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 BSCH 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.

NOT FOR NEW DESIGN

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CLH Series

The CLH Series is a type of ceramic chip inductor produced using the multilayer technology. The series provides excellent Q factor and SRF characteristics and is suitable for high frequency applications.

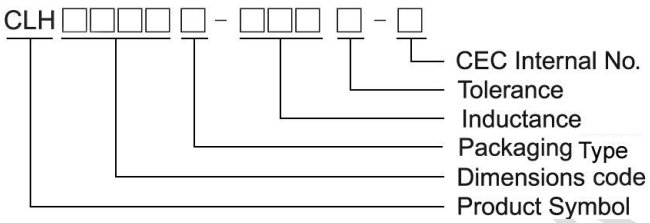
Features

- RoHS compliant
- Excellent Q factor and SRF characteristics
- Small size of 1005/1608 is suitable for small portable devices
- Supports operating frequency up to 6GHz with nominal inductance values from 1.0nH to 470nH.

Applications

- RF resonance and impedance matching circuit
- RF and wireless communication
- Information technology equipment, computers, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, PDAs, keyless remote systems
- L-C filter configurations

Product Identification

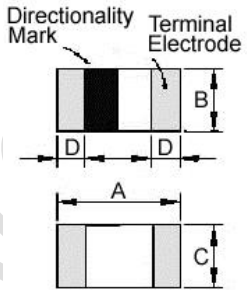


- Packing Type: T: Taping B: Bulk
- Product series identification:

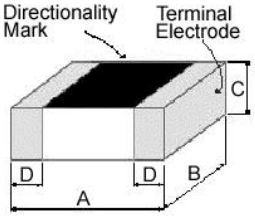
  CLH0603-F: Top side half mark.
  CLH1005-S: Top side full mark.
  CLH1608-S: Top side full mark.

Shape and Dimensions

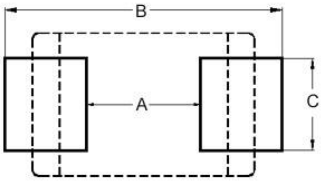
CLH0603-F Series



CLH1005-S Series
CLH1608-S Series



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
0603	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05
1005	1.0±0.10	0.5±0.10	0.5±0.10	0.25±0.10
1608	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2

Dimensions in mm

TYPE	A	B	C
CLH0603	0.3	0.75 ~ 1.05	0.3
CLH1005	0.4	1.2 ~ 1.4	0.5
CLH1608	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8

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Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Min	RDC (Ω) Max	Rated Current (mA) Max
CLH0603T-1N0□-F	1.0	±0.3nH	100	4	>10000	0.11	470
CLH0603T-1N2□-F	1.2	±0.3nH	100	4	>10000	0.12	450
CLH0603T-1N5□-F	1.5	±0.3nH	100	4	>10000	0.13	430
CLH0603T-1N8□-F	1.8	±0.3nH	100	4	>10000	0.16	390
CLH0603T-2N0□-F	2.0	±0.3nH	100	4	>10000	0.17	380
CLH0603T-2N2□-F	2.2	±0.3nH	100	4	8800	0.19	360
CLH0603T-2N4□-F	2.4	±0.3nH	100	4	8300	0.20	350
CLH0603T-2N7□-F	2.7	±0.3nH	100	4	7700	0.21	340
CLH0603T-3N0□-F	3.0	±0.3nH	100	4	7200	0.22	330
CLH0603T-3N3□-F	3.3	±0.3nH	100	4	6700	0.23	320
CLH0603T-3N6□-F	3.6	±0.3nH	100	4	6400	0.25	310
CLH0603T-3N9□-F	3.9	±0.3nH	100	4	6000	0.27	300
CLH0603T-4N3□-F	4.3	±0.3nH	100	4	5700	0.30	280
CLH0603T-4N7□-F	4.7	±0.3nH	100	4	5300	0.30	280
CLH0603T-5N1□-F	5.1	±0.3nH	100	4	5000	0.33	270
CLH0603T-5N6□-F	5.6	±0.3nH	100	4	4600	0.36	260
CLH0603T-6N2□-F	6.2	±0.3nH	100	4	4200	0.38	250
CLH0603T-6N8□-F	6.8	5	100	4	3900	0.39	250
CLH0603T-7N5□-F	7.5	5	100	4	3600	0.41	240
CLH0603T-8N2□-F	8.2	5	100	4	3400	0.45	230
CLH0603T-9N1□-F	9.1	5	100	4	3200	0.48	220
CLH0603T-10N□-F	10	5	100	4	2900	0.51	220
CLH0603T-12N□-F	12	5	100	4	2700	0.68	190
CLH0603T-15N□-F	15	5	100	4	2300	0.71	180
CLH0603T-18N□-F	18	5	100	4	2100	0.81	170
CLH0603T-22N□-F	22	5	100	4	1800	1.00	150
CLH0603T-27N□-F	27	5	100	4	1800	1.35	120
CLH0603T-33N□-F	33	5	100	4	1700	1.47	110
CLH0603T-39N□-F	39	5	100	4	1500	1.72	100
CLH0603T-47N□-F	47	5	100	4	1300	1.90	100
CLH0603T-56N□-F	56	5	100	4	1100	2.27	80
CLH0603T-68N□-F	68	5	100	4	1100	2.66	80
CLH0603T-82N□-F	82	5	100	4	1000	3.37	70
CLH0603T-R10□-F	100	5	100	4	900	3.74	60

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5%

- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- Rate Current :Applied the current to coils, the temperature rise shall not be more than 30℃
- Residual impedance of short chip : 0.19nH
- Measure Equipment：

  L & Q：Agilent E4991A+Agilent 16197A

  SRF：Agilent E4991A or HP19196C

  RDC：HP4338B or CHEN HWA 502

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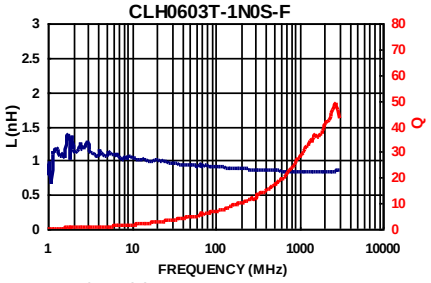
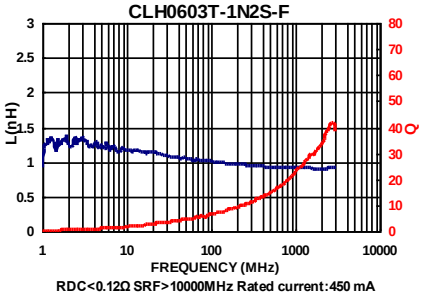
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH0603T-1N0S-F



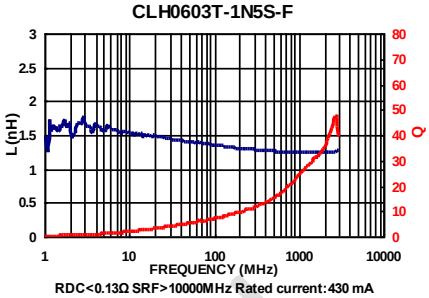
RDC<0.11Ω SRF>10000MHz Rated current:470 mA

CLH0603T-1N2S-F



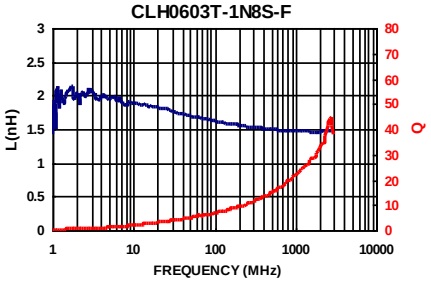
RDC<0.12Ω SRF>10000MHz Rated current:450 mA

CLH0603T-1N5S-F



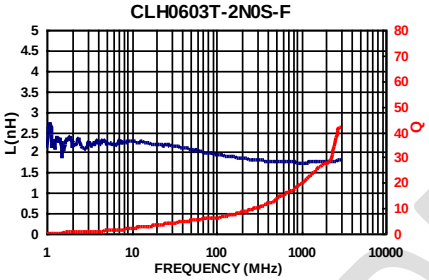
RDC<0.13Ω SRF>10000MHz Rated current:430 mA

CLH0603T-1N8S-F



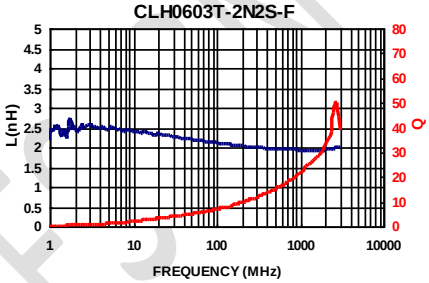
RDC<0.16Ω SRF>10000MHz Rated current:390 mA

CLH0603T-2N0S-F



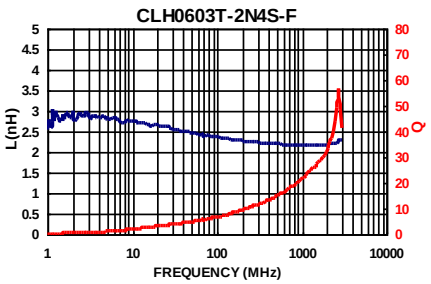
RDC<0.11Ω SRF>10000MHz Rated current:470 mA

CLH0603T-2N2S-F



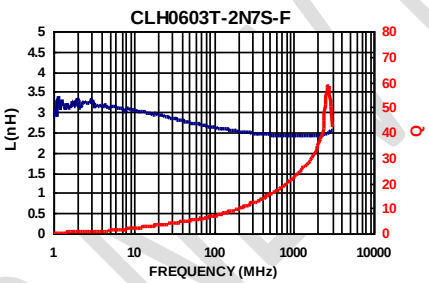
RDC<0.19Ω SRF>8800MHz Rated current:360 mA

CLH0603T-2N4S-F



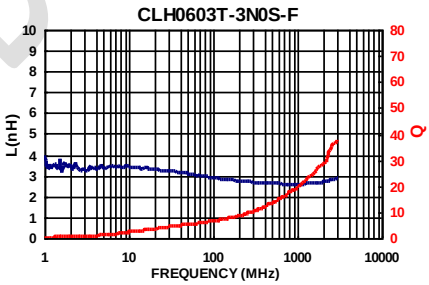
RDC<0.2Ω SRF>8300MHz Rated current:350 mA

CLH0603T-2N7S-F



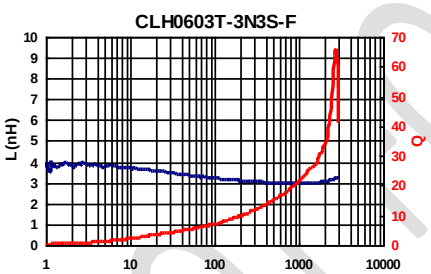
RDC<0.21Ω SRF>7700MHz Rated current:340 mA

CLH0603T-3N0S-F



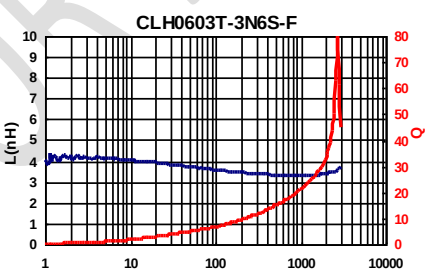
RDC<0.22Ω SRF>7200MHz Rated current:330 mA

CLH0603T-3N3S-F



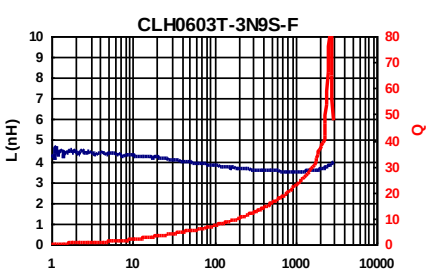
RDC<0.23Ω SRF>6700MHz Rated current:320 mA

CLH0603T-3N6S-F



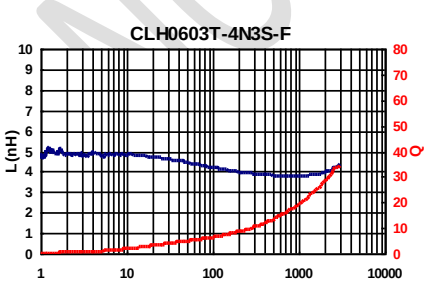
RDC<0.25Ω SRF>6400MHz Rated current:310 mA

CLH0603T-3N9S-F



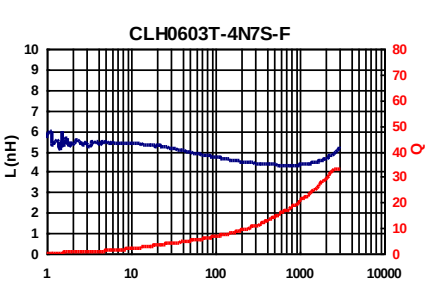
RDC<0.27Ω SRF>6000MHz Rated current:300 mA

CLH0603T-4N3S-F



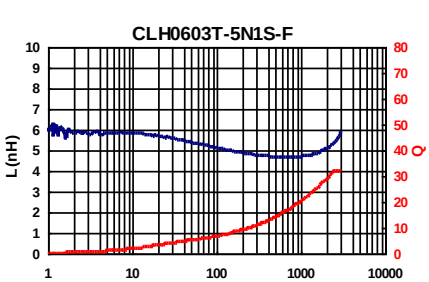
RDC<0.3Ω SRF>5700MHz Rated current:280 mA

