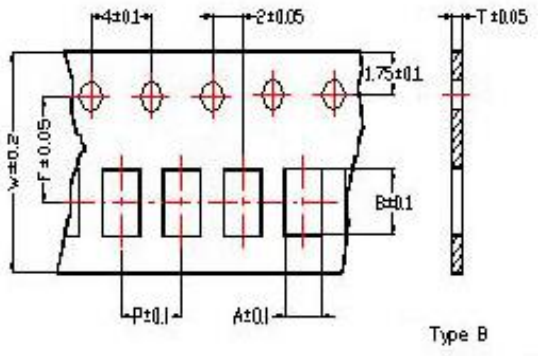
Test Instruments：Agilent E4991A Material/Impedance Analyzer

Test Instruments：Agilent E4991A Material/Impedance Analyzer

Packaging Specifications

Tape Dimensions

Figure A



Tape Material

Figure A

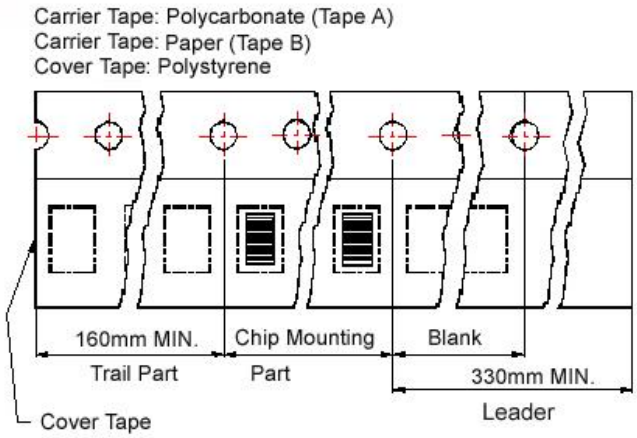
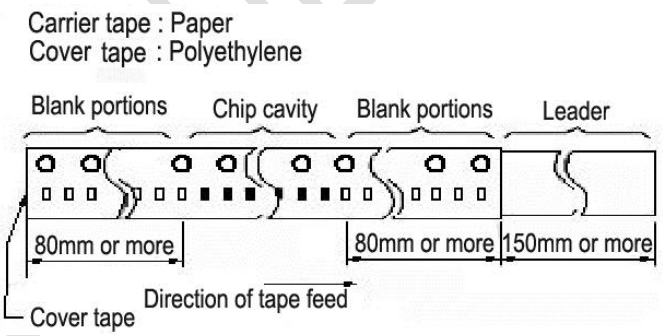
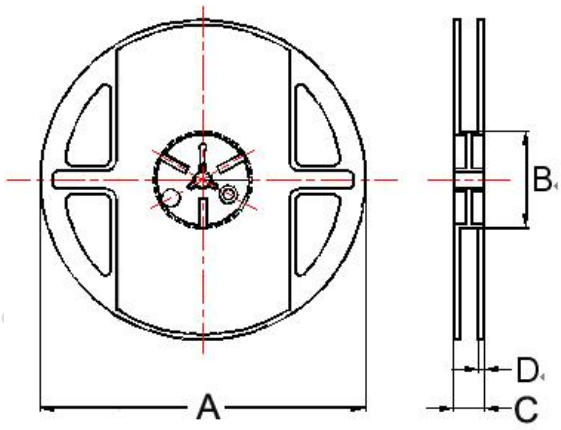


Figure B





Dimensions in mm

TYPE	Tape Dimensions						Tape	Tape	Reel Dimensions				Quantity
	A	B	T	W	P	F	Tape	Material	A	B	C	D	PCS / Reel
CHQ0603	0.37	0.67	0.42	8	2	3.5	A	B	180	60	13	1.5	15000
CHQ1005	0.62	1.12	0.60	8	2	3.5	A	A	178	60	12	1.5	10000

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Fixed Inductors ***category:***

Click to view products by Chilisin ***manufacturer:***

Other Similar products are found below :

MLZ1608M6R8WTD25 MLZ1608N6R8LT000 MLZ1608N3R3LTD25 MLZ1608N3R3LT000 MLZ1608N150LT000 MLZ1608M150WTD25 MLZ1608M3R3WTD25 MLZ1608M3R3WT000 MLZ1608M150WT000 MLZ1608A1R5WT000 MLZ1608N1R5LT000 B82432C1333K000 PCMB053T-1R0MS PCMB053T-1R5MS PCMB104T-1R5MS CR32NP-100KC CR32NP-151KC CR32NP-180KC CR32NP-181KC CR32NP-1R5MC CR32NP-390KC CR32NP-3R9MC CR32NP-680KC CR32NP-820KC CR32NP-8R2MC CR43NP-390KC CR43NP-560KC CR43NP-680KC CR54NP-181KC CR54NP-470LC CR54NP-820KC CR54NP-8R5MC MGDQ4-00004-P MGDU1-00016-P MHL1ECTTP18NJ MHL1JCTTD12NJ PE-51506NL PE-53601NL PE-53630NL PE-53824SNLT PE-62892NL PE-92100NL PG0434.801NLT PG0936.113NLT PM06-2N7 PM06-39NJ HC2LP-R47-R HC2-R47-R HC3-2R2-R HC8-1R2-R