THE DATASHEET OF

BSCH000603031N5S00

SMD Ceramic Multilayer Chip Inductors

BSCH Series

Pulse
a YAGEO company

The BSCH 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.

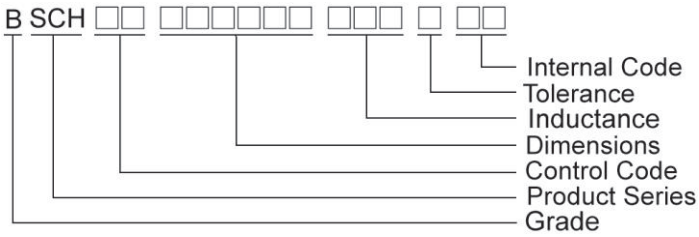
Features

- 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



- Product series identification:

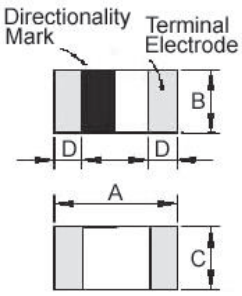
BSCH00060303 Top side half mark.

BSCH00100505 Top side full mark.

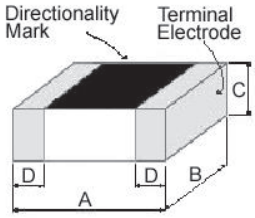
BSCH00160808 Top side full mark.

Shape and Dimensions

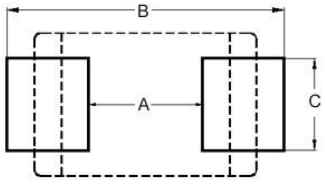
BSCH00060303



BSCH00100505 / 160808



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
BSCH00060303	0.6 ± 0.03	0.3 ± 0.03	0.3 ± 0.03	0.15 ± 0.05
BSCH00100505	1.0 ± 0.10	0.5 ± 0.10	0.5 ± 0.10	0.25 ± 0.10
BSCH00160808	1.6 ± 0.15	0.8 ± 0.15	0.8 ± 0.15	0.3 ± 0.2

Dimensions in mm

TYPE	A	B	C
BSCH00060303	0.3	0.75 ~ 1.05	0.3
BSCH00100505	0.4	1.2 ~ 1.4	0.5
BSCH00160808	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Min	RDC (Ω) Max	Rated Current (mA) Max
BSCH000603031N0□00	1.0	±0.3nH	100	4	>10000	0.11	470
BSCH000603031N2□00	1.2	±0.3nH	100	4	>10000	0.12	450
BSCH000603031N5□00	1.5	±0.3nH	100	4	>10000	0.13	430
BSCH000603031N8□00	1.8	±0.3nH	100	4	>10000	0.16	390
BSCH000603032N0□00	2.0	±0.3nH	100	4	>10000	0.17	380
BSCH000603032N2□00	2.2	±0.3nH	100	4	8800	0.19	360
BSCH000603032N4□00	2.4	±0.3nH	100	4	8300	0.20	350
BSCH000603032N7□00	2.7	±0.3nH	100	4	7700	0.21	340
BSCH000603033N0□00	3.0	±0.3nH	100	4	7200	0.22	330
BSCH000603033N3□00	3.3	±0.3nH	100	4	6700	0.23	320
BSCH000603033N6□00	3.6	±0.3nH	100	4	6400	0.25	310
BSCH000603033N9□00	3.9	±0.3nH	100	4	6000	0.27	300
BSCH000603034N3□00	4.3	±0.3nH	100	4	5700	0.30	280
BSCH000603034N7□00	4.7	±0.3nH	100	4	5300	0.30	280
BSCH000603035N1□00	5.1	±0.3nH	100	4	5000	0.33	270
BSCH000603035N6□00	5.6	±0.3nH	100	4	4600	0.36	260
BSCH000603036N2□00	6.2	±0.3nH	100	4	4200	0.38	250
BSCH000603036N8□00	6.8	5	100	4	3900	0.39	250
BSCH000603037N5□00	7.5	5	100	4	3600	0.41	240
BSCH000603038N2□00	8.2	5	100	4	3400	0.45	230
BSCH000603039N1□00	9.1	5	100	4	3200	0.48	220
BSCH0006030310N□00	10	5	100	4	2900	0.51	220
BSCH0006030312N□00	12	5	100	4	2700	0.68	190
BSCH0006030315N□00	15	5	100	4	2300	0.71	180
BSCH0006030318N□00	18	5	100	4	2100	0.81	170
BSCH0006030322N□00	22	5	100	4	1800	1.00	150
BSCH0006030327N□00	27	5	100	4	1800	1.35	120
BSCH0006030333N□00	33	5	100	4	1700	1.47	110
BSCH0006030339N□00	39	5	100	4	1500	1.72	100
BSCH0006030347N□00	47	5	100	4	1300	1.90	100
BSCH0006030356N□00	56	5	100	4	1100	2.27	80
BSCH0006030368N□00	68	5	100	4	1100	2.66	80

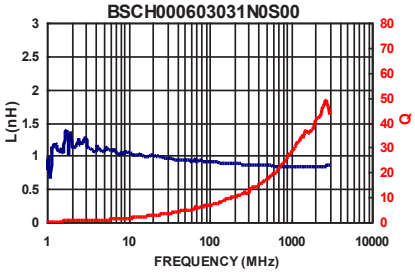
BSCH0006030382N□00	82	5	100	4	1000	3.37	70
BSCH00060303R10□00	100	5	100	4	900	3.74	60

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

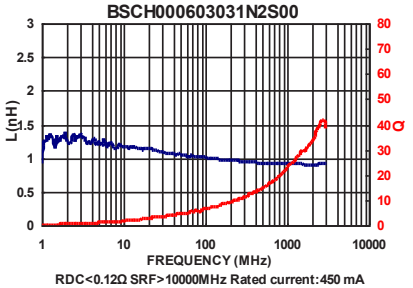
Test Instruments：Agilent E4991A Material/Impedance Analyzer

BSCH000603031N0S00



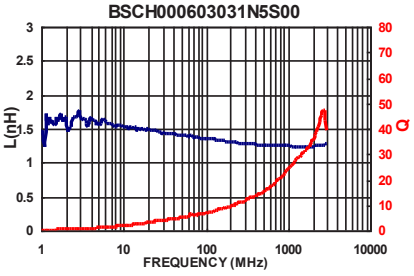
RDC<0.11Ω SRF>10000MHz Rated current:470 mA

BSCH000603031N2S00



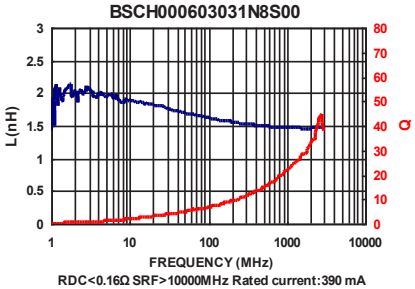
RDC<0.12Ω SRF>10000MHz Rated current:450 mA

BSCH000603031N5S00



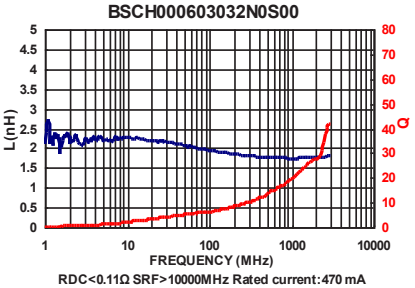
RDC<0.13Ω SRF>10000MHz Rated current:430 mA

BSCH000603031N8S00



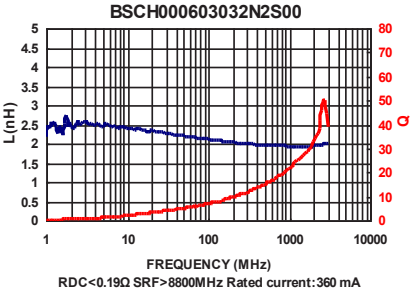
RDC<0.16Ω SRF>10000MHz Rated current:390 mA

BSCH000603032N0S00



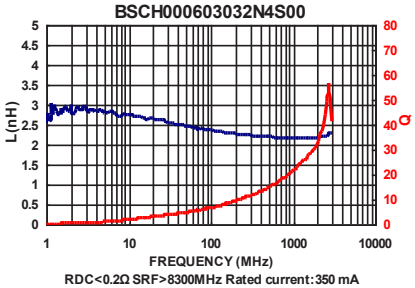
RDC<0.11Ω SRF>10000MHz Rated current:470 mA

BSCH000603032N2S00



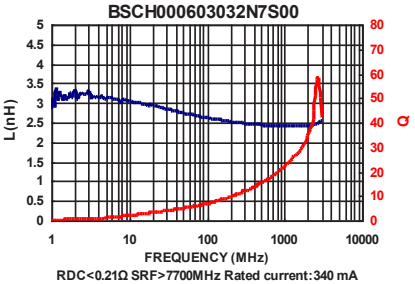
RDC<0.19Ω SRF>8800MHz Rated current:360 mA

BSCH000603032N4S00



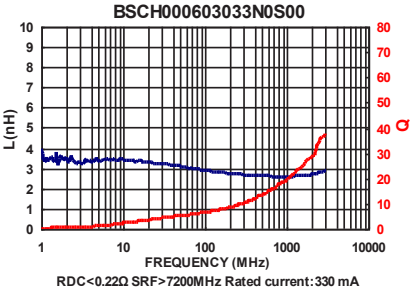
RDC<0.2Ω SRF>8300MHz Rated current:350 mA

BSCH000603032N7S00



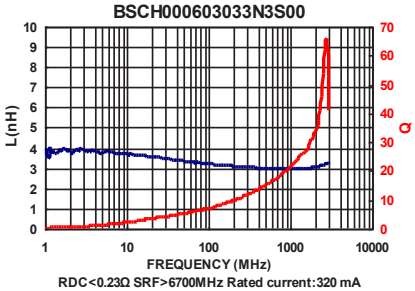
RDC<0.21Ω SRF>7700MHz Rated current:340 mA

BSCH000603033N0S00



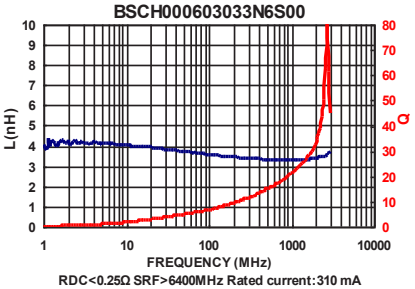
RDC<0.22Ω SRF>7200MHz Rated current:330 mA

BSCH000603033N3S00



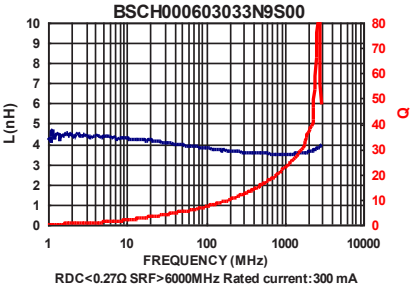
RDC<0.23Ω SRF>6700MHz Rated current:320 mA