CLH0603T-4N7S-F



RDC<0.3Ω SRF>5300MHz Rated current:280 mA

CLH0603T-5N1S-F



RDC<0.33Ω SRF>5000MHz Rated current:270 mA

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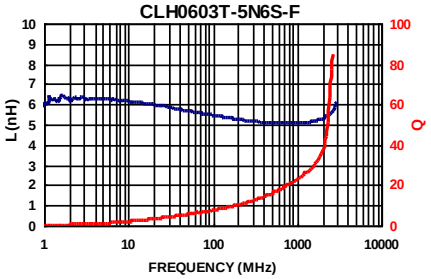
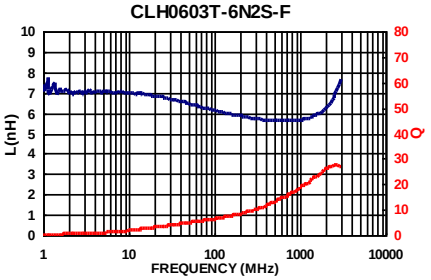
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH0603T-5N6S-F



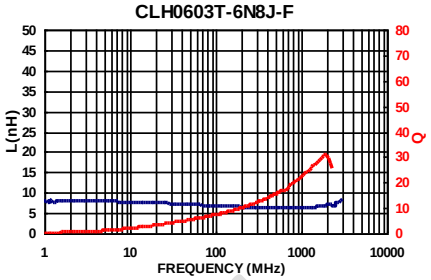
RDC<0.36Ω SRF>4600MHz Rated current:260 mA

CLH0603T-6N2S-F



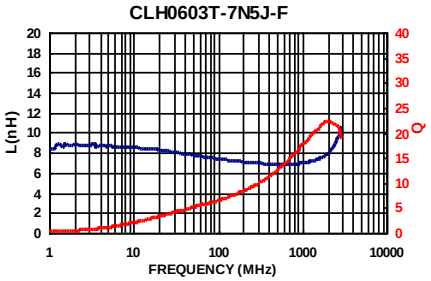
RDC<0.38Ω SRF>4200MHz Rated current:250 mA

CLH0603T-6N8J-F



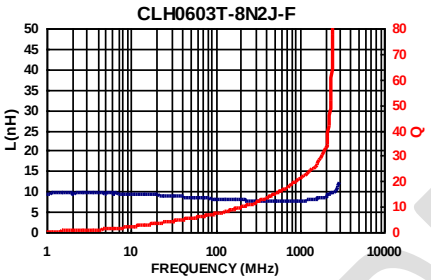
RDC<0.39Ω SRF>3900MHz Rated current:250 mA

CLH0603T-7N5J-F



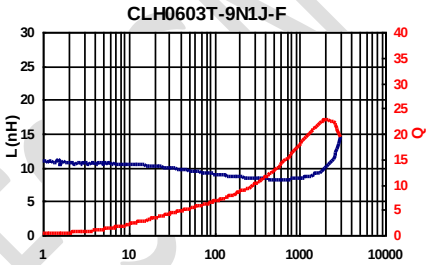
RDC<0.41Ω SRF>3600MHz Rated current:240 mA

CLH0603T-8N2J-F



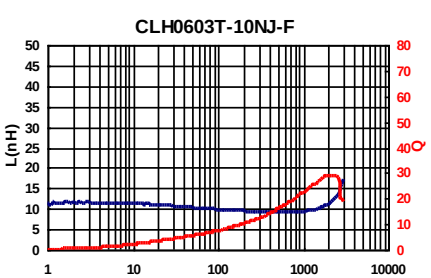
RDC<0.45Ω SRF>3400MHz Rated current:230 mA

CLH0603T-9N1J-F



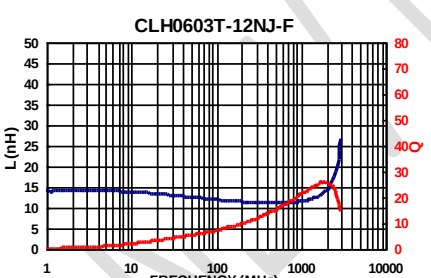
RDC<0.48Ω SRF>3200MHz Rated current:220 mA

CLH0603T-10NJ-F



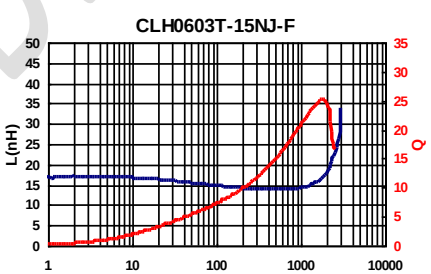
RDC<0.51Ω SRF>2900MHz Rated current:220 mA

CLH0603T-12NJ-F



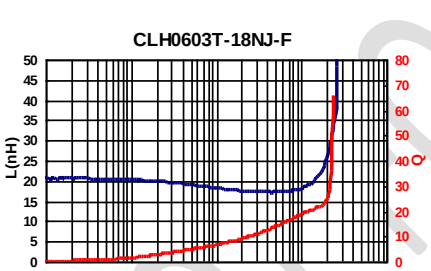
RDC<0.68Ω SRF>2700MHz Rated current:190 mA

CLH0603T-15NJ-F



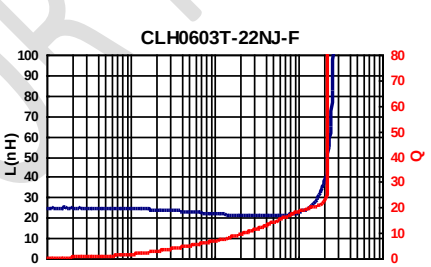
RDC<0.71Ω SRF>2300MHz Rated current:180 mA

CLH0603T-18NJ-F



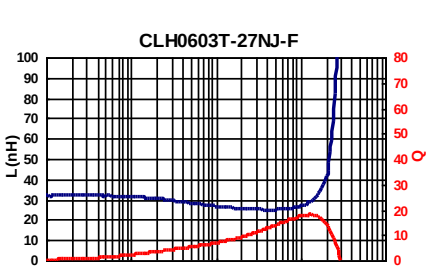
RDC<0.81Ω SRF>2100MHz Rated current:170 mA

CLH0603T-22NJ-F



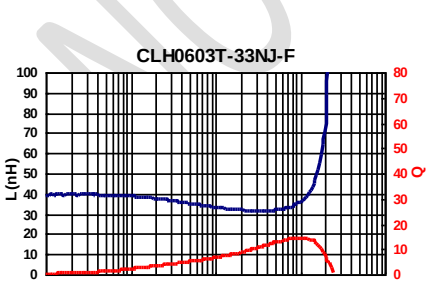
RDC<1.0Ω SRF>1800MHz Rated current:150 mA

CLH0603T-27NJ-F



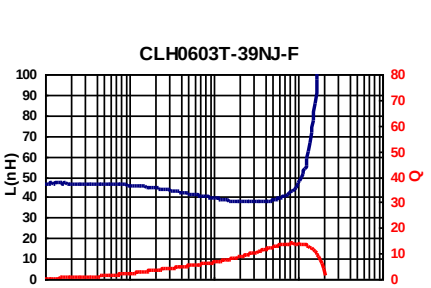
RDC<1.35Ω SRF>1800MHz Rated current:120 mA

CLH0603T-33NJ-F



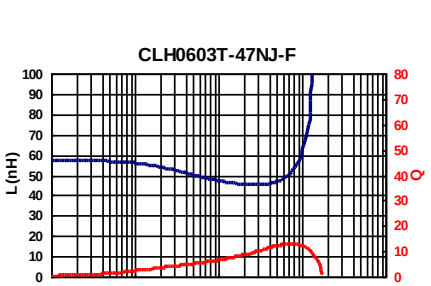
RDC<1.47Ω SRF>1700MHz Rated current:110 mA

CLH0603T-39NJ-F



RDC<1.72Ω SRF>1500MHz Rated current:100 mA

CLH0603T-47NJ-F



RDC<1.9Ω SRF>1300MHz Rated current:100 mA

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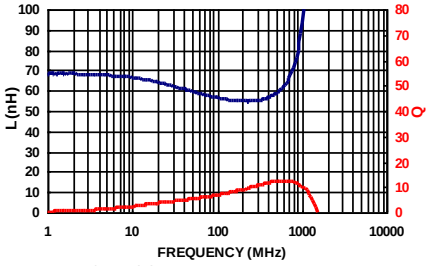
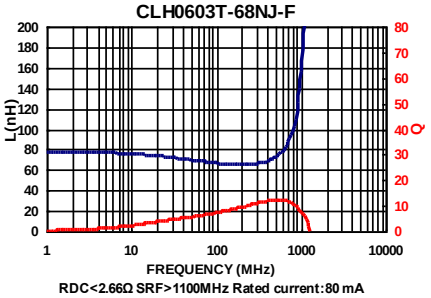
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH0603T-56NJ-F



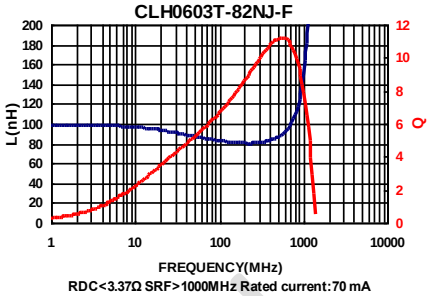
RDC<2.27Ω SRF>1100MHz Rated current:80 mA

CLH0603T-68NJ-F



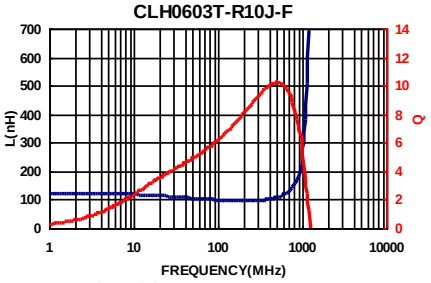
RDC<2.66Ω SRF>1100MHz Rated current:80 mA

CLH0603T-82NJ-F



RDC<3.37Ω SRF>1000MHz Rated current:70 mA

CLH0603T-R10J-F



RDC<3.74Ω SRF>900MHz Rated current:60 mA

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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.

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
CLH1005T-1N0☐-S	1.0	±0.3nH	100	8	10000	0.07	400
CLH1005T-1N1☐-S	1.1	±0.3nH	100	8	10000	0.10	400
CLH1005T-1N2☐-S	1.2	±0.3nH	100	8	10000	0.09	400
CLH1005T-1N3☐-S	1.3	±0.3nH	100	8	9000	0.10	400
CLH1005T-1N5☐-S	1.5	±0.3nH	100	8	9000	0.10	400
CLH1005T-1N6☐-S	1.6	±0.3nH	100	8	8700	0.10	400
CLH1005T-1N8☐-S	1.8	±0.3nH	100	8	8700	0.10	400
CLH1005T-2N0☐-S	2.0	±0.3nH	100	8	8100	0.10	400
CLH1005T-2N2☐-S	2.2	±0.3nH	100	8	8100	0.12	400
CLH1005T-2N4☐-S	2.4	±0.3nH	100	8	7700	0.15	400
CLH1005T-2N7☐-S	2.7	±0.3nH	100	8	7700	0.15	400
CLH1005T-3N0☐-S	3.0	±0.3nH	100	8	6300	0.15	400
CLH1005T-3N3☐-S	3.3	±0.3nH/10	100	8	6300	0.15	400
CLH1005T-3N6☐-S	3.6	±0.3nH/10	100	8	6100	0.15	400
CLH1005T-3N9☐-S	3.9	±0.3nH/10	100	8	6100	0.18	400
CLH1005T-4N3☐-S	4.3	±0.3nH/10	100	8	6000	0.18	400
CLH1005T-4N7☐-S	4.7	±0.3nH/10	100	8	6000	0.18	400
CLH1005T-5N0☐-S	5.0	±0.3nH/10	100	8	5100	0.20	400
CLH1005T-5N1☐-S	5.1	±0.3nH/10	100	8	5300	0.20	400
CLH1005T-5N6☐-S	5.6	±0.3nH/10	100	8	5100	0.20	400
CLH1005T-6N8☐-S	6.8	5 / 10	100	8	4550	0.24	400
CLH1005T-8N0☐-S	8.0	5 / 10	100	8	4100	0.30	300
CLH1005T-8N2☐-S	8.2	5 / 10	100	8	4100	0.24	300
CLH1005T-9N1☐-S	9.1	5 / 10	100	8	3900	0.26	300
CLH1005T-10N☐-S	10	5 / 10	100	8	3900	0.26	300
CLH1005T-12N☐-S	12	5 / 10	100	8	3000	0.40	300
CLH1005T-15N☐-S	15	5 / 10	100	8	2800	0.50	300
CLH1005T-18N☐-S	18	5 / 10	100	8	2500	0.55	300
CLH1005T-22N☐-S	22	5 / 10	100	8	2200	0.70	300
CLH1005T-24N☐-S	24	5 / 10	100	8	2100	0.70	300
CLH1005T-27N☐-S	27	5 / 10	100	8	2000	0.80	300
CLH1005T-33N☐-S	33	5 / 10	100	8	1800	0.9	200
CLH1005T-39N☐-S	39	5 / 10	100	8	1600	1.0	150
CLH1005T-47N☐-S	47	5 / 10	100	8	1400	1.2	150
CLH1005T-56N☐-S	56	5 / 10	100	8	1300	1.3	150
CLH1005T-68N☐-S	68	5 / 10	100	8	1100	1.5	100

