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.

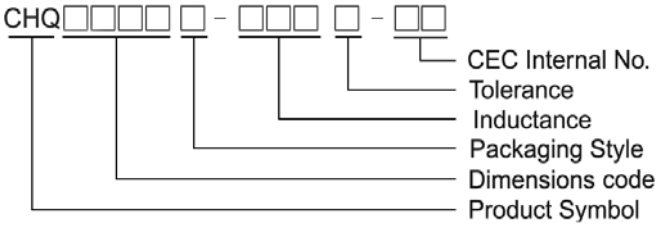
Features

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

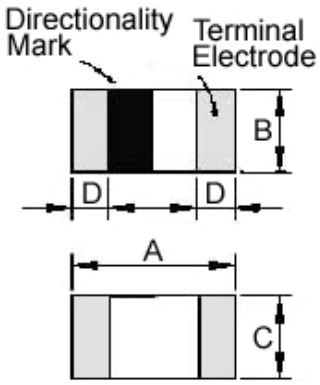
Applications

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

Product Identification



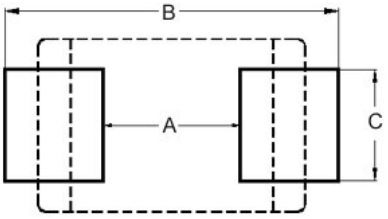
Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D
CHQ0603	0.6±0.03	0.3±0.03	0.3±0.03	0.10±0.05

Recommended Pattern



Dimensions in mm

TYPE	A	B	C
CHQ0603	0.3	0.75 ~ 1.05	0.3

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Q Min	Test Frequency (MHz)	Q Typical					SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Max
					500 MHz	800 MHz	1.8 GHz	2.0 GHz	2.4 GHz			
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
- Measure Equipment：

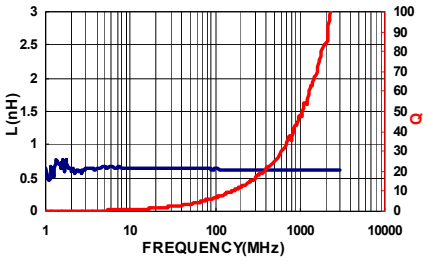
  L & Q：Agilent E4991A+Agilent 16197A

  SRF：Agilent E4991A or HP19196C

  RDC：HP4338B or CHEN HWA 502

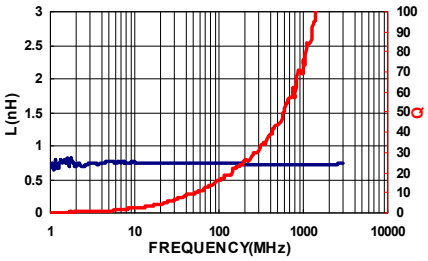
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CHQ0603T-0N6B-HU