BSCH000603033N6S00



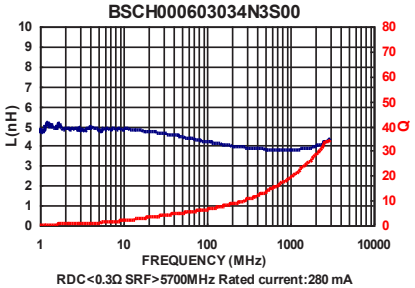
RDC<0.25Ω SRF>6400MHz Rated current:310 mA

BSCH000603033N9S00



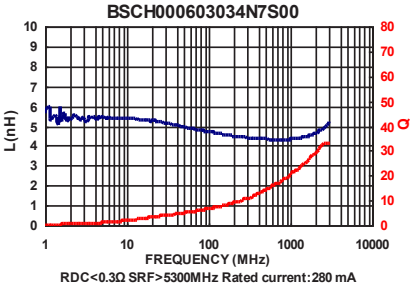
RDC<0.27Ω SRF>6000MHz Rated current:300 mA

BSCH000603034N3S00



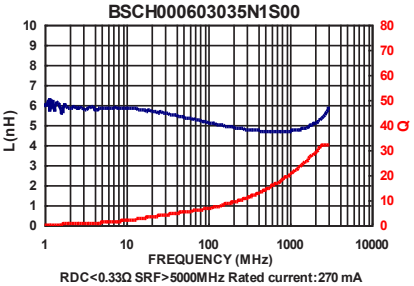
RDC<0.3Ω SRF>5700MHz Rated current:280 mA

BSCH000603034N7S00



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

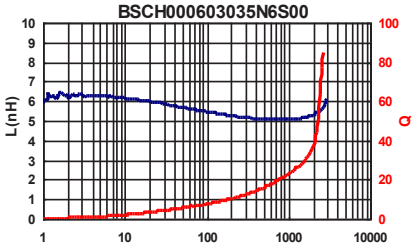
BSCH000603035N1S00



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

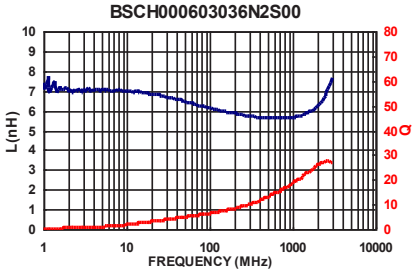
Test Instruments：Agilent E4991A Material/Impedance Analyzer

BSCH000603035N6S00



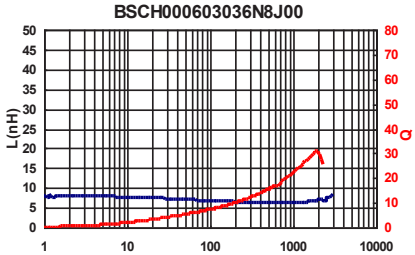
RDC<0.36Ω SRF>4600MHz Rated current:260 mA

BSCH000603036N2S00



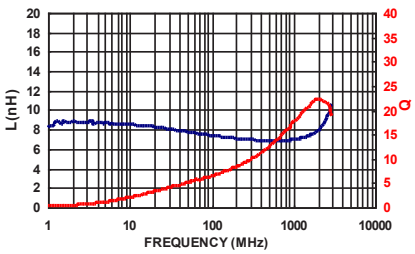
RDC<0.38Ω SRF>4200MHz Rated current:250 mA

BSCH000603036N8J00



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

BSCH000603037N5J00



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

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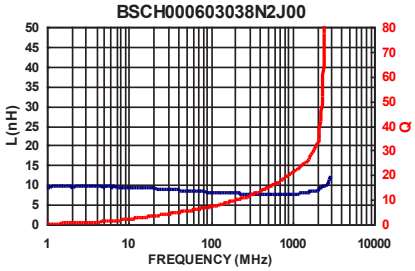
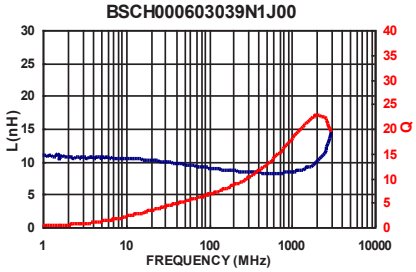


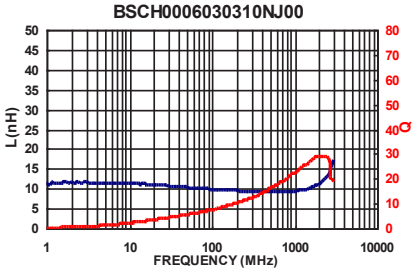
RDC<0.45Ω SRF>3400MHz Rated current:230 mA

BSCH000603039N1J00



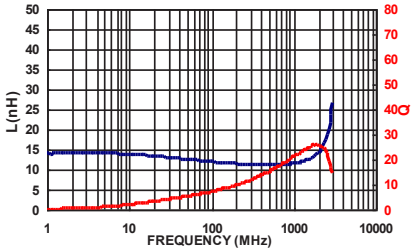
RDC<0.48Ω SRF>3200MHz Rated current:220 mA

BSCH0006030310NJ00



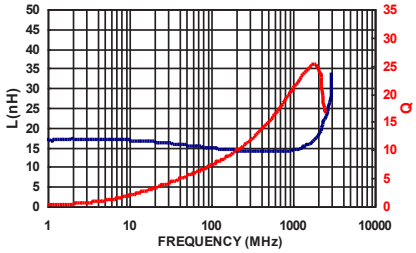
RDC<0.51Ω SRF>2900MHz Rated current:220 mA

BSCH0006030312NJ00



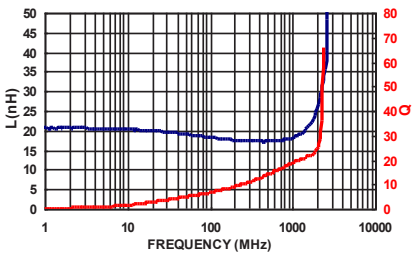
RDC<0.68Ω SRF>2700MHz Rated current:190 mA

BSCH0006030315NJ00



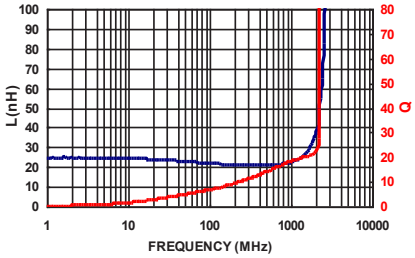
RDC<0.71Ω SRF>2300MHz Rated current:180 mA

BSCH0006030318NJ00



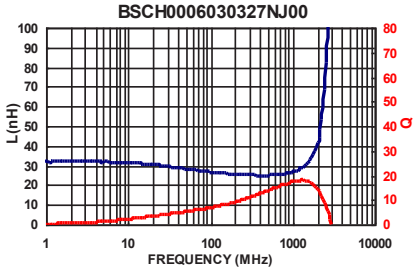
RDC<0.81Ω SRF>2100MHz Rated current:170 mA

BSCH0006030322NJ00



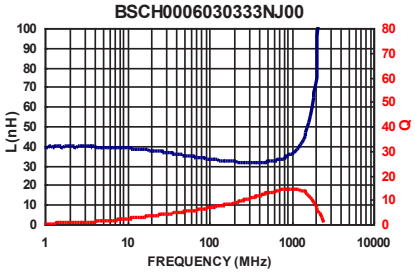
RDC<1.0Ω SRF>1800MHz Rated current:150 mA

BSCH0006030327NJ00



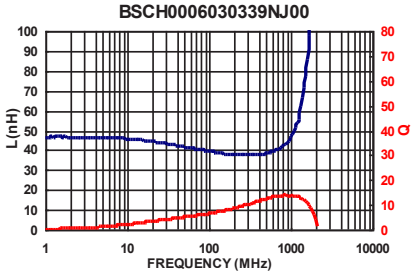
RDC<1.35Ω SRF>1800MHz Rated current:120 mA

BSCH0006030333NJ00



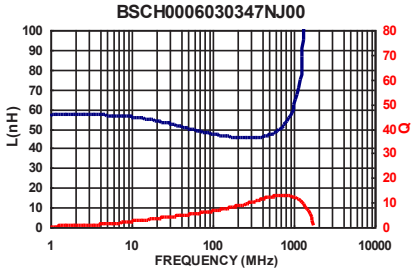
RDC<1.47Ω SRF>1700MHz Rated current:110 mA

BSCH0006030339NJ00



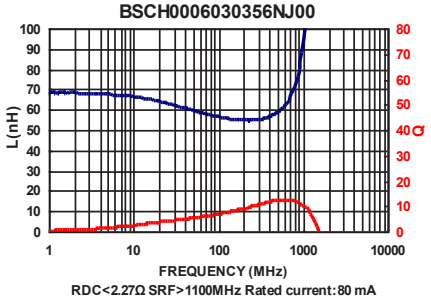
RDC<1.72Ω SRF>1500MHz Rated current:100 mA

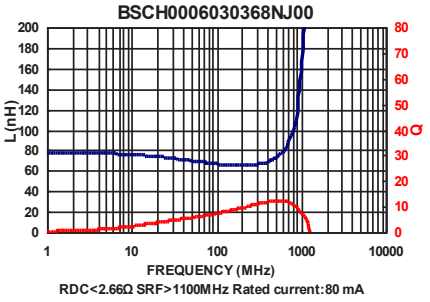
BSCH0006030347NJ00

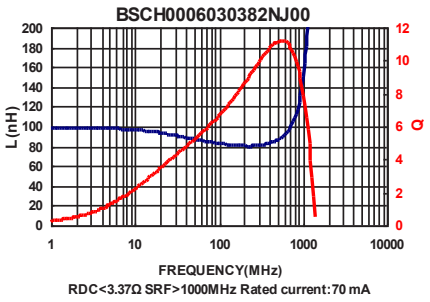


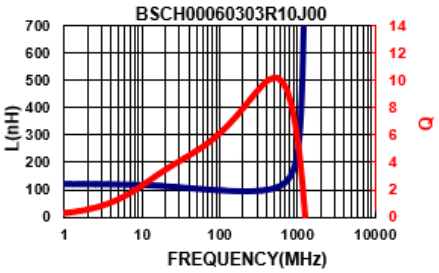
RDC<1.9Ω SRF>1300MHz Rated current:100 mA