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- 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 : 0nH
- Measure Equipment：
  L & Q：Agilent E4991A+Agilent 16197A
  SRF：HP8753D
  RDC：HP4338B or CHEN HWA 502

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Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
CLH1005T-75N☐-S	75	5 / 10	100	8	1080	1.5	100
CLH1005T-82N☐-S	82	5 / 10	100	8	1000	1.6	100
CLH1005T-R10☐-S	100	5 / 10	100	8	900	2.0	100
CLH1005T-R12☐-S	120	5 / 10	100	8	800	2.2	100
CLH1005T-R15☐-S	150	5 / 10	100	8	700	3.5	100
CLH1005T-R18☐-S	180	5 / 10	100	8	600	3.8	100
CLH1005T-R22☐-S	220	5 / 10	100	8	500	4.2	100
CLH1005T-R27☐-S	270	5 / 10	100	8	500	4.8	100

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

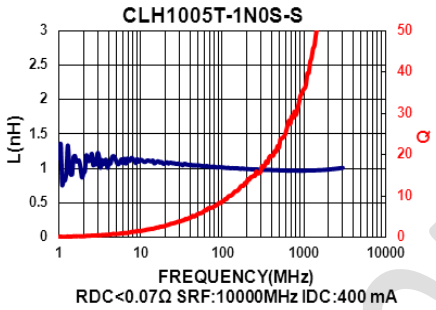
- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- IDC：Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0nH
- Measure Equipment：

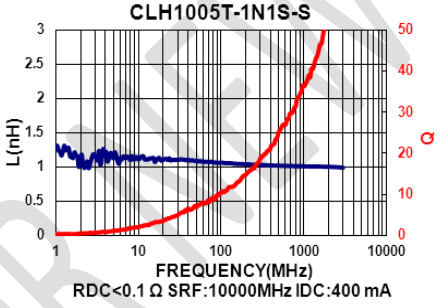
  L & Q：Agilent E4991A+Agilent 16197A

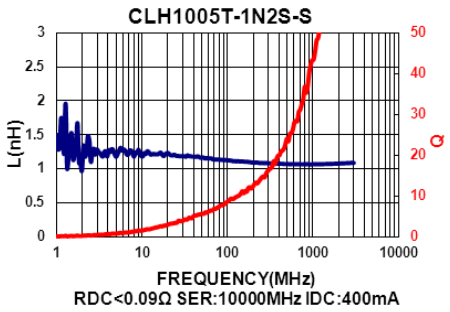
  SRF：HP8753D

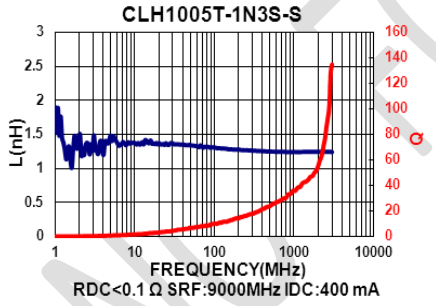
  RDC：HP4338B or CHEN HWA 502

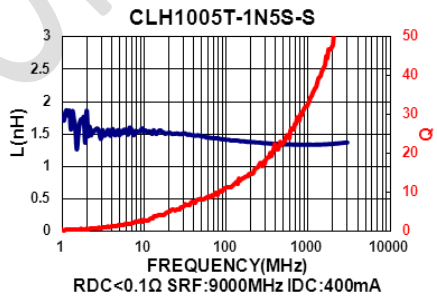
Test Instruments：Agilent E4991A Material/Impedance Analyzer

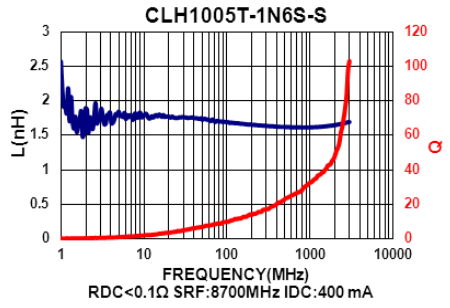


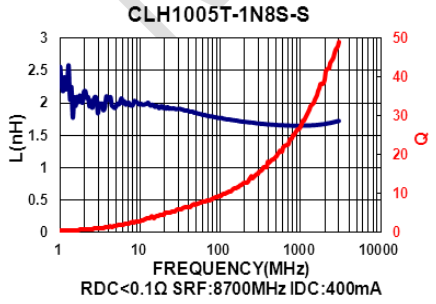


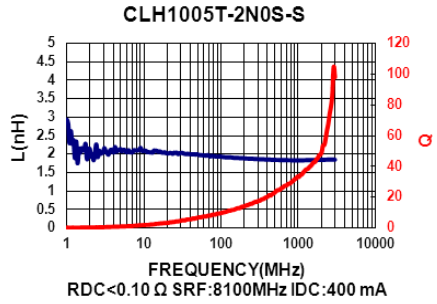


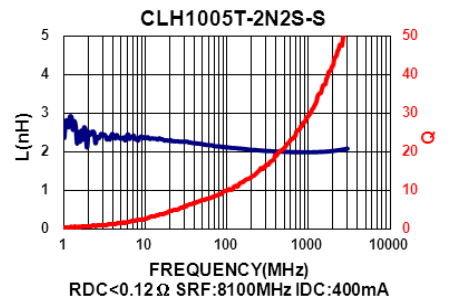












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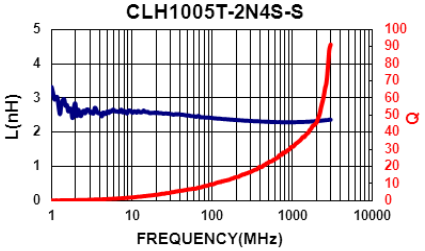
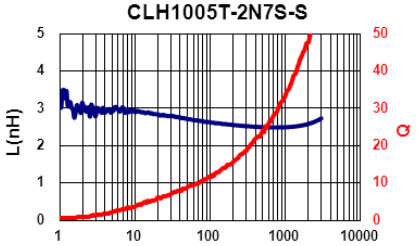
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH1005T-2N4S-S



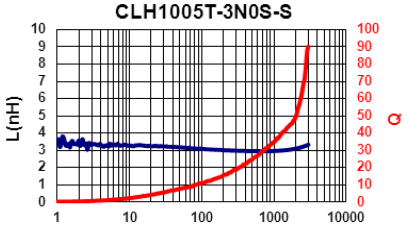
RDC<0.15Ω SRF:7700MHz IDC:400mA

CLH1005T-2N7S-S



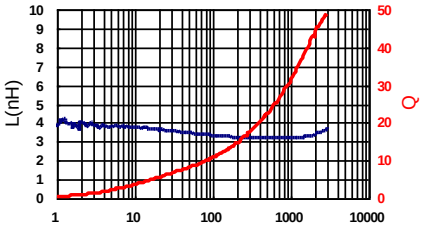
RDC<0.15Ω SRF:7700MHz IDC:400mA

CLH1005T-3N0S-S



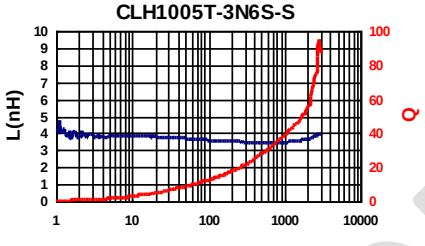
RDC<0.15 Ω SRF:6300MHz IDC:400mA

CLH1005T-3N3S-S



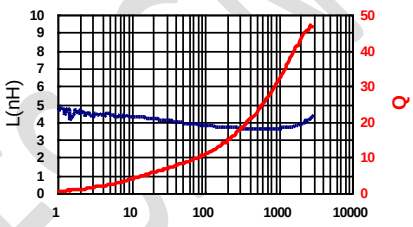
RDC<0.15Ω SRF:6300MHz IDC:400mA

CLH1005T-3N6S-S



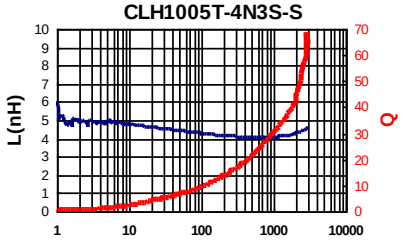
RDC<0.15Ω SRF:6100MHz IDC:400 mA

CLH1005T-3N9S-S



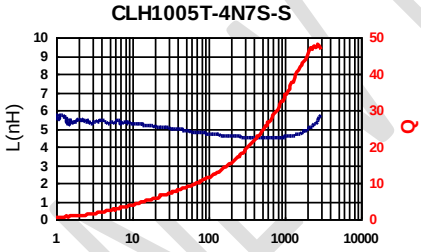
RDC<0.18Ω SRF:6100MHz IDC:400mA

CLH1005T-4N3S-S



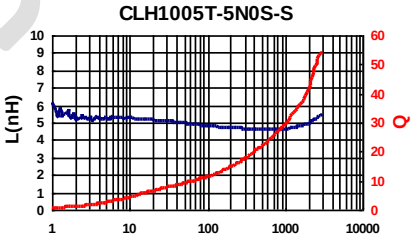
RDC<0.18 Ω SRF:6000MHz IDC:400 mA

CLH1005T-4N7S-S



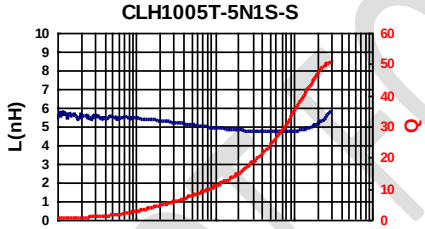
RDC<0.18Ω SRF:6000MHz IDC:400mA

CLH1005T-5N0S-S



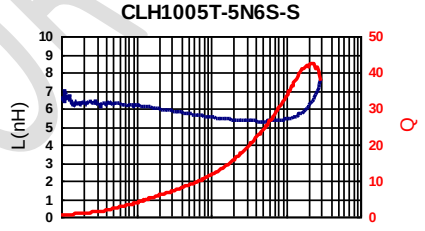
RDC<0.2Ω SRF:5100MHz IDC:400 mA

CLH1005T-5N1S-S



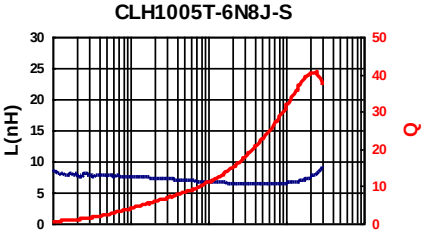
RDC<0.2 Ω SRF:5300MHz IDC:400 mA

CLH1005T-5N6S-S



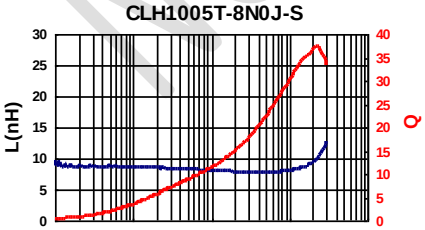
RDC<0.2Ω SRF:5100MHz IDC:400mA

CLH1005T-6N8J-S



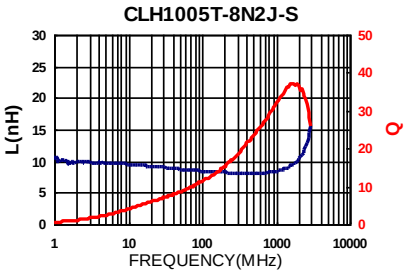
RDC<0.24Ω SRF:4550MHz IDC:400mA

CLH1005T-8N0J-S



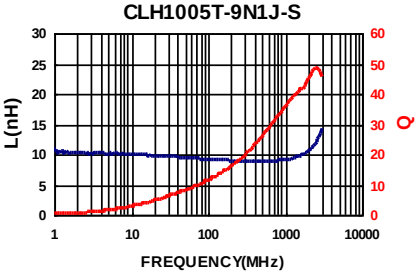
RDC<0.3Ω SRF:4100MHz IDC:300 mA

CLH1005T-8N2J-S



RDC<0.24Ω SRF:4100MHz IDC:300mA

CLH1005T-9N1J-S



RDC<0.26Ω SRF:3900MHz IDC:300 mA

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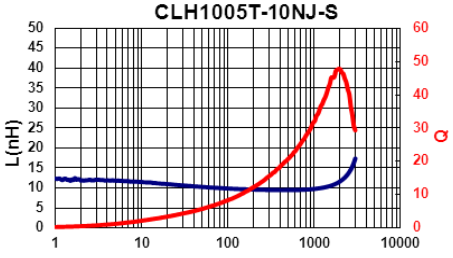
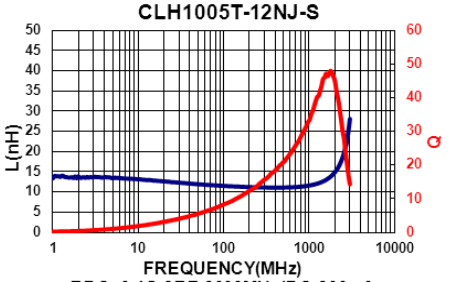
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH1005T-10NJ-S