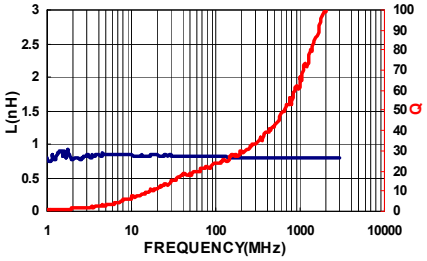
RDC<0.06Ω SRF:10000MHz IDC:900 mA

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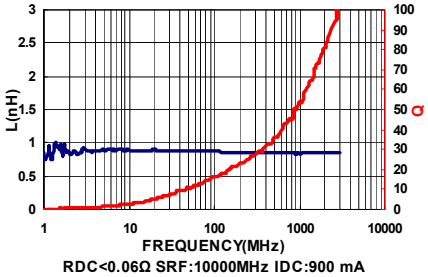
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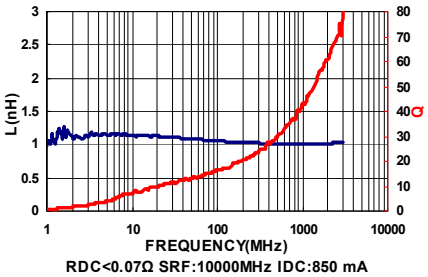
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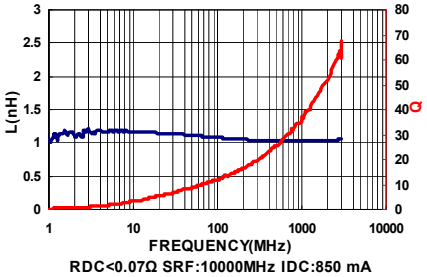
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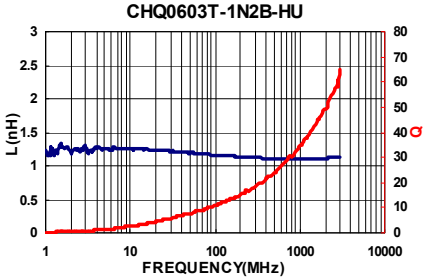
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CHQ0603T-1N1B-HU



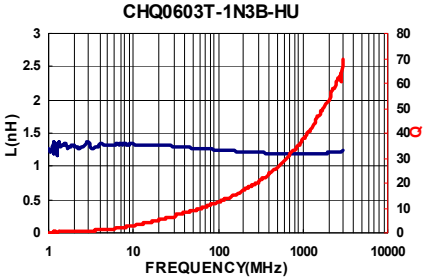
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CHQ0603T-1N2B-HU



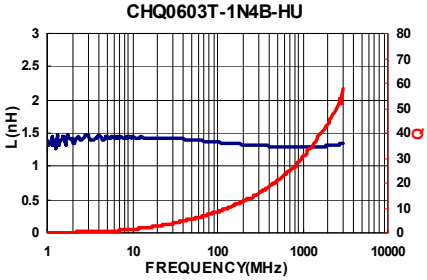
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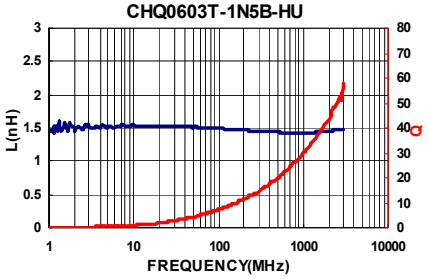
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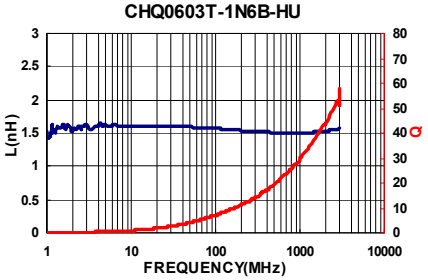
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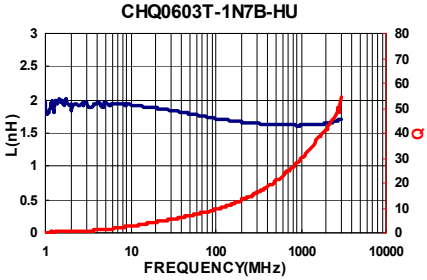
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CHQ0603T-1N6B-HU



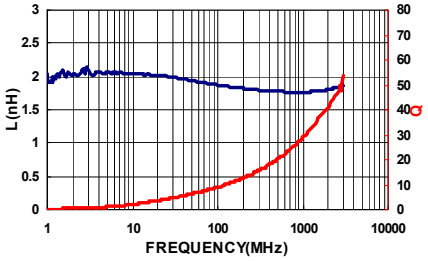
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CHQ0603T-1N7B-HU



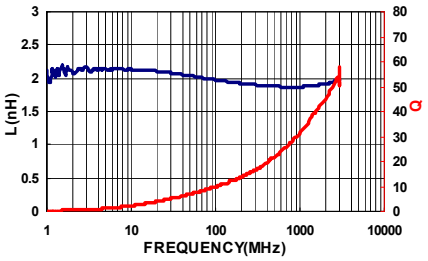
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CHQ0603T-1N8B-HU