Test Instruments：Agilent E4991A Material/Impedance Analyzer









Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
BSCH001005051N0☐CS	1.0	±0.3nH	100	8	10000	0.07	400
BSCH001005051N1☐CS	1.1	±0.3nH	100	8	10000	0.10	400
BSCH001005051N2☐CS	1.2	±0.3nH	100	8	10000	0.09	400
BSCH001005051N3☐CS	1.3	±0.3nH	100	8	9000	0.10	400
BSCH001005051N5☐CS	1.5	±0.3nH	100	8	9000	0.10	400
BSCH001005051N6☐CS	1.6	±0.3nH	100	8	8700	0.10	400
BSCH001005051N8☐CS	1.8	±0.3nH	100	8	8700	0.10	400
BSCH001005052N0☐CS	2.0	±0.3nH	100	8	8100	0.10	400
BSCH001005052N2☐CS	2.2	±0.3nH	100	8	8100	0.12	400
BSCH001005052N4☐CS	2.4	±0.3nH	100	8	7700	0.15	400
BSCH001005052N7☐CS	2.7	±0.3nH	100	8	7700	0.15	400
BSCH001005053N0☐CS	3.0	±0.3nH	100	8	6300	0.15	400
BSCH001005053N3☐CS	3.3	±0.3nH/10	100	8	6300	0.15	400
BSCH001005053N6☐CS	3.6	±0.3nH/10	100	8	6100	0.15	400
BSCH001005053N9☐CS	3.9	±0.3nH/10	100	8	6100	0.18	400
BSCH001005054N3☐CS	4.3	±0.3nH/10	100	8	6000	0.18	400
BSCH001005054N7☐CS	4.7	±0.3nH/10	100	8	6000	0.18	400
BSCH001005055N0☐CS	5.0	±0.3nH/10	100	8	5100	0.20	400
BSCH001005055N1☐CS	5.1	±0.3nH/10	100	8	5300	0.20	400
BSCH001005055N6☐CS	5.6	±0.3nH/10	100	8	5100	0.20	400
BSCH001005056N8☐CS	6.8	5 / 10	100	8	4550	0.24	400
BSCH001005057N5☐CS	7.5	5 / 10	100	8	4200	0.24	300
BSCH001005058N0☐CS	8.0	5 / 10	100	8	4100	0.30	300
BSCH001005058N2☐CS	8.2	5 / 10	100	8	4100	0.24	300
BSCH001005059N1☐CS	9.1	5 / 10	100	8	3900	0.26	300
BSCH0010050510N☐CS	10	5 / 10	100	8	3900	0.26	300
BSCH0010050512N☐CS	12	5 / 10	100	8	3000	0.40	300
BSCH0010050515N☐CS	15	5 / 10	100	8	2800	0.50	300
BSCH0010050518N☐CS	18	5 / 10	100	8	2500	0.55	300
BSCH0010050522N☐CS	22	5 / 10	100	8	2200	0.70	300
BSCH0010050524N☐CS	24	5 / 10	100	8	2100	0.70	300
BSCH0010050527N☐CS	27	5 / 10	100	8	2000	0.80	300
BSCH0010050533N☐CS	33	5 / 10	100	8	1800	0.9	200
BSCH0010050539N☐CS	39	5 / 10	100	8	1600	1.0	150

BSCH0010050547N□CS	47	5 / 10	100	8	1400	1.2	150

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

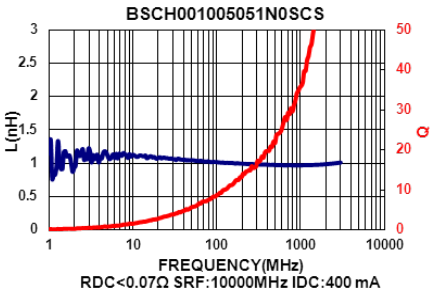
Electrical Characteristics

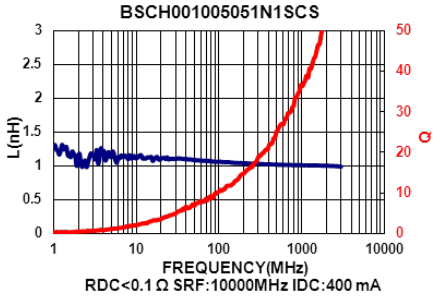
Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
BSCH0010050556N□CS	56	5 / 10	100	8	1300	1.3	150
BSCH0010050568N□CS	68	5 / 10	100	8	1100	1.5	100
BSCH0010050575N□CS	75	5 / 10	100	8	1080	1.5	100
BSCH0010050582N□CS	82	5 / 10	100	8	1000	1.6	100
BSCH00100505R10□CS	100	5 / 10	100	8	900	2.0	100
BSCH00100505R12□CS	120	5 / 10	100	8	800	2.2	100
BSCH00100505R15□CS	150	5 / 10	100	8	700	3.5	100
BSCH00100505R18□CS	180	5 / 10	100	8	600	3.8	100
BSCH00100505R22□CS	220	5 / 10	100	8	500	4.2	100
BSCH00100505R27□CS	270	5 / 10	100	8	500	4.8	100

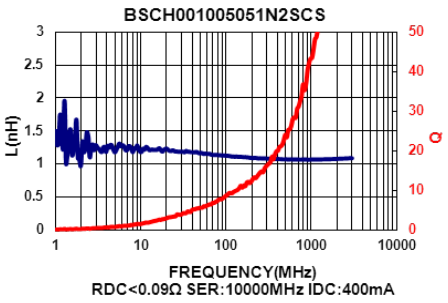
Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

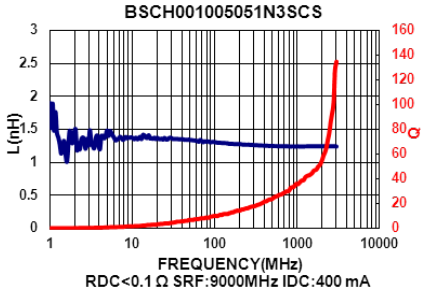
- Operating temperature range－55℃～125℃(Including self - temperature rise)
- IDC：Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0nH
- Measure Equipment：
  L & Q：Agilent E4991A+Agilent 16197A
  SRF：HP8753D
  RDC：HP4338B or CHEN HWA 502

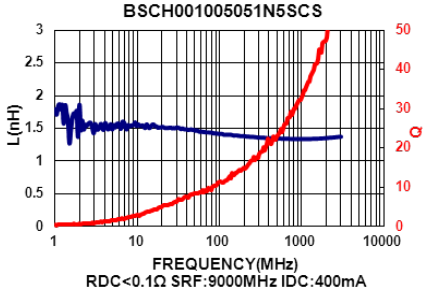
Test Instruments：Agilent E4991A Material/Impedance Analyzer

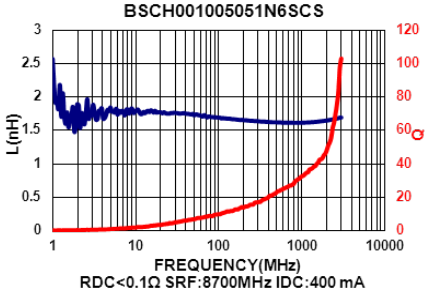












Test Instruments： Agilent E4991A Material/Impedance Analyzer

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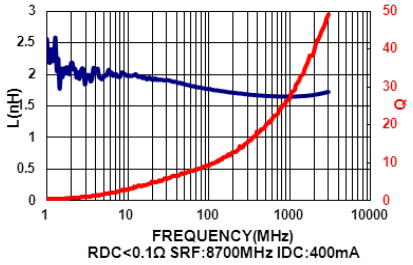
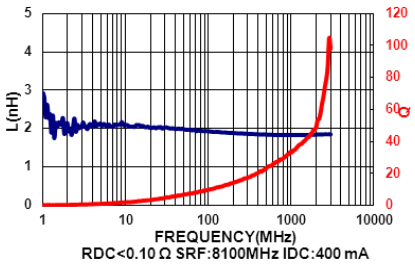


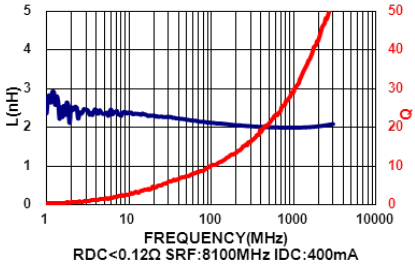
RDC<0.1Ω SRF:8700MHz IDC:400mA

BSCH001005052N0SCS



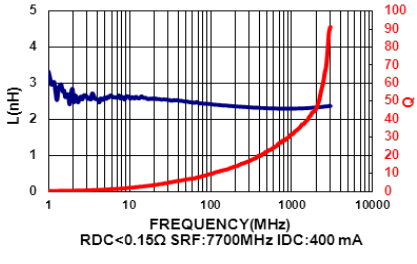
RDC<0.10 Ω SRF:8100MHz IDC:400 mA

BSCH001005052N2SCS



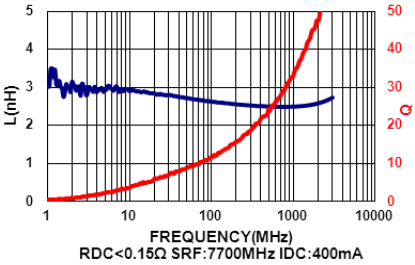
RDC<0.12Ω SRF:8100MHz IDC:400mA

BSCH001005052N4SCS



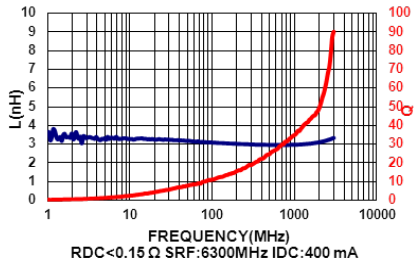
RDC<0.15Ω SRF:7700MHz IDC:400 mA

BSCH001005052N7SCS



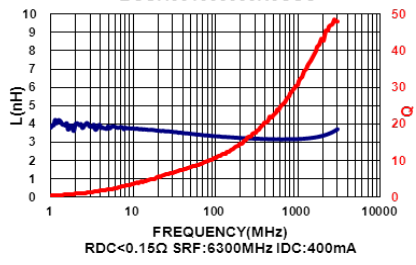
RDC<0.15Ω SRF:7700MHz IDC:400mA

BSCH001005053N0SCS



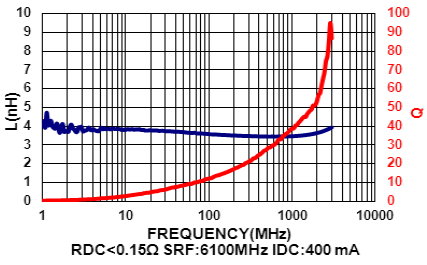
RDC<0.15 Ω SRF:6300MHz IDC:400 mA

BSCH001005053N3SCS



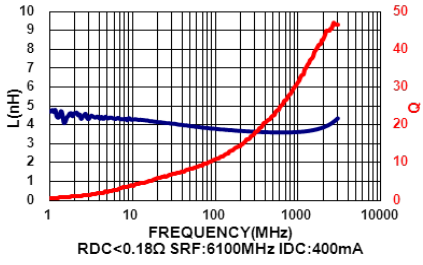
RDC<0.15Ω SRF:6300MHz IDC:400mA

BSCH001005053N6SCS



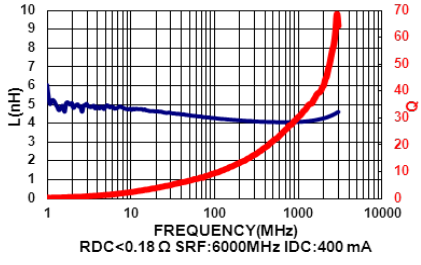
RDC<0.15Ω SRF:6100MHz IDC:400 mA

BSCH001005053N9SCS



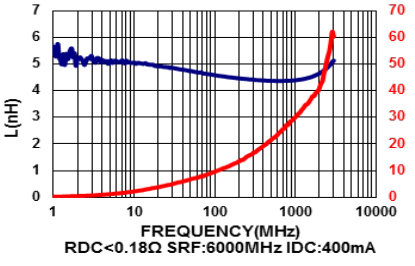
RDC<0.18Ω SRF:6100MHz IDC:400mA

BSCH001005054N3SCS



RDC<0.18 Ω SRF:6000MHz IDC:400 mA

BSCH001005054N7SCS



RDC<0.18Ω SRF:6000MHz IDC:400mA

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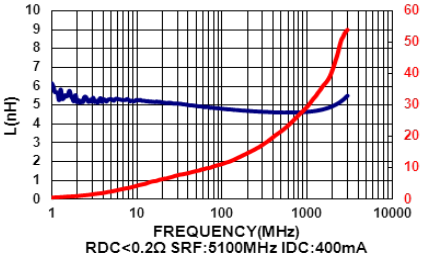