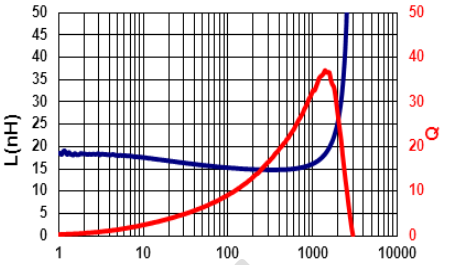
RDC<0.26Ω SRF:3900MHz IDC:300mA

CLH1005T-12NJ-S



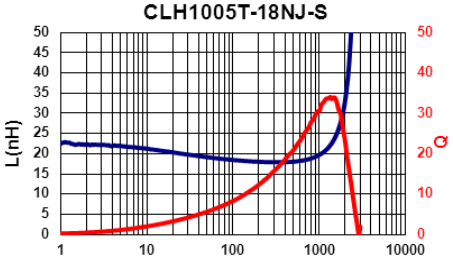
RDC<0.4Ω SRF:3000MHz IDC:300mA

CLH1005T-15NJ-S



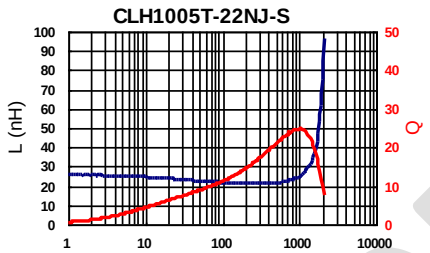
RDC<0.5Ω SRF:2800MHz IDC:300mA

CLH1005T-18NJ-S



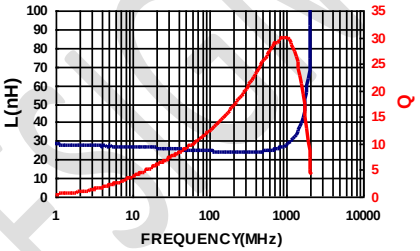
RDC<0.55Ω SRF:2500MHz IDC:300mA

CLH1005T-22NJ-S



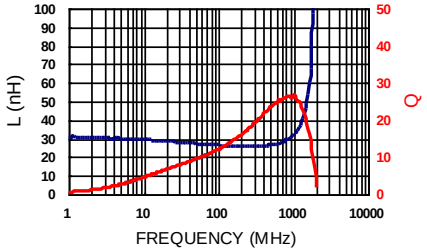
RDC<0.7Ω SRF:2200MHz IDC:300mA

CLH1005T-24NJ-S



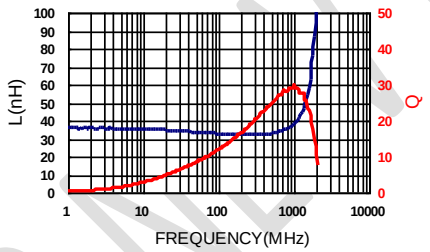
RDC<0.7Ω SRF:2100MHz IDC:300 mA

CLH1005T-27NJ-S



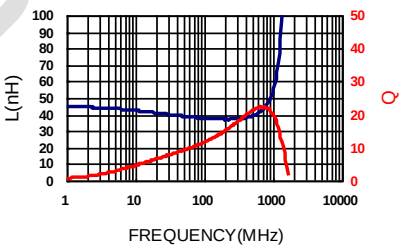
RDC<0.8Ω SRF:2000MHz IDC:300mA

CLH1005T-33NJ-S



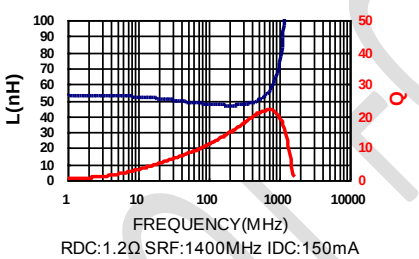
RDC<0.9Ω SRF:1800MHz IDC:200mA

CLH1005T-39NJ-S



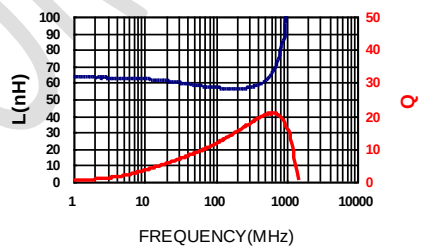
RDC<1.0Ω SRF:1600MHz IDC:150mA

CLH1005T-47NJ-S



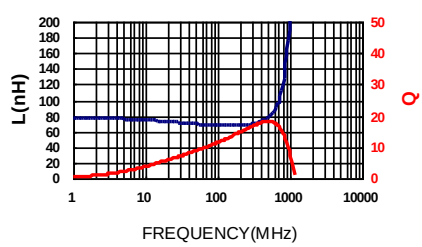
RDC:1.2Ω SRF:1400MHz IDC:150mA

CLH1005T-56NJ-S



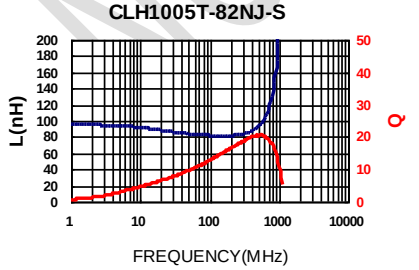
RDC<1.3Ω SRF:1300MHz IDC:150mA

CLH1005T-68NJ-S



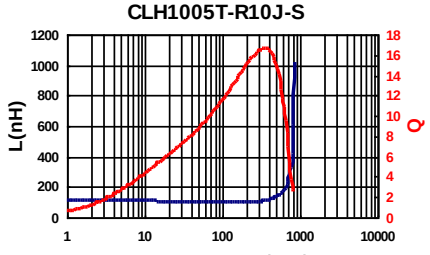
RDC<1.5Ω SRF:1100MHz IDC:100mA

CLH1005T-82NJ-S



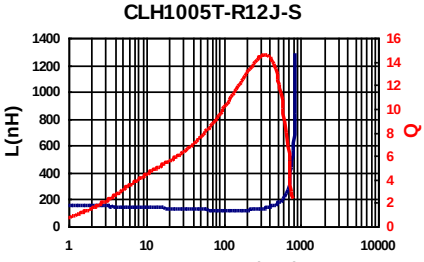
RDC<1.6Ω SRF:1000MHz IDC:100mA

CLH1005T-R10J-S



RDC<2.0 Ω SRF:900MHz IDC:100 mA

CLH1005T-R12J-S



RDC<2.2 Ω SRF:800MHz IDC:100 mA

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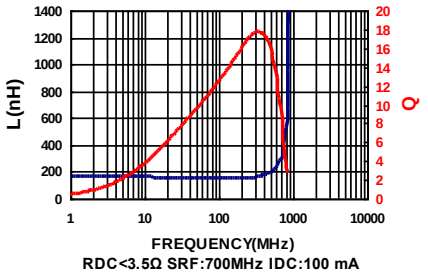
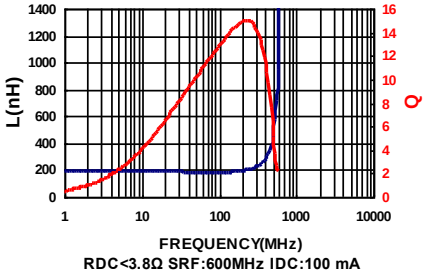
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH1005T-R15J-S



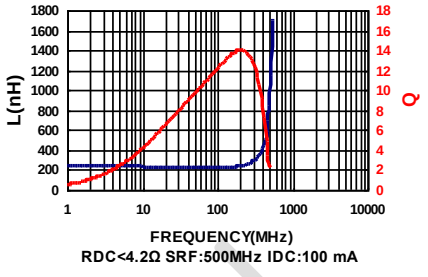
RDC<3.5Ω SRF:700MHz IDC:100 mA

CLH1005T-R18J-S



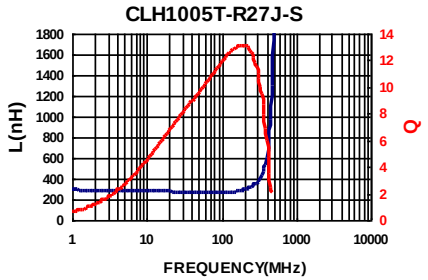
RDC<3.8Ω SRF:600MHz IDC:100 mA

CLH1005T-R22J-S



RDC<4.2Ω SRF:500MHz IDC:100 mA

CLH1005T-R27J-S



RDC<4.8Ω SRF:500MHz IDC:100 mA

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Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	Rated Current (mA) Max
CLH1005T-1N0□-S-NP	1.0	±0.2nH/±0.3nH	100	8	10000	0.07	400
CLH1005T-1N1□-S-NP	1.1	±0.3nH	100	8	10000	0.10	400
CLH1005T-1N2□-S-NP	1.2	±0.2nH/±0.3nH	100	8	10000	0.09	400
CLH1005T-1N3□-S-NP	1.3	±0.3nH	100	8	9000	0.10	400
CLH1005T-1N5□-S-NP	1.5	±0.3nH	100	8	9000	0.10	400
CLH1005T-1N6□-S-NP	1.6	±0.3nH	100	8	8700	0.10	400
CLH1005T-1N8□-S-NP	1.8	±0.3nH	100	8	8700	0.10	400
CLH1005T-2N0□-S-NP	2.0	±0.3nH	100	8	8100	0.10	400
CLH1005T-2N2□-S-NP	2.2	±0.3nH	100	8	8100	0.12	400
CLH1005T-2N4□-S-NP	2.4	±0.3nH	100	8	7700	0.15	400
CLH1005T-2N7□-S-NP	2.7	±0.3nH	100	8	7700	0.15	400
CLH1005T-3N0□-S-NP	3.0	±0.3nH	100	8	6300	0.15	400
CLH1005T-3N3□-S-NP	3.3	±0.3nH	100	8	6300	0.15	400
CLH1005T-3N6□-S-NP	3.6	±0.3nH	100	8	6100	0.15	400
CLH1005T-3N9□-S-NP	3.9	±0.3nH	100	8	6100	0.18	400
CLH1005T-4N3□-S-NP	4.3	±0.3nH	100	8	6000	0.18	400
CLH1005T-4N7□-S-NP	4.7	±0.3nH	100	8	6000	0.18	400
CLH1005T-5N1□-S-NP	5.1	±0.3nH	100	8	5300	0.20	400
CLH1005T-5N6□-S-NP	5.6	±0.3nH	100	8	5100	0.20	400
CLH1005T-6N2□-S-NP	6.2	±0.3nH/5/10	100	8	4500	0.22	400
CLH1005T-6N8□-S-NP	6.8	5 / 10	100	8	4550	0.24	400
CLH1005T-7N5□-S-NP	7.5	5 / 10	100	8	4200	0.24	300
CLH1005T-8N2□-S-NP	8.2	5 / 10	100	8	4100	0.24	300
CLH1005T-9N1□-S-NP	9.1	5 / 10	100	8	3900	0.26	300
CLH1005T-10N□-S-NP	10	5 / 10	100	8	3900	0.26	300
CLH1005T-12N□-S-NP	12	5 / 10	100	8	3000	0.28	300
CLH1005T-15N□-S-NP	15	5 / 10	100	8	2500	0.32	300
CLH1005T-18N□-S-NP	18	5 / 10	100	8	2200	0.36	300
CLH1005T-22N□-S-NP	22	5 / 10	100	8	1900	0.42	300
CLH1005T-27N□-S-NP	27	5 / 10	100	8	1700	0.46	300
CLH1005T-33N□-S-NP	33	5 / 10	100	8	1600	0.58	200
CLH1005T-39N□-S-NP	39	5 / 10	100	8	1200	0.65	200
CLH1005T-47N□-S-NP	47	5 / 10	100	8	1000	0.72	200
CLH1005T-56N□-S-NP	56	5 / 10	100	8	800	0.82	200
CLH1005T-68N□-S-NP	68	5 / 10	100	8	800	0.92	180
CLH1005T-82N□-S-NP	82	5 / 10	100	8	700	1.20	150

Note: When ordering, please specify tolerance code. Tolerance : C=±0.2nH , S=±0.3nH , J=±5% , K=±10%

- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- Rate Current：Applied the current to coils, the temperature rise shall not be more than 30℃
- Residual impedance of short chip : 0nH
- Measure Equipment：

  L & Q：Agilent E4991A+Agilent 16197A

  SRF：HP8753D

  RDC：HP4338B or CHEN HWA 502

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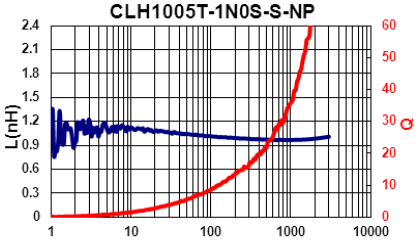
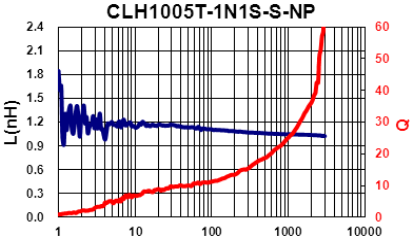
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH1005T-1N0S-S-NP



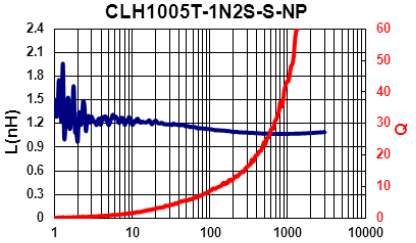
RDC<0.07Ω SRF:10000MHz Rated current:400mA