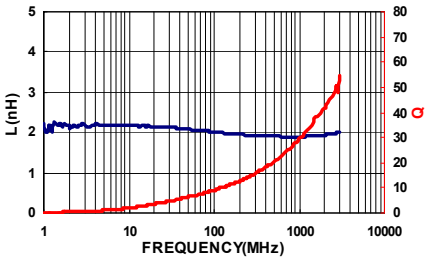
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CHQ0603T-1N9B-HU



RDC<0.13Ω SRF:10000MHz IDC:620 mA

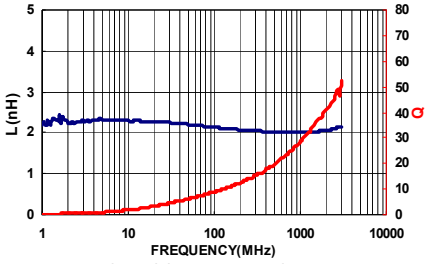
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RDC<0.15Ω SRF:10000MHz IDC:600 mA

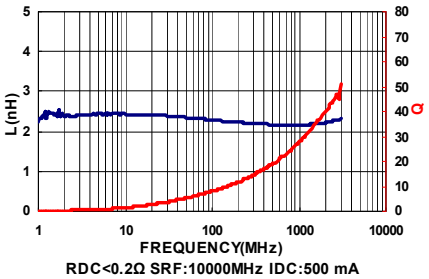
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CHQ0603T-2N1B-HU



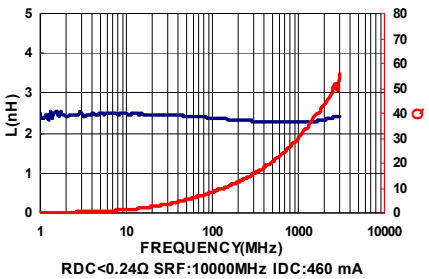
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CHQ0603T-2N2B-HU



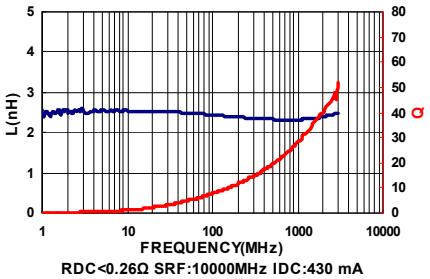
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CHQ0603T-2N3B-HU



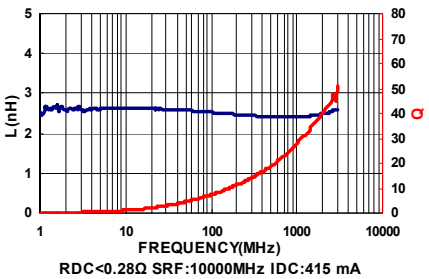
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CHQ0603T-2N4B-HU



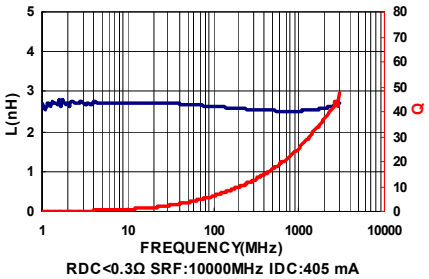
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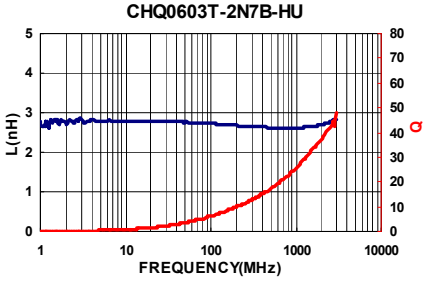
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CHQ0603T-2N6B-HU



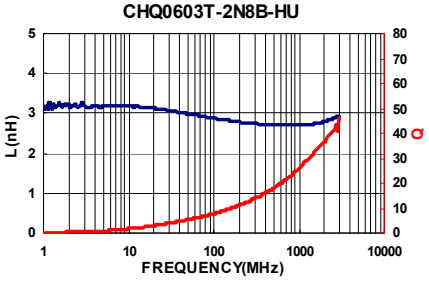
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CHQ0603T-2N7B-HU