RDC<0.2Ω SRF:5100MHz IDC:400mA

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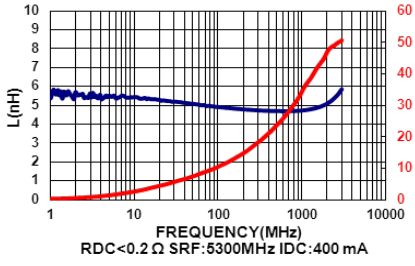

RDC<0.2 Ω SRF:5300MHz IDC:400 mA

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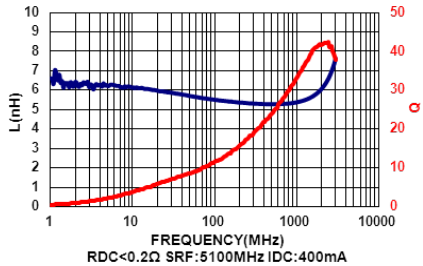

RDC<0.2Ω SRF:5100MHz IDC:400mA

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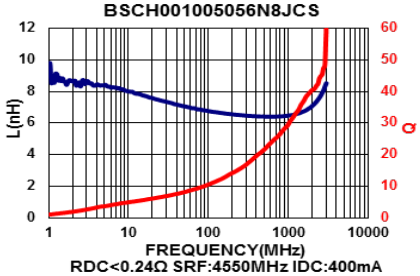
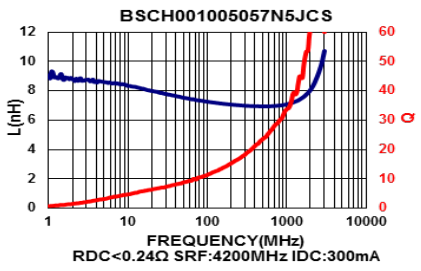
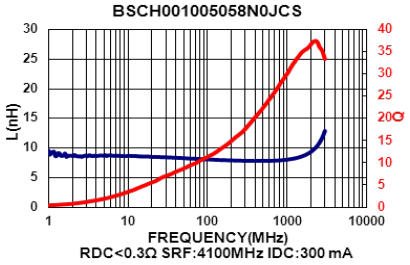
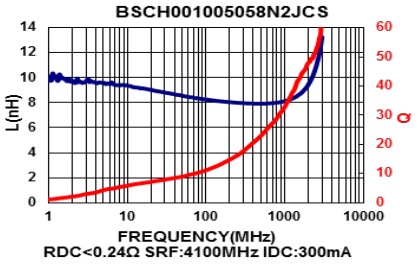


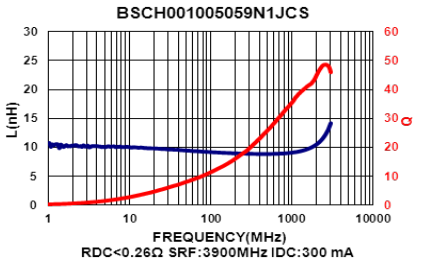
RDC<0.24Ω SRF:4550MHz IDC:400mA

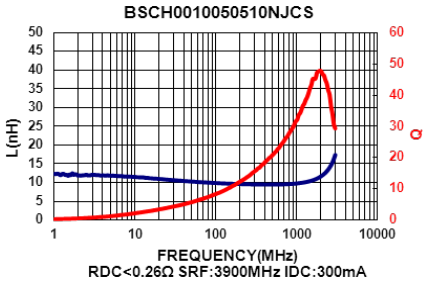
Test Instruments：Agilent E4991A Material/Impedance Analyzer

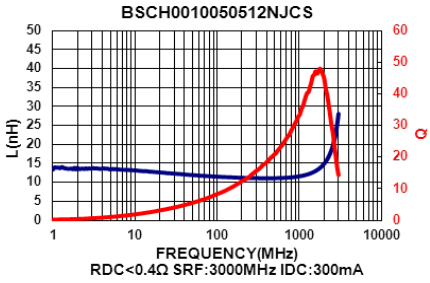


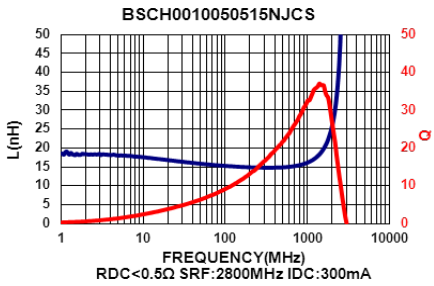


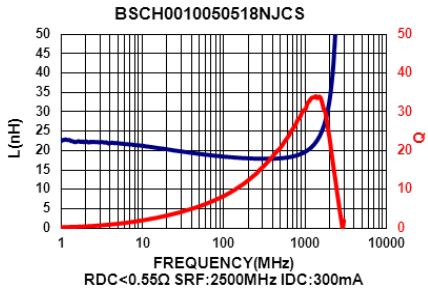


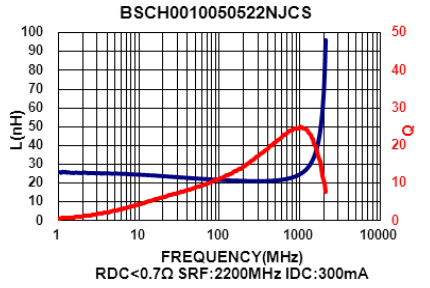


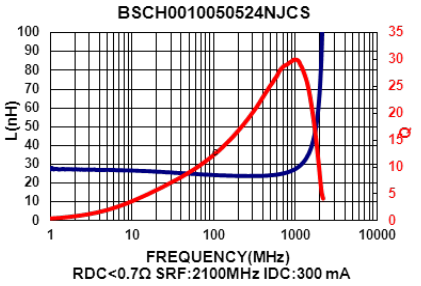


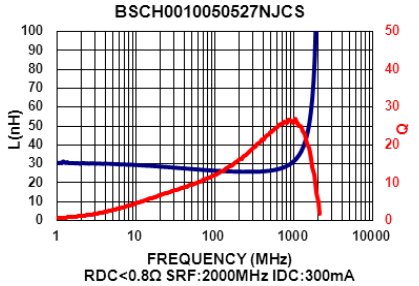


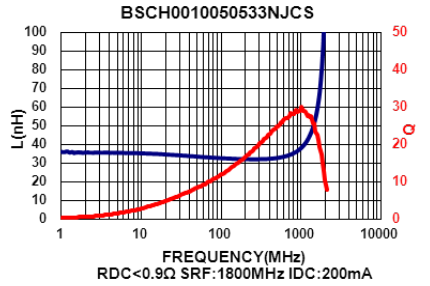


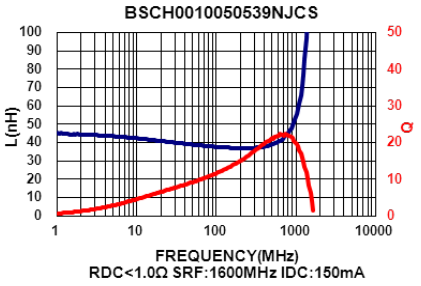


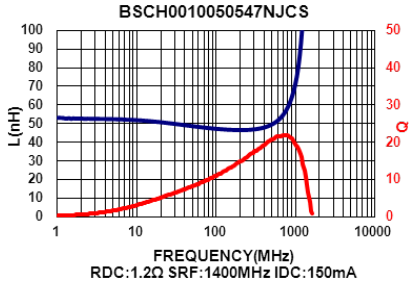


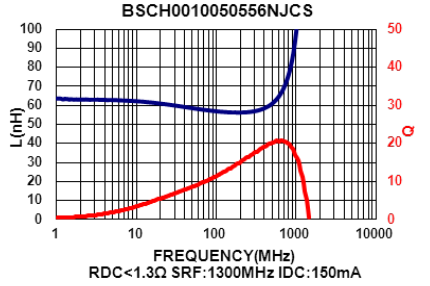












Test Instruments：Agilent E4991A Material/Impedance Analyzer

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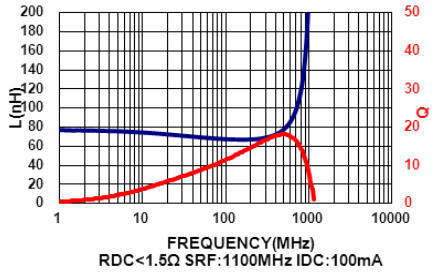
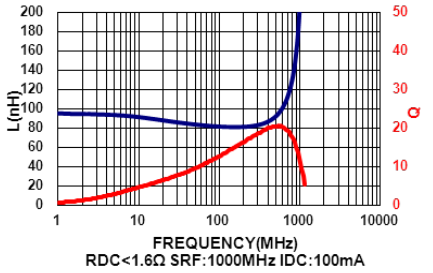


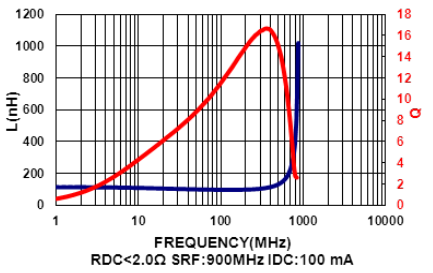
RDC<1.5Ω SRF:1100MHz IDC:100mA

BSCH0010050582NJCS



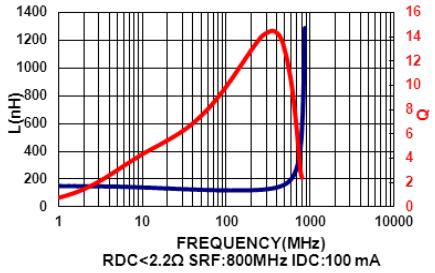
RDC<1.6Ω SRF:1000MHz IDC:100mA

BSCH00100505R10JCS



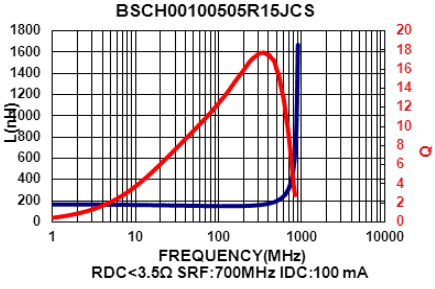
RDC<2.0Ω SRF:900MHz IDC:100 mA

BSCH00100505R12JCS



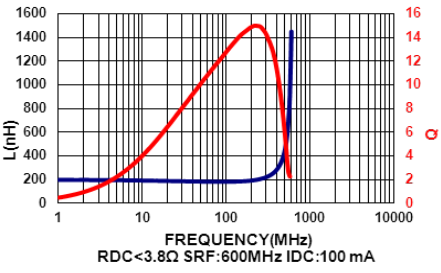
RDC<2.2Ω SRF:800MHz IDC:100 mA

BSCH00100505R15JCS



RDC<3.5Ω SRF:700MHz IDC:100 mA

BSCH00100505R18JCS



RDC<3.8Ω SRF:600MHz IDC:100 mA

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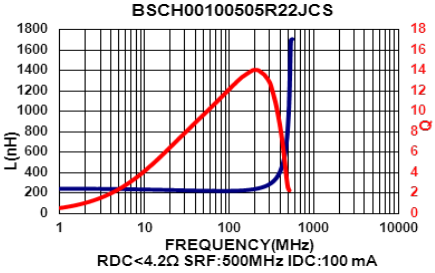
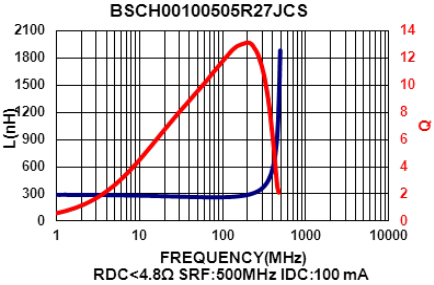