CLH1005T-1N1S-S-NP



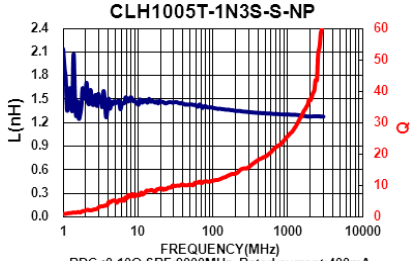
RDC<0.10Ω SRF:10000MHz Rated current:400mA

CLH1005T-1N2S-S-NP



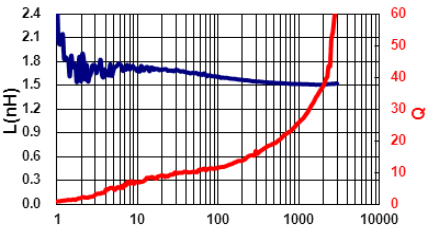
RDC<0.09Ω SRF:10000MHz Rated current:400mA

CLH1005T-1N3S-S-NP



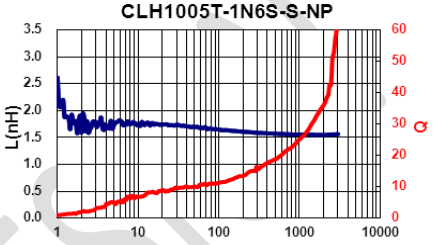
RDC<0.10Ω SRF:9000MHz Rated current:400mA

CLH1005T-1N5S-S-NP



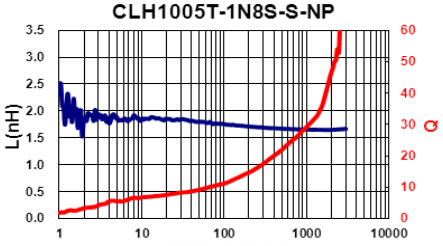
RDC<0.10Ω SRF:9000MHz Rated current:400mA

CLH1005T-1N6S-S-NP



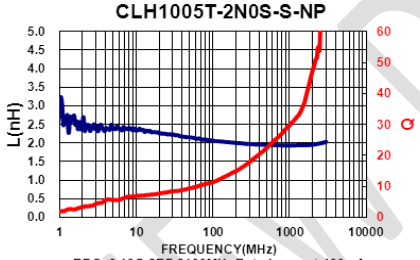
RDC<0.10Ω SRF:8700MHz Rated current:400mA

CLH1005T-1N8S-S-NP



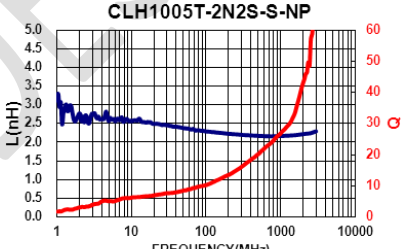
RDC<0.10Ω SRF:8700MHz Rated current:400mA

CLH1005T-2N0S-S-NP



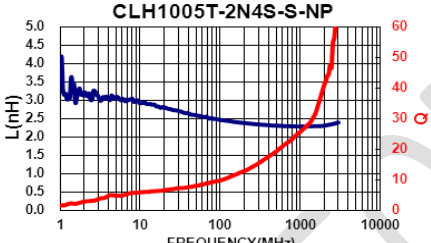
RDC<0.10Ω SRF:8100MHz Rated current:400mA

CLH1005T-2N2S-S-NP



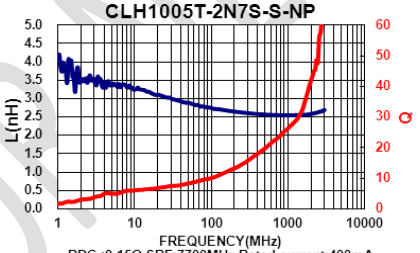
RDC<0.12Ω SRF:8100MHz Rated current:400mA

CLH1005T-2N4S-S-NP



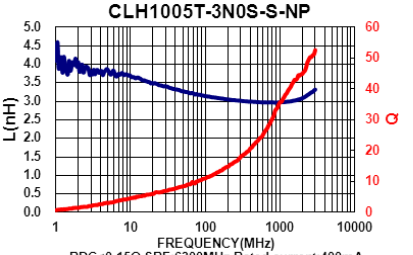
RDC<0.15Ω SRF:7700MHz Rated current:400mA

CLH1005T-2N7S-S-NP



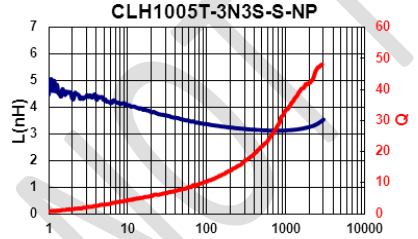
RDC<0.15Ω SRF:7700MHz Rated current:400mA

CLH1005T-3N0S-S-NP



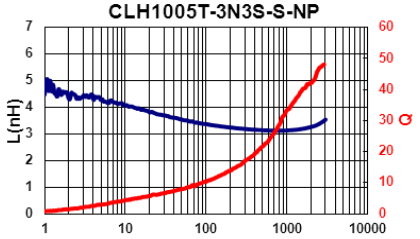
RDC<0.15Ω SRF:6300MHz Rated current:400mA

CLH1005T-3N3S-S-NP



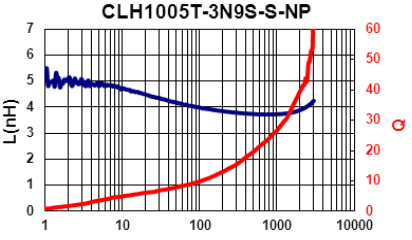
RDC<0.15Ω SRF:6300MHz Rated current:400mA

CLH1005T-3N3S-S-NP



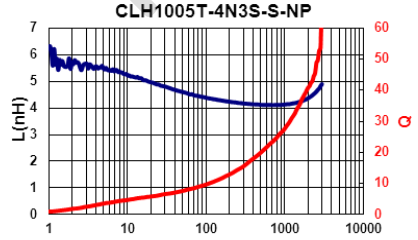
RDC<0.15Ω SRF:6300MHz Rated current:400mA

CLH1005T-3N9S-S-NP



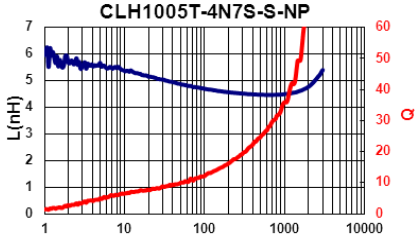
RDC<0.18Ω SRF:6100MHz Rated current:400mA

CLH1005T-4N3S-S-NP



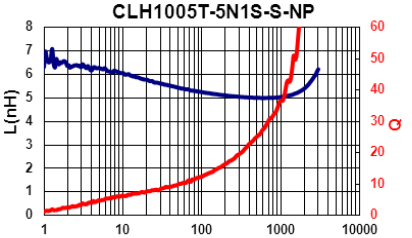
RDC<0.18Ω SRF:6000MHz Rated current:400mA

CLH1005T-4N7S-S-NP



RDC<0.18Ω SRF:6000MHz Rated current:400mA

CLH1005T-5N1S-S-NP



RDC<0.20Ω SRF:5300MHz Rated current:400mA

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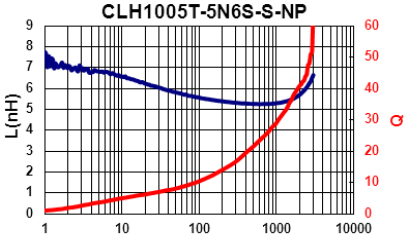
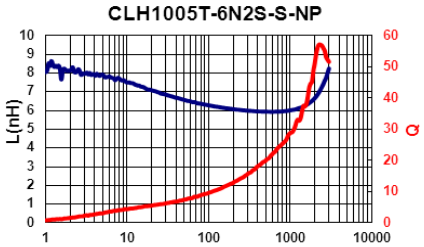
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH1005T-5N6S-S-NP



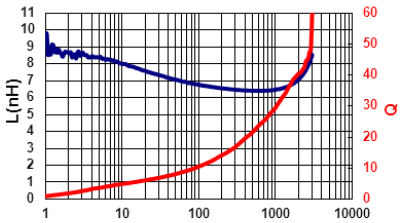
RDC<0.20Ω SRF:5100MHz Rated current:400mA

CLH1005T-6N2S-S-NP



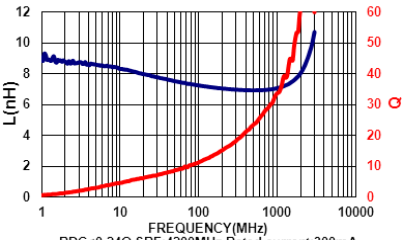
RDC<0.22Ω SRF:4500MHz Rated current:400mA

CLH1005T-6N8J-S-NP



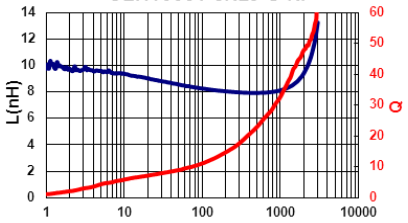
RDC<0.24Ω SRF:4550MHz Rated current:400mA

CLH1005T-7N5J-S-NP



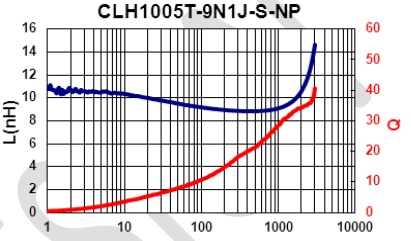
RDC<0.24Ω SRF:4200MHz Rated current:300mA

CLH1005T-8N2J-S-NP



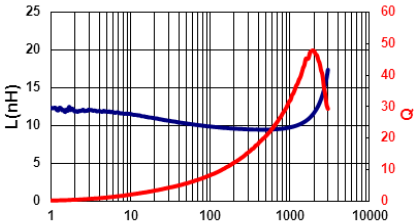
RDC<0.24Ω SRF:4100MHz Rated current:300mA

CLH1005T-9N1J-S-NP



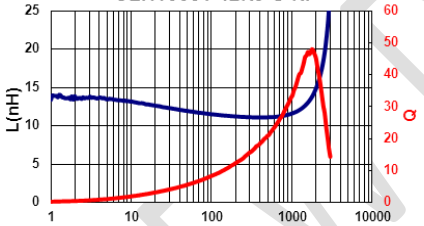
RDC<0.26Ω SRF:3900MHz Rated current:300mA

CLH1005T-10NJ-S-NP



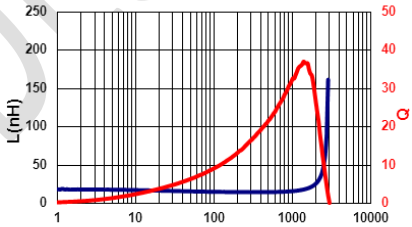
RDC<0.26Ω SRF:3900MHz Rated current:300mA

CLH1005T-12NJ-S-NP



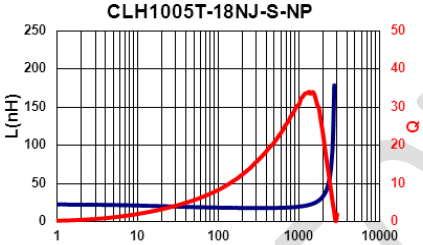
RDC<0.28Ω SRF:3000MHz Rated current:300mA

CLH1005T-15NJ-S-NP



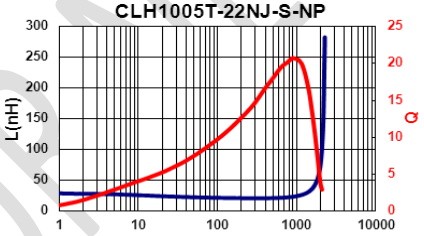
RDC<0.32Ω SRF:2500MHz Rated current:300mA

CLH1005T-18NJ-S-NP



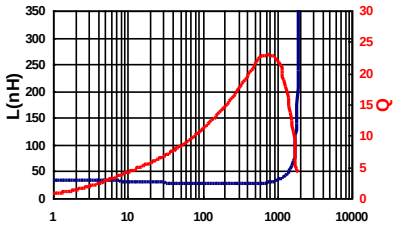
RDC<0.36Ω SRF:2200MHz Rated current:300mA

CLH1005T-22NJ-S-NP



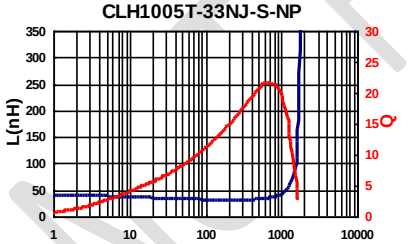
RDC<0.42Ω SRF:1900MHz Rated current:300mA

CLH1005T-27NJ-S-NP



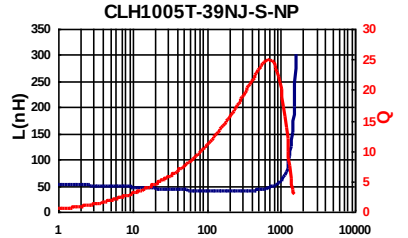
RDC<0.46Ω SRF:1700MHz Rated current:300mA