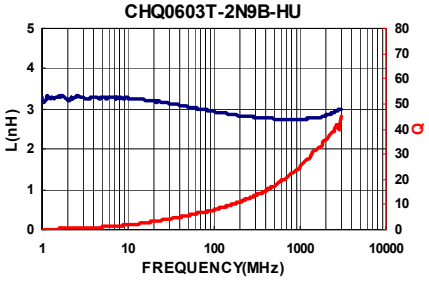
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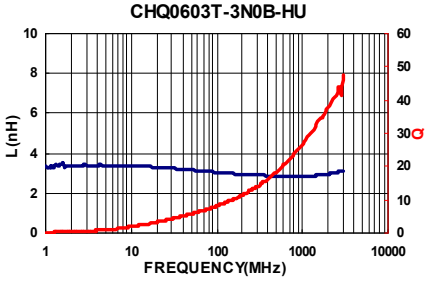
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CHQ0603T-2N9B-HU



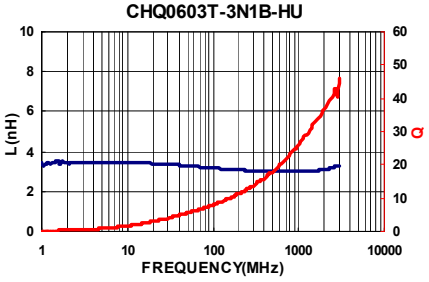
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CHQ0603T-3N0B-HU