RDC<4.2Ω SRF:500MHz IDC:100 mA

BSCH00100505R27JCS



RDC<4.8Ω SRF:500MHz IDC:100 mA

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	Rated Current (mA) Max
BSCH001005051N0☐CP	1.0	±0.3nH	100	8	10000	0.07	400
BSCH001005051N1☐CP	1.1	±0.3nH	100	8	10000	0.10	400
BSCH001005051N2☐CP	1.2	±0.3nH	100	8	10000	0.09	400
BSCH001005051N3☐CP	1.3	±0.3nH	100	8	9000	0.10	400
BSCH001005051N5☐CP	1.5	±0.3nH	100	8	9000	0.10	400
BSCH001005051N6☐CP	1.6	±0.3nH	100	8	8700	0.10	400
BSCH001005051N8☐CP	1.8	±0.3nH	100	8	8700	0.10	400
BSCH001005052N0☐CP	2.0	±0.3nH	100	8	8100	0.10	400
BSCH001005052N2☐CP	2.2	±0.3nH	100	8	8100	0.12	400
BSCH001005052N4☐CP	2.4	±0.3nH	100	8	7700	0.15	400
BSCH001005052N7☐CP	2.7	±0.3nH	100	8	7700	0.15	400
BSCH001005053N0☐CP	3.0	±0.3nH	100	8	6300	0.15	400
BSCH001005053N3☐CP	3.3	±0.3nH	100	8	6300	0.15	400
BSCH001005053N6☐CP	3.6	±0.3nH	100	8	6100	0.15	400
BSCH001005053N9☐CP	3.9	±0.3nH	100	8	6100	0.18	400
BSCH001005054N3☐CP	4.3	±0.3nH	100	8	6000	0.18	400
BSCH001005054N7☐CP	4.7	±0.3nH	100	8	6000	0.18	400
BSCH001005055N1☐CP	5.1	±0.3nH	100	8	5300	0.20	400
BSCH001005055N6☐CP	5.6	±0.3nH	100	8	5100	0.20	400
BSCH001005056N2☐CP	6.2	±0.3nH/5/10	100	8	4500	0.22	400
BSCH001005056N8☐CP	6.8	5 / 10	100	8	4550	0.24	400
BSCH001005057N5☐CP	7.5	5 / 10	100	8	4200	0.24	300
BSCH001005058N2☐CP	8.2	5 / 10	100	8	4100	0.24	300
BSCH001005059N1☐CP	9.1	5 / 10	100	8	3900	0.26	300
BSCH0010050510N☐CP	10	5 / 10	100	8	3900	0.26	300
BSCH0010050512N☐CP	12	5 / 10	100	8	3000	0.28	300
BSCH0010050515N☐CP	15	5 / 10	100	8	2500	0.32	300
BSCH0010050518N☐CP	18	5 / 10	100	8	2200	0.36	300
BSCH0010050522N☐CP	22	5 / 10	100	8	1900	0.42	300
BSCH0010050527N☐CP	27	5 / 10	100	8	1700	0.46	300
BSCH0010050533N☐CP	33	5 / 10	100	8	1600	0.58	200
BSCH0010050539N☐CP	39	5 / 10	100	8	1200	0.65	200
BSCH0010050547N☐CP	47	5 / 10	100	8	1000	0.72	200
BSCH0010050556N☐CP	56	5 / 10	100	8	800	0.82	200

BSCH0010050568N□CP	68	5 / 10	100	8	800	0.92	180
BSCH0010050582N□CP	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：

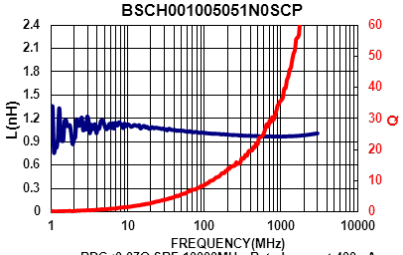
  L & Q：Agilent E4991A+Agilent 16197A

  SRF：HP8753D

  RDC：HP4338B or CHEN HWA 502

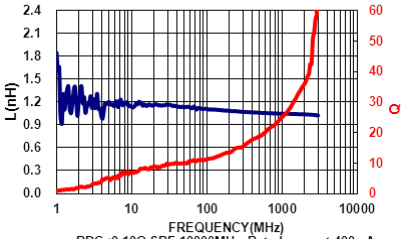
Test Instruments：Agilent E4991A Material/Impedance Analyzer

BSCH001005051N0SCP



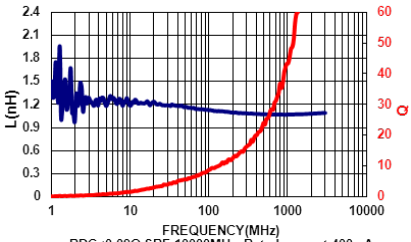
RDC<0.07Ω SRF:10000MHz Rated current:400mA

BSCH001005051N1SCP



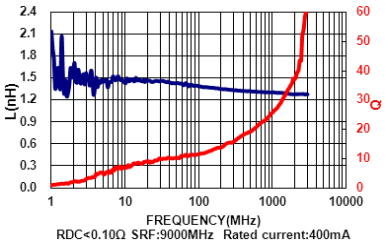
RDC<0.10Ω SRF:10000MHz Rated current:400mA

BSCH001005051N2SCP



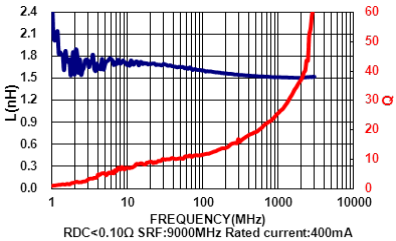
RDC<0.09Ω SRF:10000MHz Rated current:400mA

BSCH001005051N3SCP



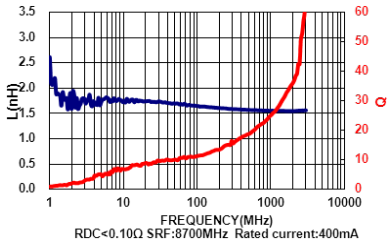
RDC<0.10Ω SRF:9000MHz Rated current:400mA

BSCH001005051N5SCP



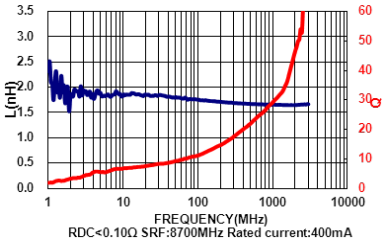
RDC<0.10Ω SRF:9000MHz Rated current:400mA

BSCH001005051N6SCP



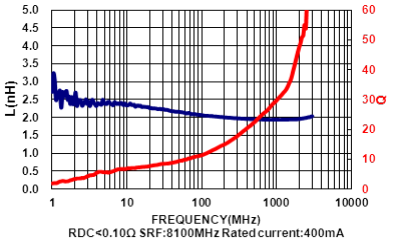
RDC<0.10Ω SRF:8700MHz Rated current:400mA

BSCH001005051N8SCP



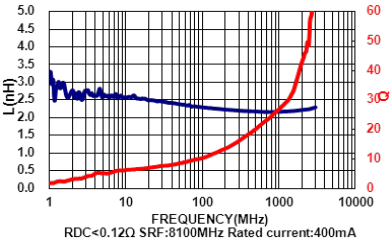
RDC<0.10Ω SRF:8700MHz Rated current:400mA

BSCH001005052N0SCP



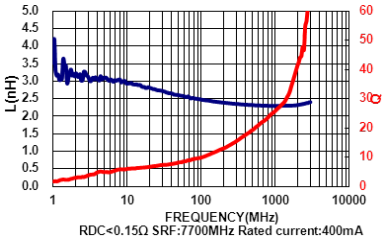
RDC<0.10Ω SRF:8100MHz Rated current:400mA

BSCH001005052N2SCP



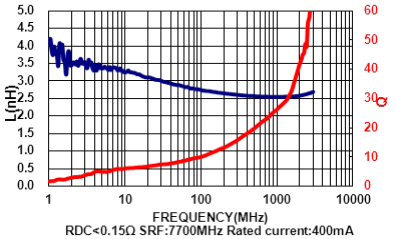
RDC<0.12Ω SRF:8100MHz Rated current:400mA

BSCH001005052N4SCP



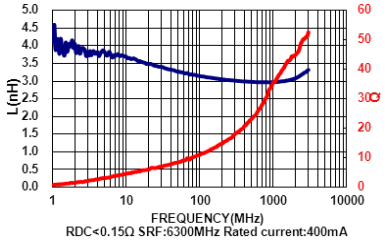
RDC<0.15Ω SRF:7700MHz Rated current:400mA

BSCH001005052N7SCP



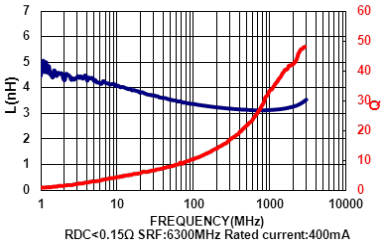
RDC<0.15Ω SRF:7700MHz Rated current:400mA

BSCH001005053N0SCP



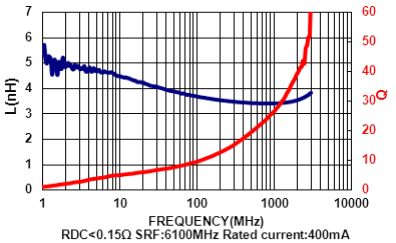
RDC<0.15Ω SRF:6300MHz Rated current:400mA

BSCH001005053N3SCP



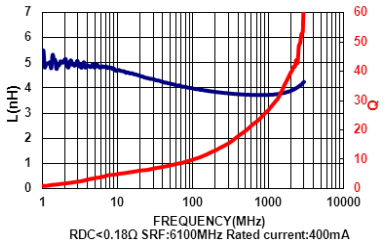
RDC<0.15Ω SRF:6300MHz Rated current:400mA