CLH1005T-33NJ-S-NP



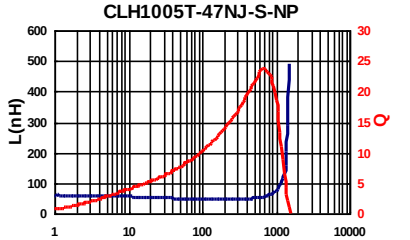
RDC<0.58Ω SRF:1600MHz Rated current:200mA

CLH1005T-39NJ-S-NP



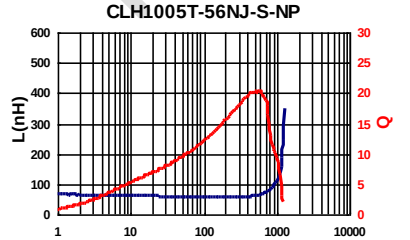
RDC<0.65Ω SRF:1200MHz Rated current:200mA

CLH1005T-47NJ-S-NP



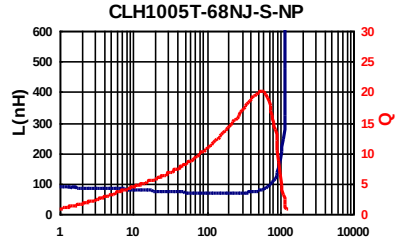
RDC<0.72Ω SRF:1000MHz Rated current:200mA

CLH1005T-56NJ-S-NP



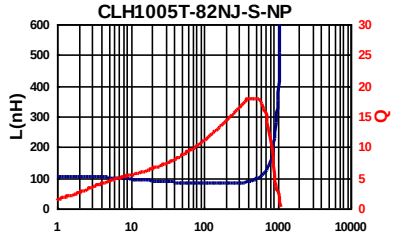
RDC<0.82Ω SRF:800MHz Rated current:200mA

CLH1005T-68NJ-S-NP



RDC<0.92Ω SRF:800MHz Rated current:180mA

CLH1005T-82NJ-S-NP



RDC<1.20Ω SRF:700MHz Rated current:150mA

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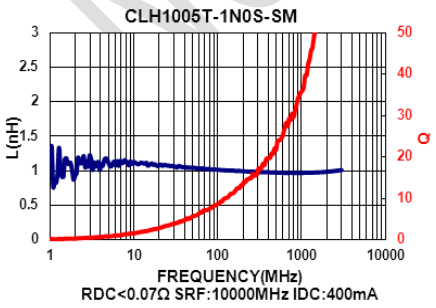
Electrical Characteristics

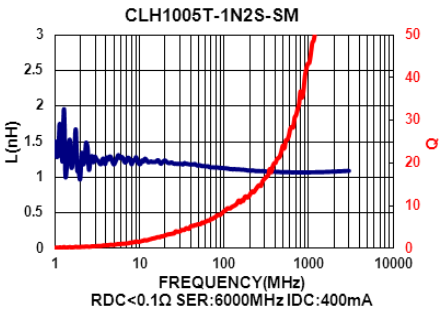
Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
CLH1005T-1N0☐-SM	1.0	±0.3nH	100	8	10000	0.07	400
CLH1005T-1N2☐-SM	1.2	±0.3nH	100	8	6000	0.10	400
CLH1005T-1N5☐-SM	1.5	±0.3nH	100	8	6000	0.10	400
CLH1005T-1N6☐-SM	1.6	±0.3nH	100	8	6000	0.10	400
CLH1005T-1N8☐-SM	1.8	±0.3nH	100	8	6000	0.10	400
CLH1005T-2N0☐-SM	2.0	±0.3nH	100	8	6000	0.12	400
CLH1005T-2N2☐-SM	2.2	±0.3nH	100	8	6000	0.15	400
CLH1005T-2N4☐-SM	2.4	±0.3nH	100	8	6000	0.15	400
CLH1005T-2N7☐-SM	2.7	±0.3nH	100	8	6000	0.15	400
CLH1005T-3N0☐-SM	3.0	±0.3nH	100	8	6000	0.15	400
CLH1005T-3N3☐-SM	3.3	±0.3nH	100	8	6000	0.15	400
CLH1005T-3N6☐-SM	3.6	±0.3nH	100	8	6000	0.15	400
CLH1005T-3N9☐-SM	3.9	±0.3nH	100	8	6000	0.19	400
CLH1005T-4N3☐-SM	4.3	±0.3nH	100	8	6000	0.20	400
CLH1005T-4N7☐-SM	4.7	±0.3nH	100	8	6000	0.20	400
CLH1005T-5N1☐-SM	5.1	±0.3nH	100	8	6000	0.20	400
CLH1005T-5N6☐-SM	5.6	±0.3nH	100	8	5300	0.20	400
CLH1005T-6N2☐-SM	6.2	5	100	8	4300	0.25	400
CLH1005T-6N8☐-SM	6.8	5	100	8	4200	0.25	400
CLH1005T-7N5☐-SM	7.5	5	100	8	3900	0.25	400
CLH1005T-8N2☐-SM	8.2	5	100	8	3600	0.30	300
CLH1005T-9N1☐-SM	9.1	5	100	8	3400	0.34	300
CLH1005T-10N☐-SM	10	5	100	8	3200	0.35	300
CLH1005T-12N☐-SM	12	5	100	8	2800	0.35	300
CLH1005T-15N☐-SM	15	5	100	8	2300	0.46	300

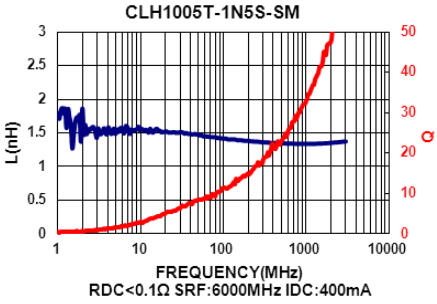
Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5%

- 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 : 0.55nH
- Measure Equipment：
  L & Q：Agilent E4991A+Agilent 16197A
  SRF：HP8753D
  RDC：HP4338B or CHEN HWA 502

Test Instruments：Agilent E4991A Material/Impedance Analyzer







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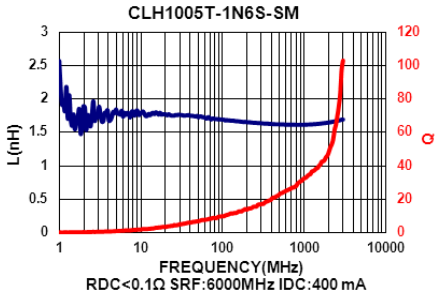
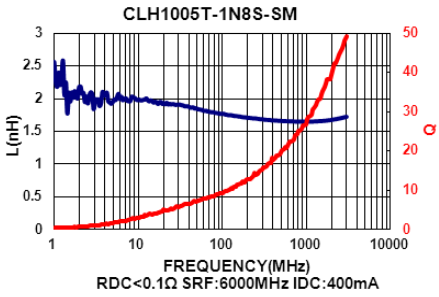
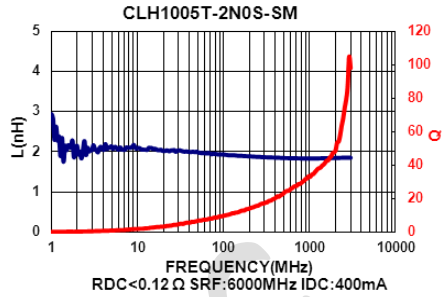
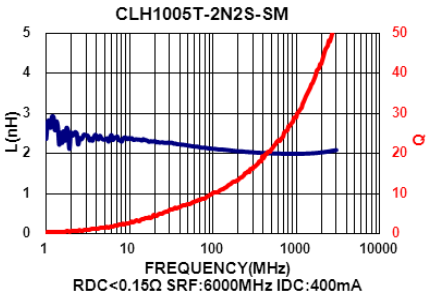
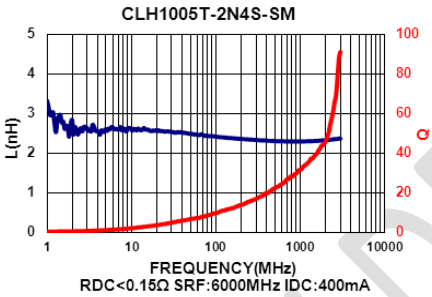
Test Instruments：Agilent E4991A Material/Impedance Analyzer

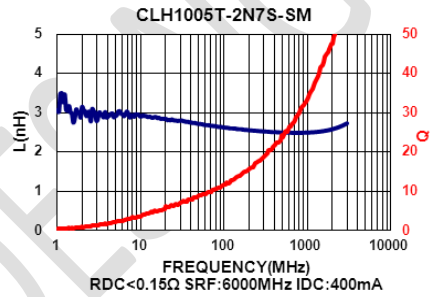


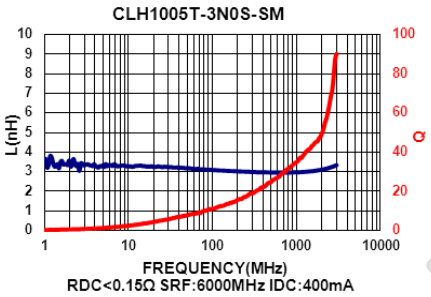


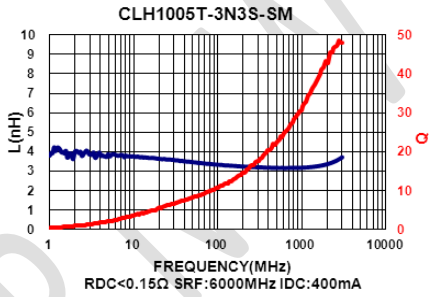


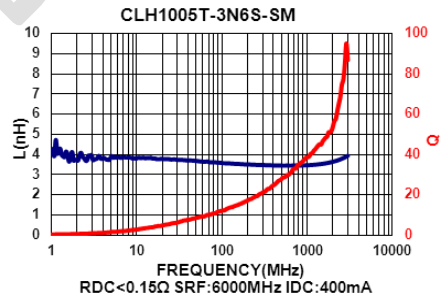


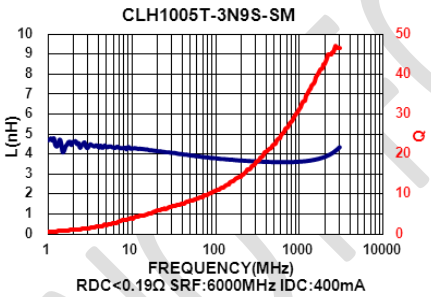


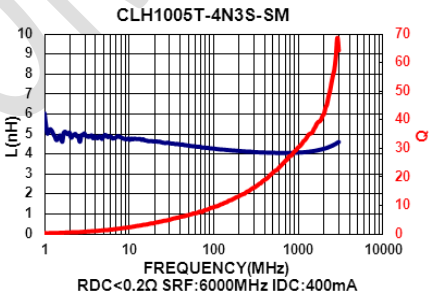


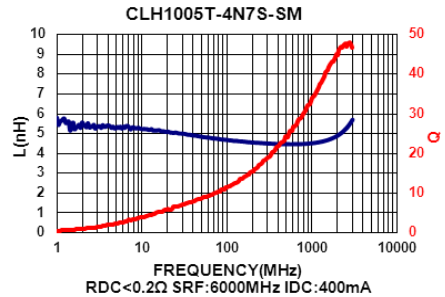


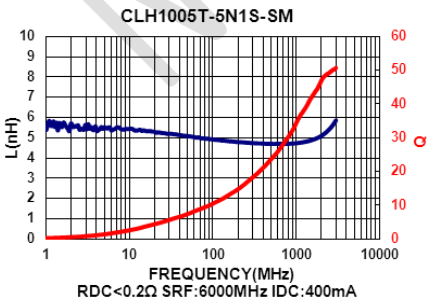


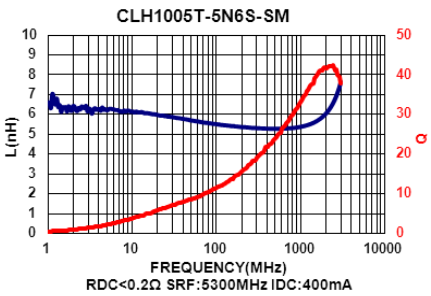


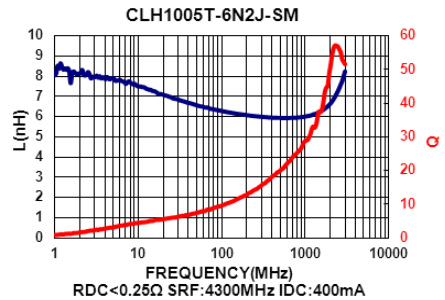












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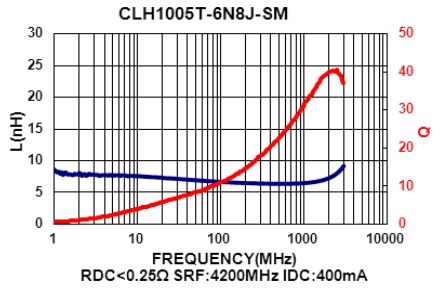
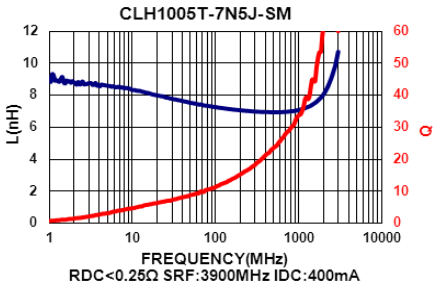
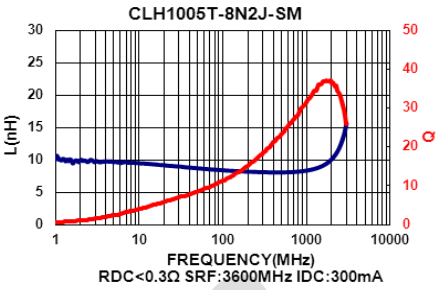
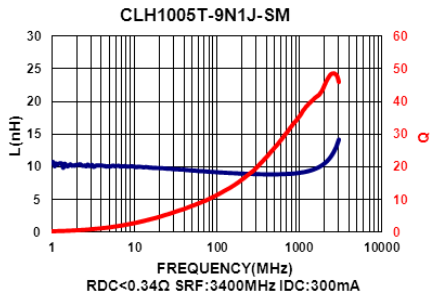
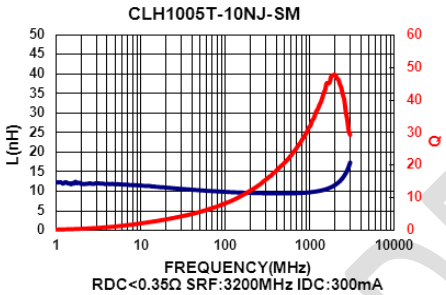
Test Instruments：Agilent E4991A Material/Impedance Analyzer