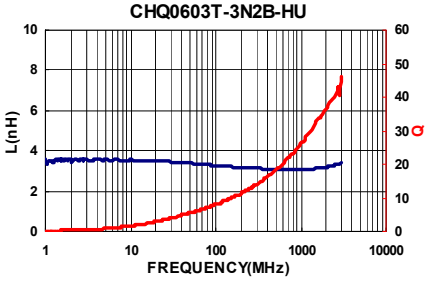
RDC<0.24Ω SRF:9100MHz IDC:460 mA

CHQ0603T-3N1B-HU



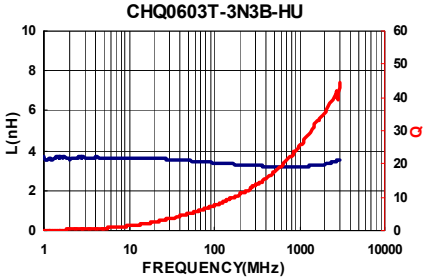
RDC<0.25Ω SRF:8900MHz IDC:450 mA

CHQ0603T-3N2B-HU



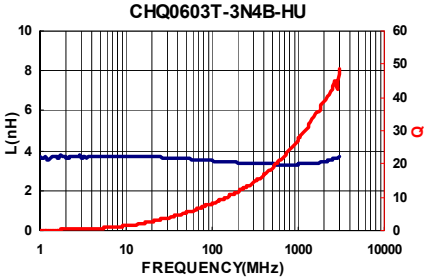
RDC<0.28Ω SRF:8700MHz IDC:415 mA

CHQ0603T-3N3B-HU



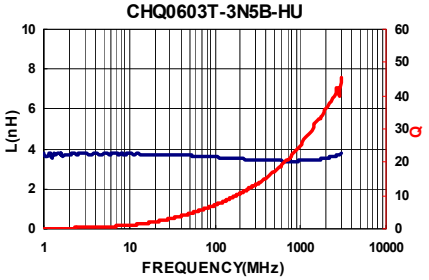
RDC<0.28Ω SRF:8600MHz IDC:415 mA

CHQ0603T-3N4B-HU



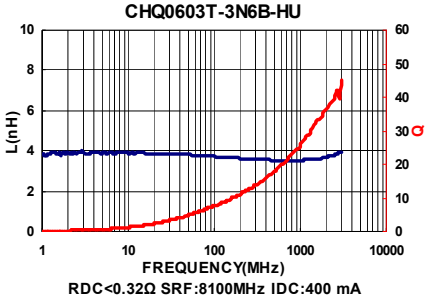
RDC<0.29Ω SRF:8400MHz IDC:410 mA

CHQ0603T-3N5B-HU



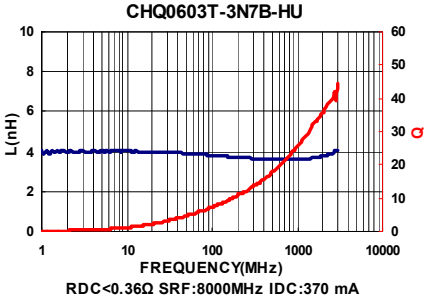
RDC<0.3Ω SRF:8200MHz IDC:405 mA

CHQ0603T-3N6B-HU



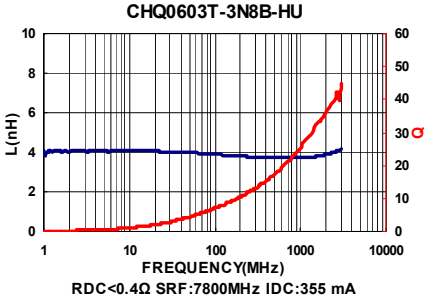
RDC<0.32Ω SRF:8100MHz IDC:400 mA

CHQ0603T-3N7B-HU



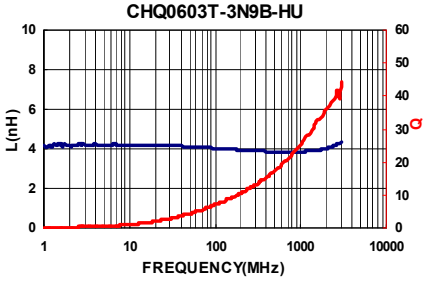
RDC<0.36Ω SRF:8000MHz IDC:370 mA

CHQ0603T-3N8B-HU



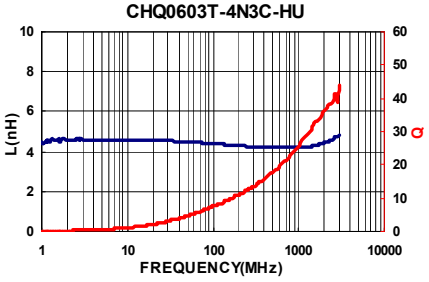
RDC<0.4Ω SRF:7800MHz IDC:355 mA

CHQ0603T-3N9B-HU