BSCH001005053N6SCP



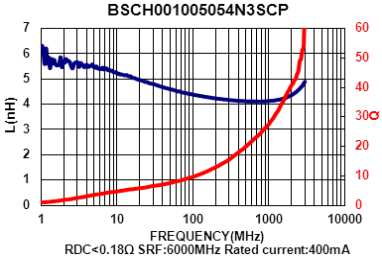
RDC<0.15Ω SRF:6100MHz Rated current:400mA

BSCH001005053N9SCP



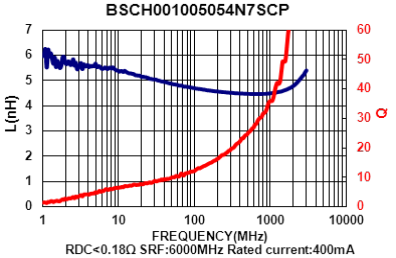
RDC<0.18Ω SRF:6100MHz Rated current:400mA

BSCH001005054N3SCP



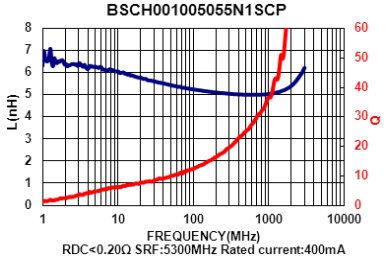
RDC<0.18Ω SRF:6000MHz Rated current:400mA

BSCH001005054N7SCP



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

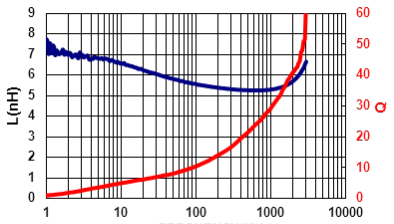
BSCH001005055N1SCP



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

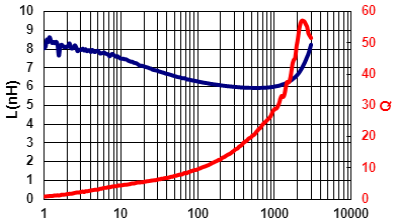
Test Instruments：Agilent E4991A Material/Impedance Analyzer

BSCH001005055N6SCP



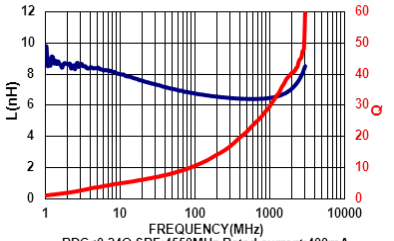
RDC<0.20Ω SRF:5100MHz Rated current:400mA

BSCH001005056N2SCP



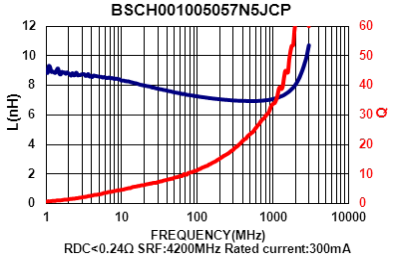
RDC<0.22Ω SRF:4500MHz Rated current:400mA

BSCH001005056N8JCP



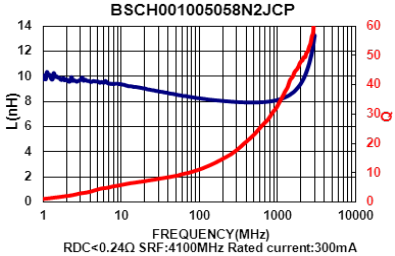
RDC<0.24Ω SRF:4550MHz Rated current:400mA

BSCH001005057N5JCP



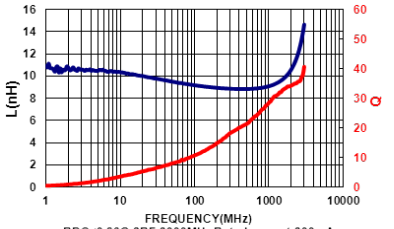
RDC<0.24Ω SRF:4200MHz Rated current:300mA

BSCH001005058N2JCP



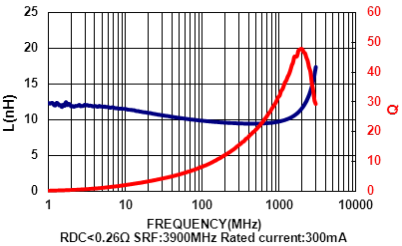
RDC<0.24Ω SRF:4100MHz Rated current:300mA

BSCH001005059N1JCP



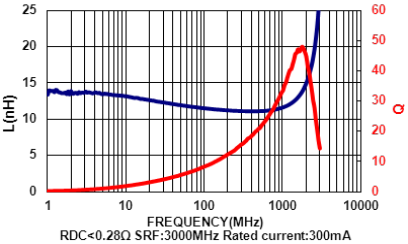
RDC<0.26Ω SRF:3900MHz Rated current:300mA

BSCH0010050510NJCP



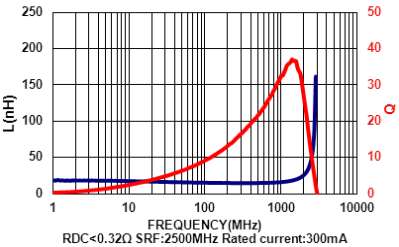
RDC<0.26Ω SRF:3900MHz Rated current:300mA

BSCH0010050512NJCP



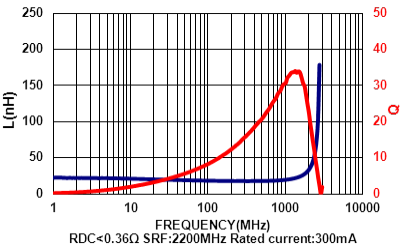
RDC<0.28Ω SRF:3000MHz Rated current:300mA

BSCH0010050515NJCP



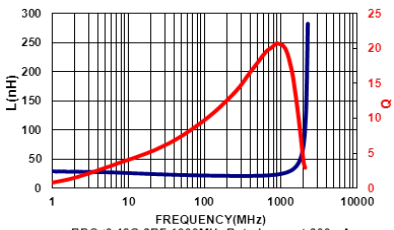
RDC<0.32Ω SRF:2500MHz Rated current:300mA

BSCH0010050518NJCP



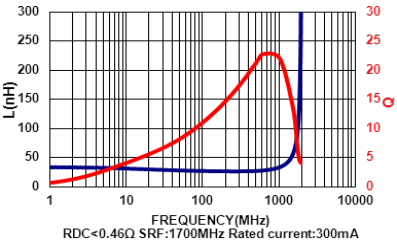
RDC<0.36Ω SRF:2200MHz Rated current:300mA

BSCH0010050522NJCP



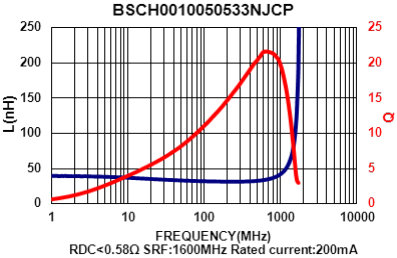
RDC<0.42Ω SRF:1900MHz Rated current:300mA

BSCH0010050527NJCP



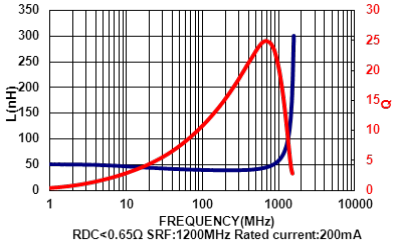
RDC<0.46Ω SRF:1700MHz Rated current:300mA

BSCH0010050533NJCP



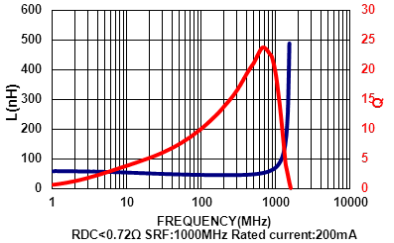
RDC<0.58Ω SRF:1600MHz Rated current:200mA

BSCH0010050539NJCP



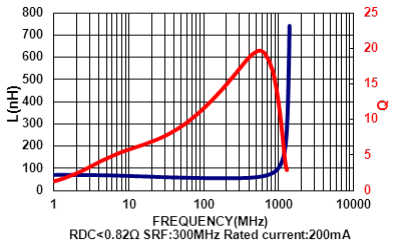
RDC<0.65Ω SRF:1200MHz Rated current:200mA

BSCH0010050547NJCP



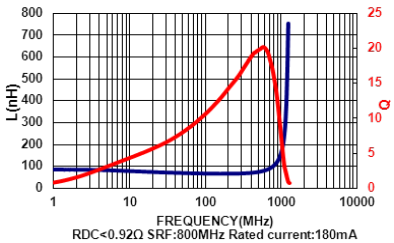
RDC<0.72Ω SRF:1000MHz Rated current:200mA

BSCH0010050556NJCP



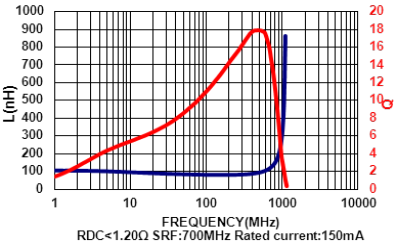
RDC<0.82Ω SRF:300MHz Rated current:200mA

BSCH0010050568NJCP



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

BSCH0010050582NJCP



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

Electrical Characteristics

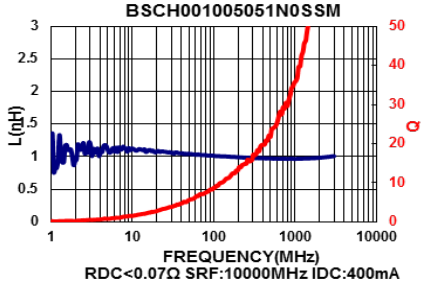
Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Max
BSCH001005051N0□SM	1.0	±0.3nH	100	8	10000	0.07	400
BSCH001005051N2□SM	1.2	±0.3nH	100	8	6000	0.10	400
BSCH001005051N5□SM	1.5	±0.3nH	100	8	6000	0.10	400
BSCH001005051N6□SM	1.6	±0.3nH	100	8	6000	0.10	400
BSCH001005051N8□SM	1.8	±0.3nH	100	8	6000	0.10	400
BSCH001005052N0□SM	2.0	±0.3nH	100	8	6000	0.12	400
BSCH001005052N2□SM	2.2	±0.3nH	100	8	6000	0.15	400
BSCH001005052N4□SM	2.4	±0.3nH	100	8	6000	0.15	400
BSCH001005052N7□SM	2.7	±0.3nH	100	8	6000	0.15	400
BSCH001005053N0□SM	3.0	±0.3nH	100	8	6000	0.15	400
BSCH001005053N3□SM	3.3	±0.3nH	100	8	6000	0.15	400
BSCH001005053N6□SM	3.6	±0.3nH	100	8	6000	0.15	400
BSCH001005053N9□SM	3.9	±0.3nH	100	8	6000	0.19	400
BSCH001005054N3□SM	4.3	±0.3nH	100	8	6000	0.20	400
BSCH001005054N7□SM	4.7	±0.3nH	100	8	6000	0.20	400
BSCH001005055N1□SM	5.1	±0.3nH	100	8	6000	0.20	400
BSCH001005055N6□SM	5.6	±0.3nH	100	8	5300	0.20	400
BSCH001005056N2□SM	6.2	5	100	8	4300	0.25	400
BSCH001005056N8□SM	6.8	5	100	8	4200	0.25	400
BSCH001005057N5□SM	7.5	5	100	8	3900	0.25	400
BSCH001005058N2□SM	8.2	5	100	8	3600	0.30	300
BSCH001005059N1□SM	9.1	5	100	8	3400	0.34	300
BSCH0010050510N□SM	10	5	100	8	3200	0.35	300
BSCH0010050512N□SM	12	5	100	8	2800	0.35	300
BSCH0010050515N□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