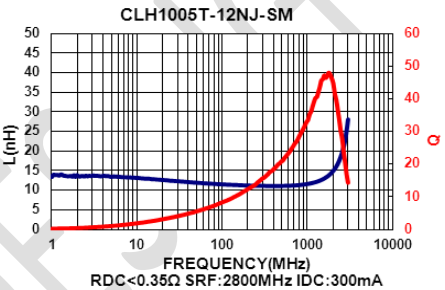


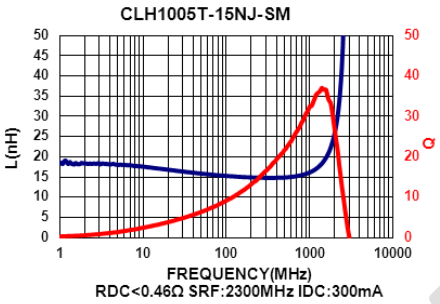












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Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
CLH1608T-1N0S-S	1.0	±0.3nH	100	8	10000	0.10	600
CLH1608T-1N2S-S	1.2	±0.3nH	100	8	10000	0.10	600
CLH1608T-1N5S-S	1.5	±0.3nH	100	8	8000	0.10	600
CLH1608T-1N6S-S	1.6	±0.3nH	100	8	8000	0.10	600
CLH1608T-1N8S-S	1.8	±0.3nH	100	8	8000	0.10	600
CLH1608T-2N2S-S	2.2	±0.3nH	100	8	7200	0.10	600
CLH1608T-2N7S-S	2.7	±0.3nH	100	10	6200	0.10	600
CLH1608T-3N0S-S	3.0	±0.3nH	100	10	5200	0.12	600
CLH1608T-3N3□-S	3.3	±0.3nH/10	100	10	5200	0.12	600
CLH1608T-3N6S-S	3.6	±0.3nH	100	10	5000	0.14	600
CLH1608T-3N9□-S	3.9	±0.3nH/10	100	10	5000	0.14	600
CLH1608T-4N3□-S	4.3	±0.3nH/10	100	10	4750	0.16	600
CLH1608T-4N7□-S	4.7	±0.3nH /10	100	10	4750	0.16	600
CLH1608T-5N1□-S	5.1	±0.3nH /10	100	10	4100	0.18	600
CLH1608T-5N6□-S	5.6	±0.3nH/10	100	10	4100	0.18	600
CLH1608T-6N2□-S	6.2	5 / 10	100	10	3750	0.22	600
CLH1608T-6N8□-S	6.8	5 / 10	100	10	3750	0.22	600
CLH1608T-7N5□-S	7.5	5 / 10	100	10	3300	0.24	600
CLH1608T-8N2□-S	8.2	5 / 10	100	10	3300	0.24	600
CLH1608T-10N□-S	10	5 / 10	100	12	3000	0.26	600
CLH1608T-12N□-S	12	5 / 10	100	12	2600	0.28	600
CLH1608T-15N□-S	15	5 / 10	100	12	2500	0.32	600
CLH1608T-16N□-S	16	5 / 10	100	12	2400	0.35	600
CLH1608T-18N□-S	18	5 / 10	100	12	2400	0.35	600
CLH1608T-22N□-S	22	5 / 10	100	12	2000	0.40	500
CLH1608T-27N□-S	27	5 / 10	100	12	1900	0.45	500
CLH1608T-33N□-S	33	5 / 10	100	12	1600	0.55	400
CLH1608T-39N□-S	39	5 / 10	100	12	1400	0.60	400
CLH1608T-47N□-S	47	5 / 10	100	12	1300	0.70	400
CLH1608T-56N□-S	56	5 / 10	100	12	1100	0.75	400
CLH1608T-62N□-S	62	5 / 10	100	12	1050	0.85	400
CLH1608T-68N□-S	68	5 / 10	100	12	1050	0.85	400
CLH1608T-75N□-S	75	5 / 10	100	12	900	1.00	300
CLH1608T-82N□-S	82	5 / 10	100	12	900	1.00	300
CLH1608T-R10□-S	100	5 / 10	100	12	770	1.20	300
CLH1608T-R12□-S	120	5 / 10	50	8	650	1.30	300
CLH1608T-R15□-S	150	5 / 10	50	8	550	1.70	250
CLH1608T-R18□-S	180	5 / 10	50	8	520	1.90	250
CLH1608T-R22□-S	220	5 / 10	50	8	500	2.00	250
CLH1608T-R27□-S	270	5 / 10	50	8	470	2.20	150
CLH1608T-R33□-S	330	5 / 10	50	8	320	2.80	100
CLH1608T-R39□-S	390	5 / 10	50	8	300	3.00	100

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- 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 : 0nH
- Measure Equipment：

  L & Q：Agilent E4991A+Agilent 16197A

  SRF：HP8753D

  RDC：HP4338B or CHEN HWA 502

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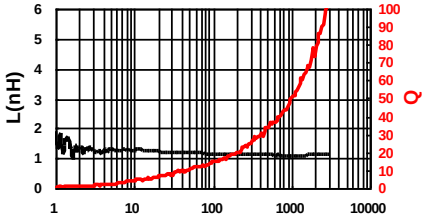
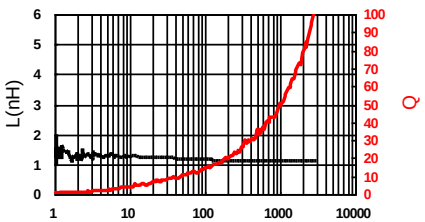
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH1608T-1N0S-S



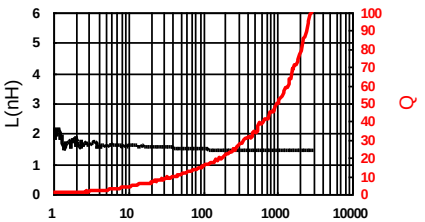
RDC<0.1Ω SRF:10000MHz IDC:600mA

CLH1608T-1N2S-S



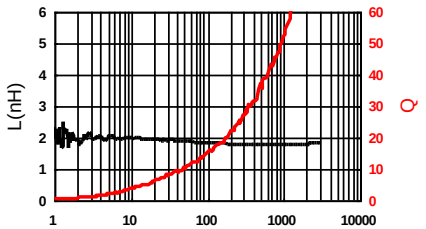
RDC<0.1Ω SRF:10000MHz IDC:600mA

CLH1608T-1N5S-S



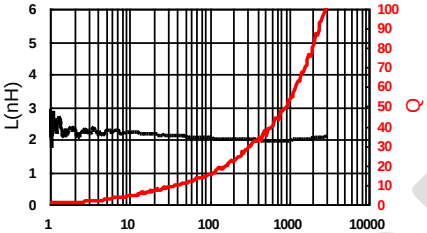
RDC<0.1Ω SRF:8000MHz IDC:600mA

CLH1608T-1N8S-S



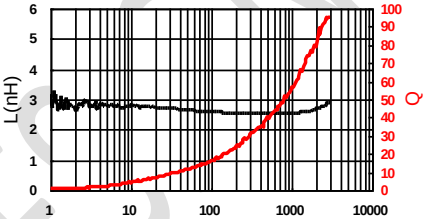
RDC<0.10Ω SRF:8000MHz IDC:600mA

CLH1608T-2N2S-S



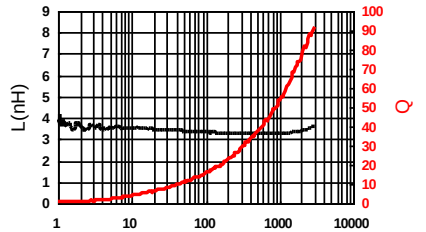
RDC<0.1Ω SRF:7200MHz IDC:600mA

CLH1608T-2N7S-S



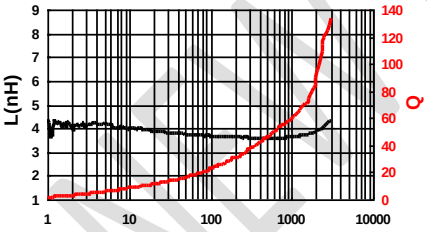
RDC<0.10Ω SRF:6200MHz IDC:600mA

CLH1608T-3N3S-S



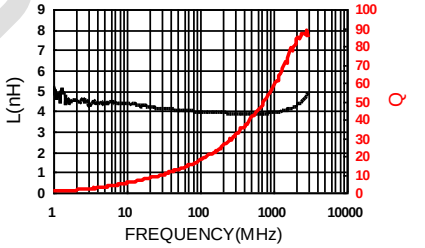
RDC<0.12Ω SRF:5200MHz IDC:600mA

CLH1608T-3N6S-S



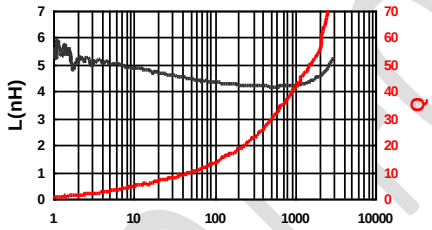
RDC<0.14Ω SRF:5000MHz IDC:600mA

CLH1608T-3N9S-S



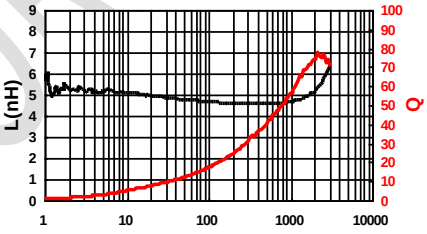
RDC<0.14Ω SRF:5000MHz IDC:600mA

CLH1608T-4N3S-S



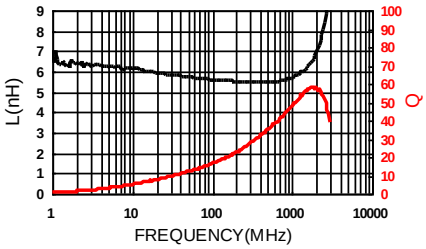
RDC<0.16Ω SRF:4750MHz IDC:600mA

CLH1608T-4N7S-S



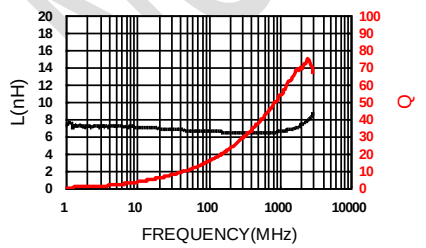
RDC<0.16Ω SRF:4750MHz IDC:600mA

CLH1608T-5N6S-S



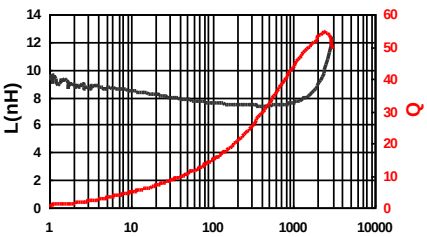
RDC<0.18Ω SRF:4100MHz IDC:600mA

CLH1608T-6N8J-S



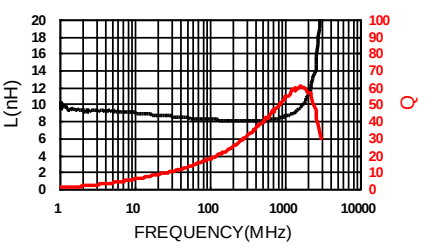
RDC<0.22Ω SRF:3750MHz IDC:600mA

CLH1608T-7N5J-S



RDC<0.24Ω SRF:3300MHz IDC:600mA

CLH1608T-8N2J-S



RDC<0.24Ω SRF:3300MHz IDC:600mA

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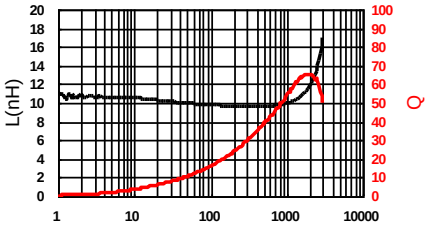
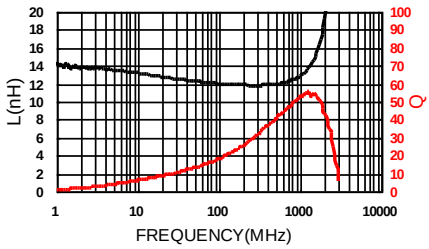
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH1608T-10NJ-S