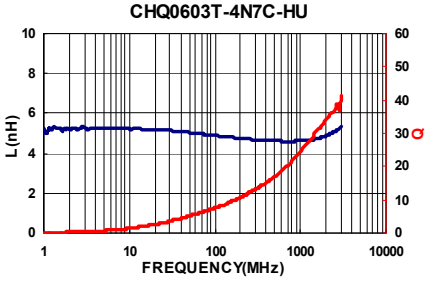
RDC<0.41Ω SRF:7700MHz IDC:350 mA

CHQ0603T-4N3C-HU



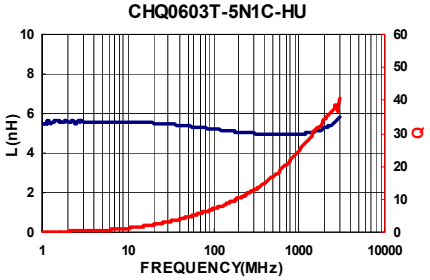
RDC<0.48Ω SRF:6500MHz IDC:320 mA

CHQ0603T-4N7C-HU



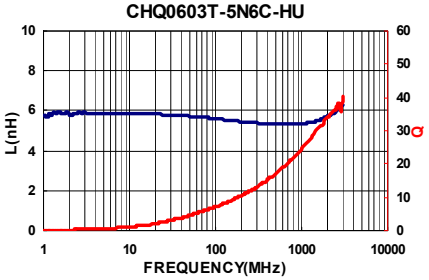
RDC<0.42Ω SRF:6400MHz IDC:350 mA

CHQ0603T-5N1C-HU



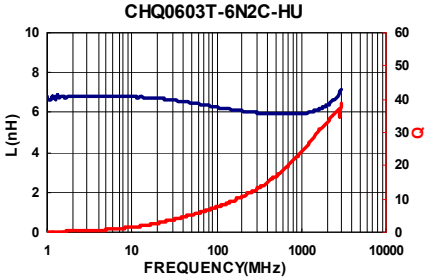
RDC<0.45Ω SRF:6100MHz IDC:330 mA

CHQ0603T-5N6C-HU



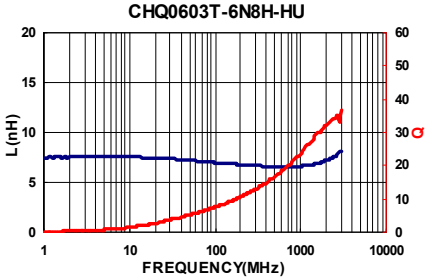
RDC<0.47Ω SRF:5500MHz IDC:325 mA

CHQ0603T-6N2C-HU



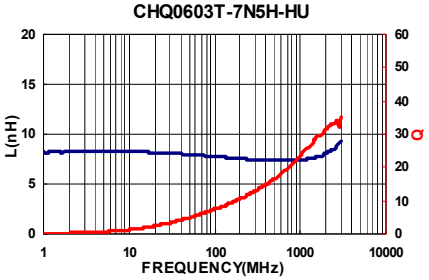
RDC<0.52Ω SRF:5100MHz IDC:305 mA

CHQ0603T-6N8H-HU



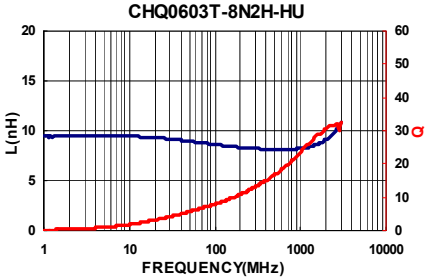
RDC<0.55Ω SRF:4800MHz IDC:305 mA

CHQ0603T-7N5H-HU



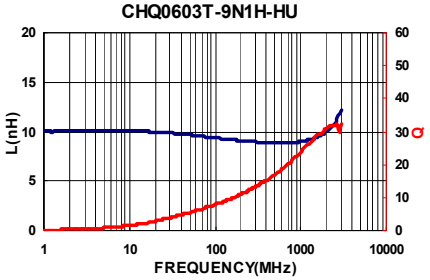
RDC<0.55Ω SRF:4600MHz IDC:305 mA

CHQ0603T-8N2H-HU



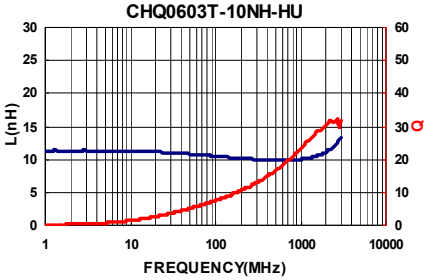
RDC<0.57Ω SRF:4300MHz IDC:290 mA

CHQ0603T-9N1H-HU