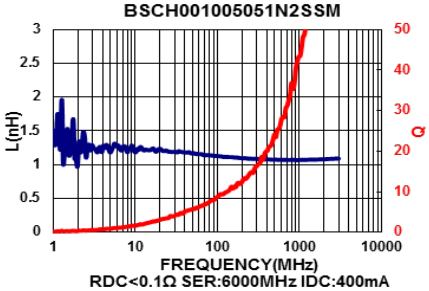
Test Instruments： Agilent E4991A Material/Impedance Analyzer

BSCH001005051N0SSM



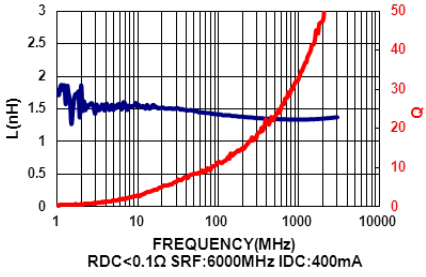
RDC<0.07Ω SRF:10000MHz IDC:400mA

BSCH001005051N2SSM



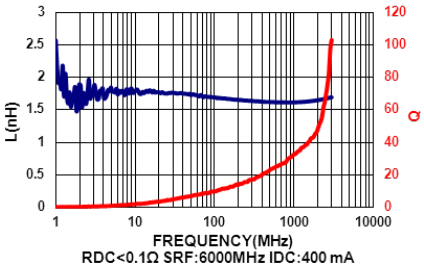
RDC<0.1Ω SER:6000MHz IDC:400mA

BSCH001005051N5SSM



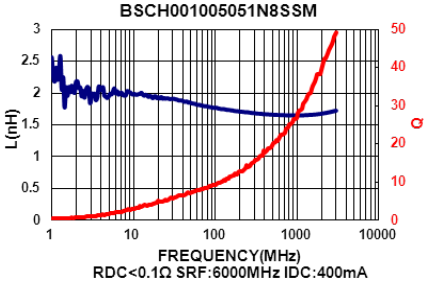
RDC<0.1Ω SRF:6000MHz IDC:400mA

BSCH001005051N6SSM



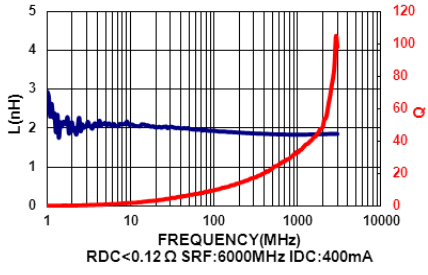
RDC<0.1Ω SRF:6000MHz IDC:400 mA

BSCH001005051N8SSM



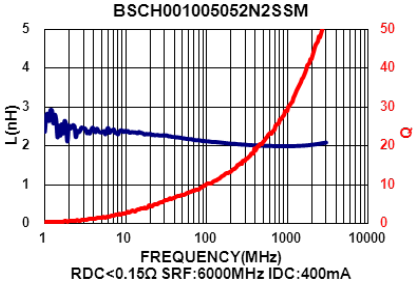
RDC<0.1Ω SRF:6000MHz IDC:400mA

BSCH001005052N0SSM



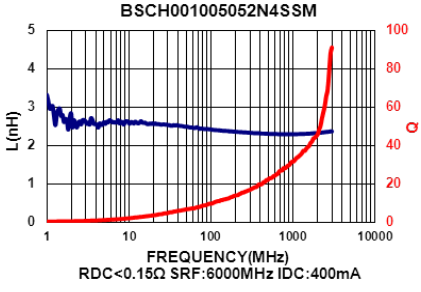
RDC<0.12Ω SRF:6000MHz IDC:400mA

BSCH001005052N2SSM



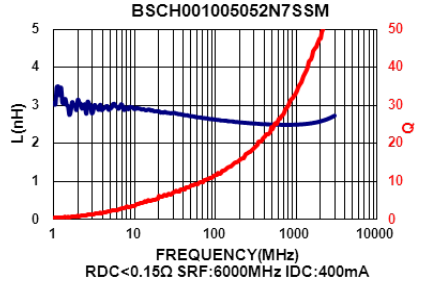
RDC<0.15Ω SRF:6000MHz IDC:400mA

BSCH001005052N4SSM



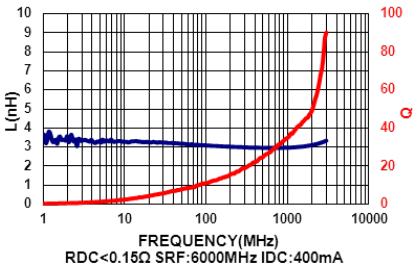
RDC<0.15Ω SRF:6000MHz IDC:400mA

BSCH001005052N7SSM



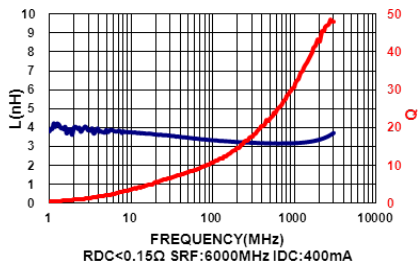
RDC<0.15Ω SRF:6000MHz IDC:400mA

BSCH001005053N0SSM



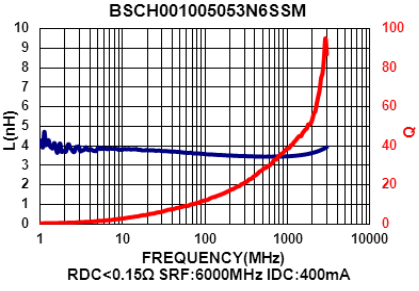
RDC<0.15Ω SRF:6000MHz IDC:400mA

BSCH001005053N3SSM



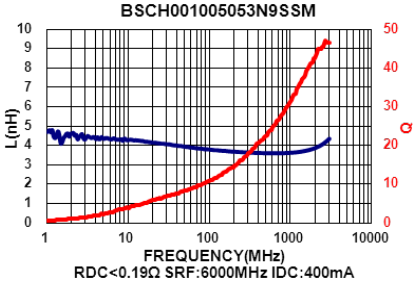
RDC<0.15Ω SRF:6000MHz IDC:400mA

BSCH001005053N6SSM



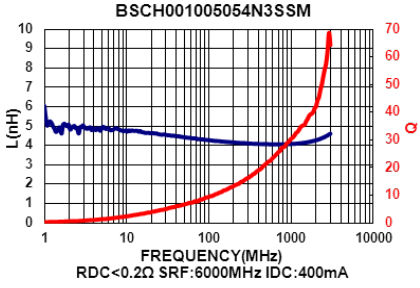
RDC<0.15Ω SRF:6000MHz IDC:400mA

BSCH001005053N9SSM



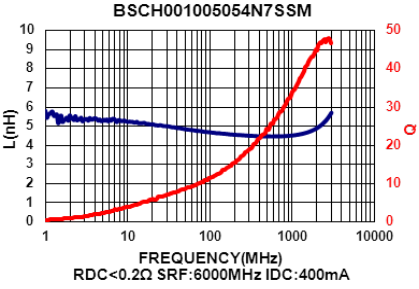
RDC<0.19Ω SRF:6000MHz IDC:400mA

BSCH001005054N3SSM



RDC<0.2Ω SRF:6000MHz IDC:400mA

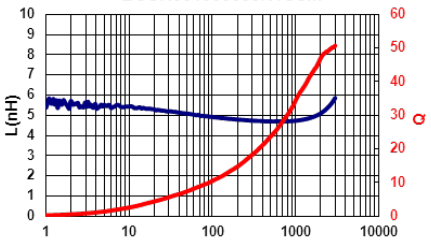
BSCH001005054N7SSM



RDC<0.2Ω SRF:6000MHz IDC:400mA

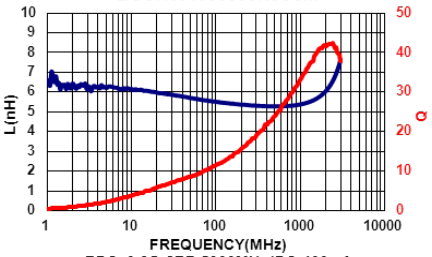
Test Instruments：Agilent E4991A Material/Impedance Analyzer