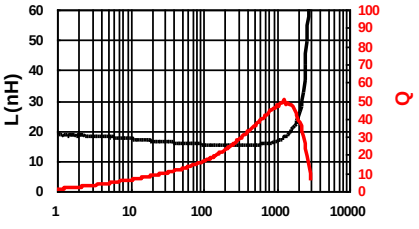
RDC<0.26Ω SRF:3000MHz IDC:600mA

CLH1608T-12NJ-S



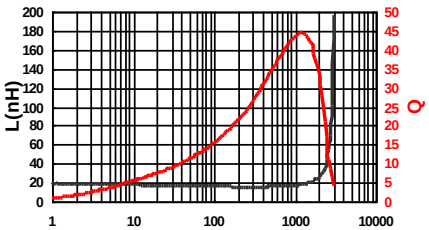
RDC<0.28Ω SRF:2600MHz IDC:600mA

CLH1608T-15NJ-S



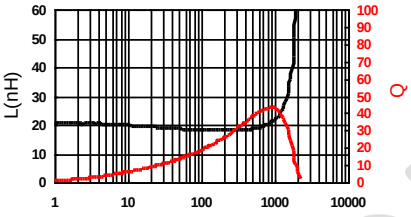
RDC<0.32Ω SRF:2400MHz IDC:600mA

CLH1608T-16NJ-S



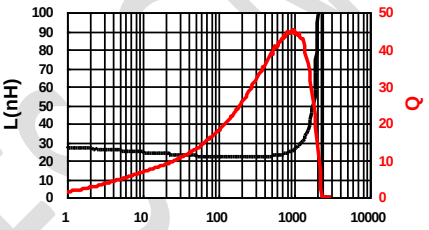
RDC<0.12Ω SRF:2400MHz IDC:600mA

CLH1608T-18NJ-S



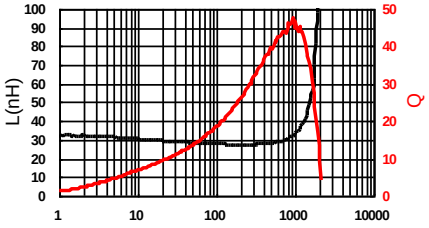
RDC<0.35Ω SRF:2400MHz IDC:600mA

CLH1608T-22NJ-S



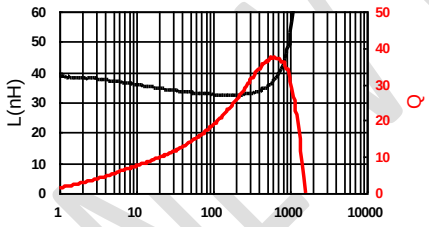
RDC<0.4Ω SRF:2000MHz IDC:500mA

CLH1608T-27NJ-S



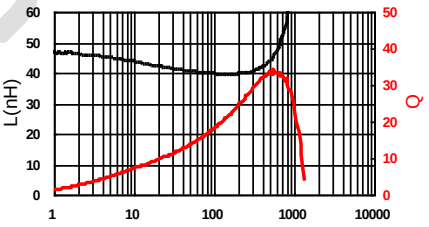
RDC<0.45Ω SRF:1900MHz IDC:500mA

CLH1608T-33NJ-S



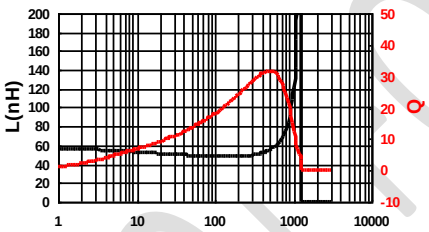
RDC<0.55Ω SRF:1600MHz IDC:400mA

CLH1608T-39NJ-S



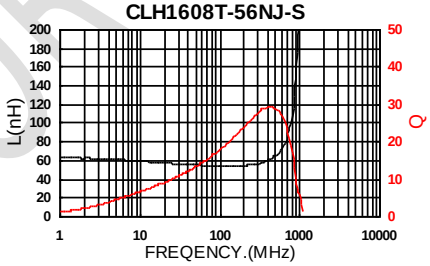
RDC<0.60Ω SRF:1400MHz IDC:400mA

CLH1608T-47NJ-S



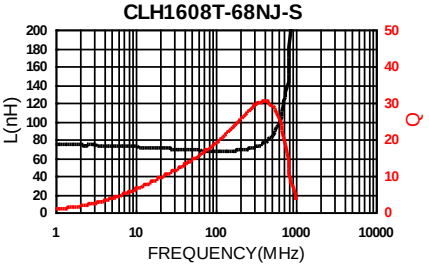
RDC<0.7Ω SRF:1300MHz IDC:400mA

CLH1608T-56NJ-S



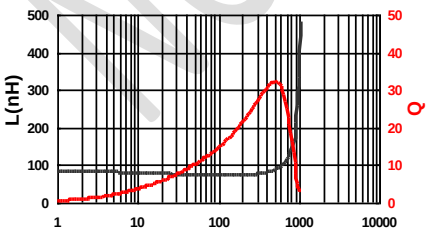
RDC<0.75Ω SRF:1100MHz IDC:400mA

CLH1608T-68NJ-S



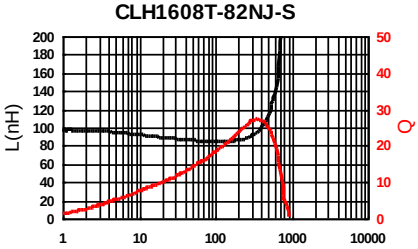
RDC<0.85Ω SRF:1050MHz IDC:400mA

CLH1608T-75NJ-S



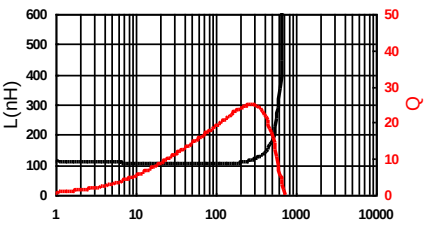
RDC<1.0Ω SRF:900MHz IDC:300mA

CLH1608T-82NJ-S



RDC<1.0Ω SRF:900MHz IDC:300mA

CLH1608T-R10J-S



RDC<1.20Ω SRF:770MHz IDC:300mA

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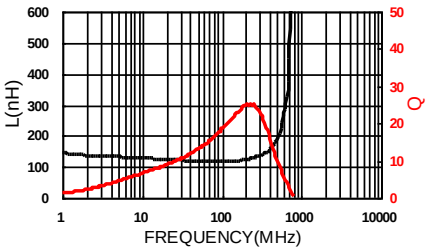
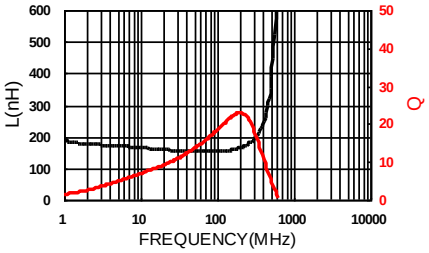
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CLH1608T-R12J-S



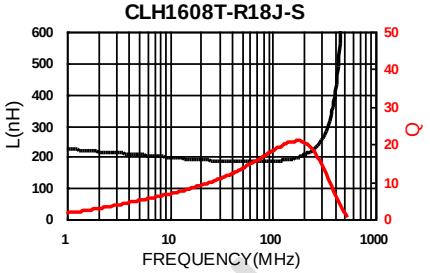
RDC<1.30 Ω SRF:650MHz IDC:300mA

CLH1608T-R15J-S



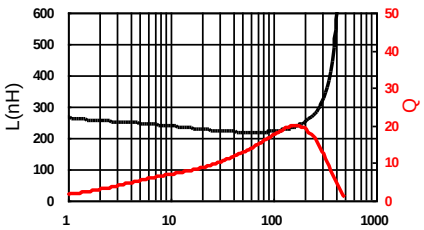
RDC<1.70 Ω SRF:550MHz IDC:250mA

CLH1608T-R18J-S



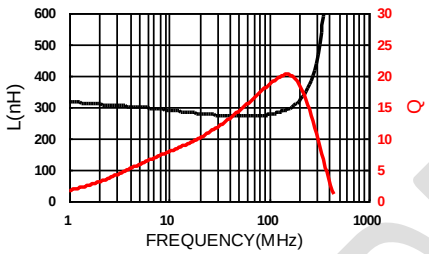
RDC<1.90 Ω SRF:520MHz IDC:250mA

CLH1608T-R22J-S



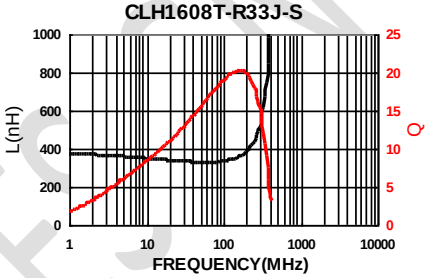
RDC<2.00 Ω SRF:500MHz IDC:250mA

CLH1608T-R27J-S



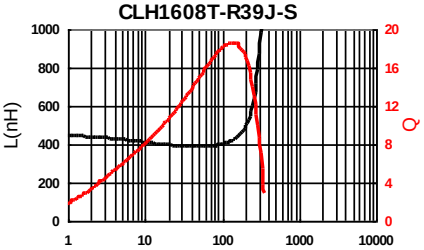
RDC<2.20 Ω SRF:470MHz IDC:150mA

CLH1608T-R33J-S



RDC<2.8 Ω SRF:320MHz IDC:100mA

CLH1608T-R39J-S



RDC<3 Ω SRF:300MHz IDC:100mA

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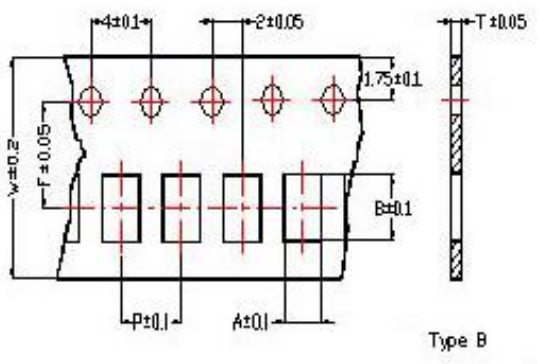
Packaging Specifications

Tape Dimensions

Figure A



Tape Material

Figure A

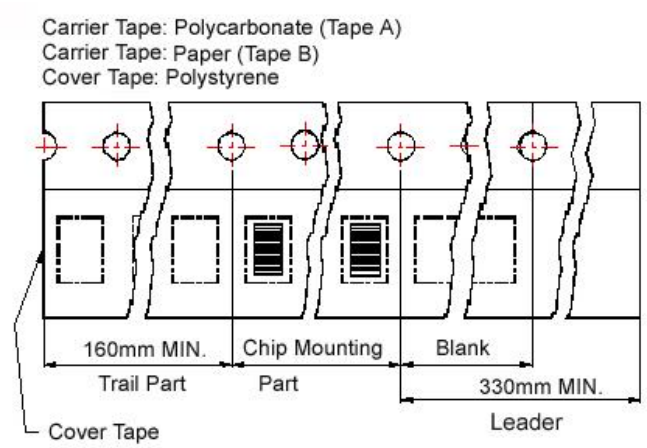
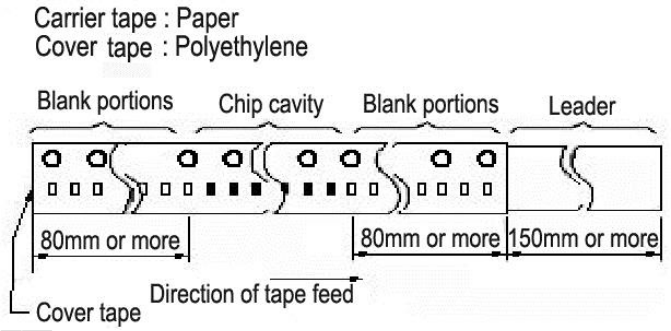
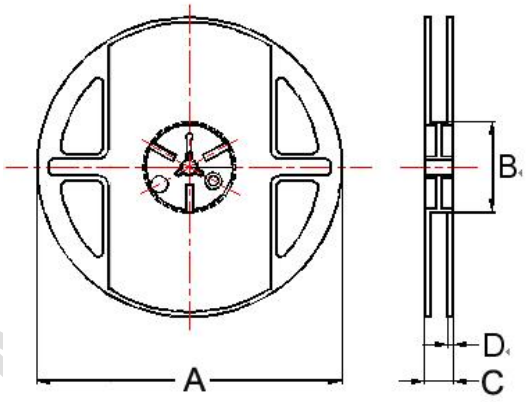


Figure B



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Tape	Reel Dimensions				Quantity
	A	B	T	W	P	F	Tape	Material	A	B	C	D	PCS / Reel
CLH0603	0.37	0.67	0.42	8	2	3.5	A	B	180	60	13	1.5	15000
CLH1005	0.62	1.12	0.60	8	2	3.5	A	A	178	60	12	1.5	10000
CLH1608	1.00	1.80	0.95	8	4	3.5	A	A	178	60	12	1.5	4000

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