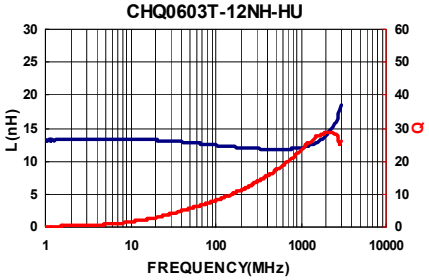
RDC<0.65Ω SRF:4000MHz IDC:270 mA

CHQ0603T-10NH-HU



RDC<0.85Ω SRF:3800MHz IDC:230 mA

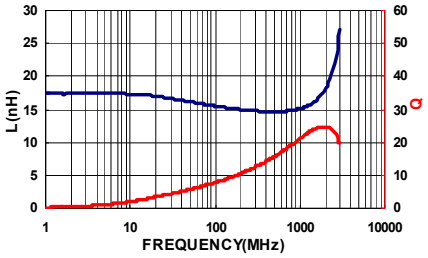
CHQ0603T-12NH-HU



RDC<0.85Ω SRF:3300MHz IDC:230 mA

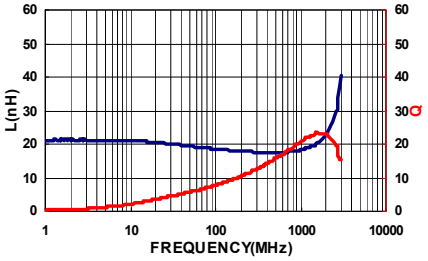
Test Instruments：Agilent E4991A Material/Impedance Analyzer

CHQ0603T-15NH-HU



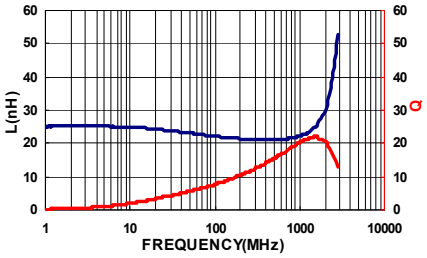
RDC<0.89Ω SRF:2600MHz IDC:220 mA

CHQ0603T-18NH-HU



RDC<1.05Ω SRF:2300MHz IDC:205 mA

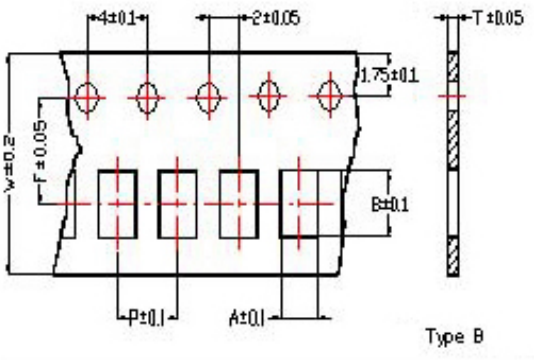
CHQ0603T-22NH-HU



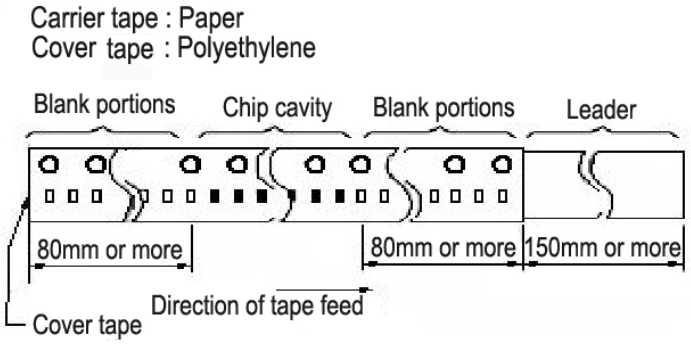
RDC<1.29Ω SRF:1900MHz IDC:190 mA

Packaging Specifications

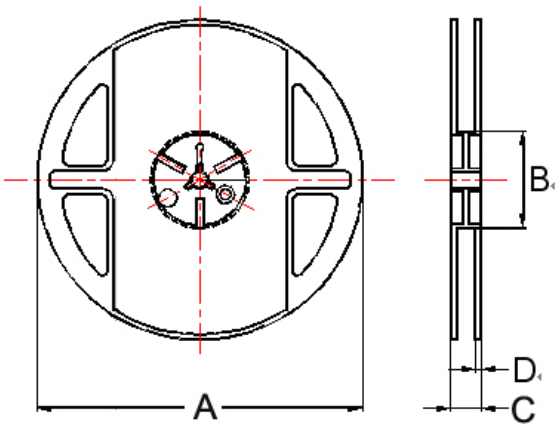
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions						Reel Dimensions				Quantity
	A	B	T	W	P	F	A	B	C	D	PCS / Reel
CHQ0603	0.37	0.67	0.42	8	2	3.5	180	60	13	1.5	15000