BSCH001005055N1SSM



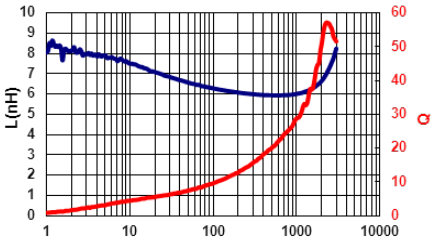
RDC<0.2Ω SRF:6000MHz IDC:400mA

BSCH001005055N6SSM



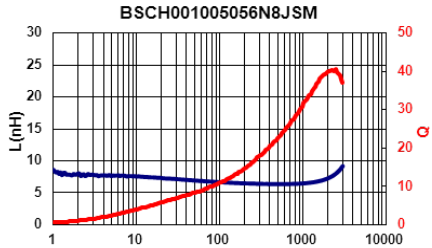
RDC<0.2Ω SRF:5300MHz IDC:400mA

BSCH001005056N2JSM



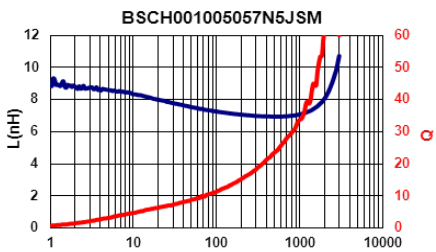
RDC<0.25Ω SRF:4300MHz IDC:400mA

BSCH001005056N8JSM



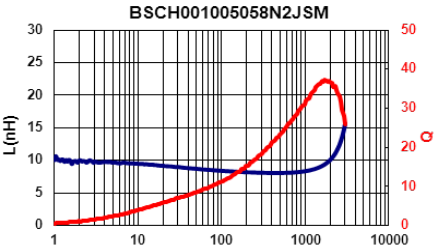
RDC<0.25Ω SRF:4200MHz IDC:400mA

BSCH001005057N5JSM



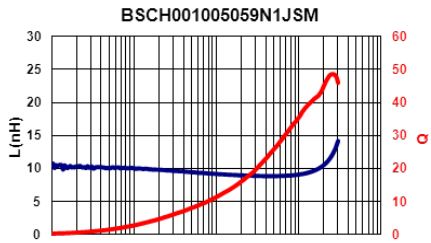
RDC<0.25Ω SRF:3900MHz IDC:400mA

BSCH001005058N2JSM



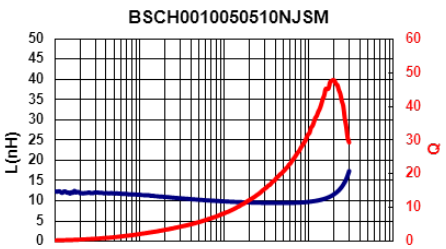
RDC<0.3Ω SRF:3600MHz IDC:300mA

BSCH001005059N1JSM



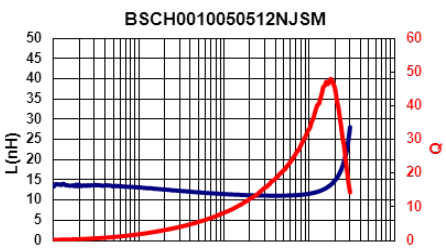
RDC<0.34Ω SRF:3400MHz IDC:300mA

BSCH0010050510NJSM



RDC<0.35Ω SRF:3200MHz IDC:300mA

BSCH0010050512NJSM



RDC<0.35Ω SRF:2800MHz IDC:300mA

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
BSCH001608081N0S00	1.0	±0.3nH	100	8	10000	0.10	600
BSCH001608081N2S00	1.2	±0.3nH	100	8	10000	0.10	600
BSCH001608081N5S00	1.5	±0.3nH	100	8	8000	0.10	600
BSCH001608081N6S00	1.6	±0.3nH	100	8	8000	0.10	600
BSCH001608081N8S00	1.8	±0.3nH	100	8	8000	0.10	600
BSCH001608082N2S00	2.2	±0.3nH	100	8	7200	0.10	600
BSCH001608082N7S00	2.7	±0.3nH	100	10	6200	0.10	600
BSCH001608083N0S00	3.0	±0.3nH	100	10	5200	0.12	600
BSCH001608083N3□00	3.3	±0.3nH/10	100	10	5200	0.12	600
BSCH001608083N6S00	3.6	±0.3nH	100	10	5000	0.14	600
BSCH001608083N9□00	3.9	±0.3nH/10	100	10	5000	0.14	600
BSCH001608084N3□00	4.3	±0.3nH/10	100	10	4750	0.16	600
BSCH001608084N7□00	4.7	±0.3nH /10	100	10	4750	0.16	600
BSCH001608085N1□00	5.1	±0.3nH /10	100	10	4100	0.18	600
BSCH001608085N6□00	5.6	±0.3nH/10	100	10	4100	0.18	600
BSCH001608086N2□00	6.2	5 / 10	100	10	3750	0.22	600
BSCH001608086N8□00	6.8	5 / 10	100	10	3750	0.22	600
BSCH001608087N5□00	7.5	5 / 10	100	10	3300	0.24	600
BSCH001608088N2□00	8.2	5 / 10	100	10	3300	0.24	600
BSCH0016080810N□00	10	5 / 10	100	12	3000	0.26	600
BSCH0016080812N□00	12	5 / 10	100	12	2600	0.28	600
BSCH0016080815N□00	15	5 / 10	100	12	2500	0.32	600
BSCH0016080816N□00	16	5 / 10	100	12	2400	0.35	600
BSCH0016080818N□00	18	5 / 10	100	12	2400	0.35	600
BSCH0016080822N□00	22	5 / 10	100	12	2000	0.40	500
BSCH0016080827N□00	27	5 / 10	100	12	1900	0.45	500
BSCH0016080833N□00	33	5 / 10	100	12	1600	0.55	400
BSCH0016080839N□00	39	5 / 10	100	12	1400	0.60	400
BSCH0016080847N□00	47	5 / 10	100	12	1300	0.70	400
BSCH0016080856N□00	56	5 / 10	100	12	1100	0.75	400
BSCH0016080862N□00	62	5 / 10	100	12	1050	0.85	400
BSCH0016080868N□00	68	5 / 10	100	12	1050	0.85	400

BSCH0016080875N□00	75	5 / 10	100	12	900	1.00	300
BSCH0016080882N□00	82	5 / 10	100	12	900	1.00	300

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

Electrical Characteristics

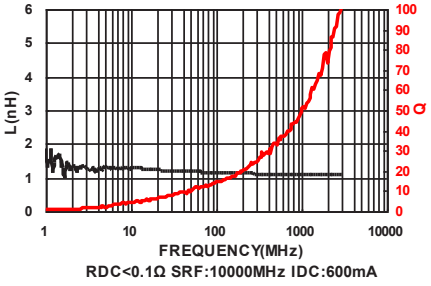
Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
BSCH00160808R10□00	100	5 / 10	100	12	770	1.20	300
BSCH00160808R12□00	120	5 / 10	50	8	650	1.30	300
BSCH00160808R15□00	150	5 / 10	50	8	550	1.70	250
BSCH00160808R18□00	180	5 / 10	50	8	520	1.90	250
BSCH00160808R22□00	220	5 / 10	50	8	500	2.00	250
BSCH00160808R27□00	270	5 / 10	50	8	470	2.20	150
BSCH00160808R33□00	330	5 / 10	50	8	320	2.80	100
BSCH00160808R39□00	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

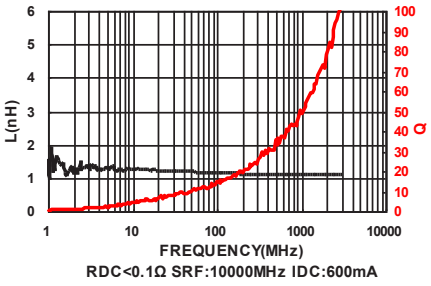
Test Instruments：Agilent E4991A Material/Impedance Analyzer

BSCH001608081N0S00



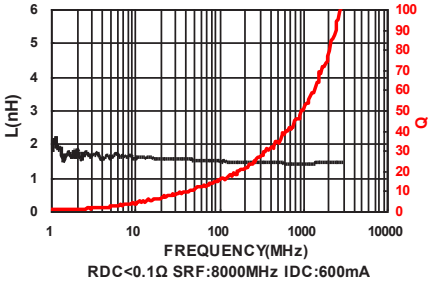
RDC<0.1Ω SRF:10000MHz IDC:600mA

BSCH001608081N2S00



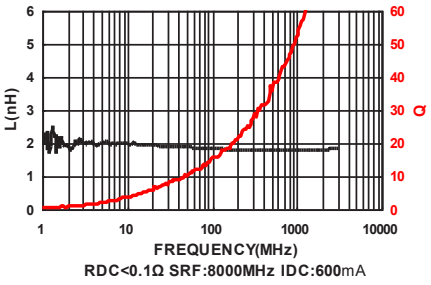
RDC<0.1Ω SRF:10000MHz IDC:600mA

BSCH001608081N5S00



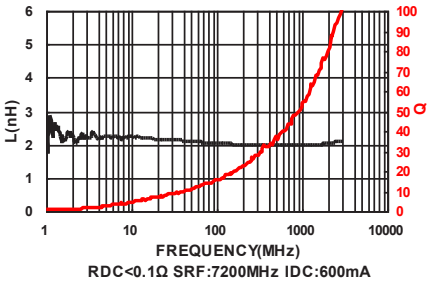
RDC<0.1Ω SRF:8000MHz IDC:600mA

BSCH001608081N8S00



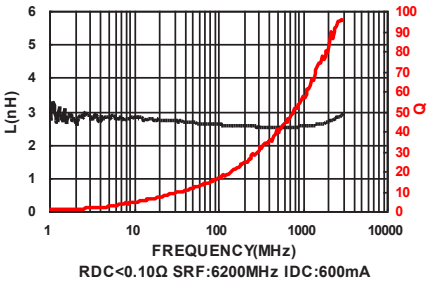
RDC<0.1Ω SRF:8000MHz IDC:600mA

BSCH001608082N2S00

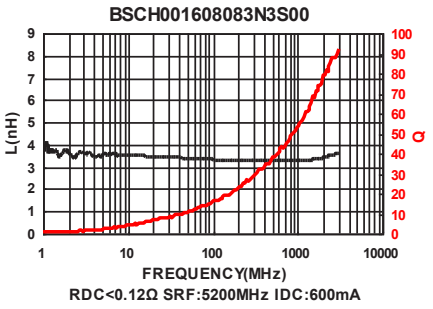


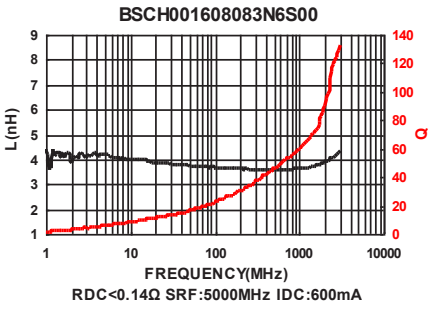
RDC<0.1Ω SRF:7200MHz IDC:600mA

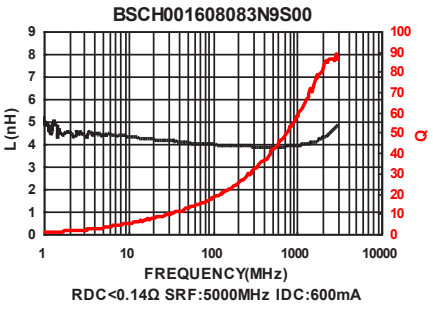
BSCH001608082N7S00



RDC<0.10Ω SRF:6200MHz IDC:600mA

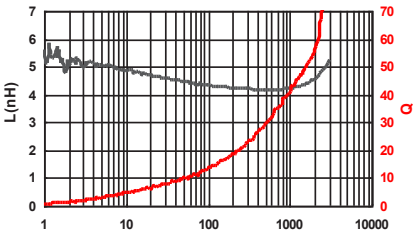

BSCH001608083N3S00
L(nH)
Q
FREQUENCY(MHz)
RDC<0.12Ω SRF:5200MHz IDC:600mA


BSCH001608083N6S00
L(nH)
Q
FREQUENCY(MHz)
RDC<0.14Ω SRF:5000MHz IDC:600mA


BSCH001608083N9S00
L(nH)
Q
FREQUENCY(MHz)
RDC<0.14Ω SRF:5000MHz IDC:600mA

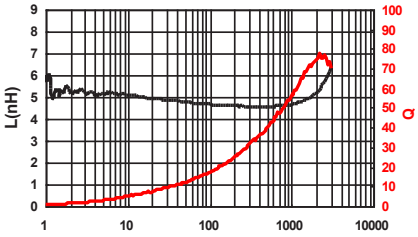
Test Instruments： Agilent E4991A Material/Impedance Analyzer

BSCH001608084N3S00



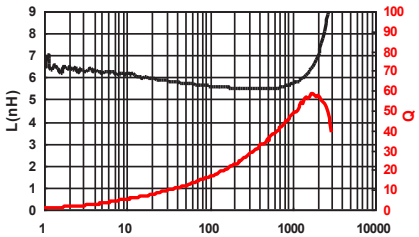
RDC<0.16Ω SRF:4750MHz IDC:600mA

BSCH001608084N7S00



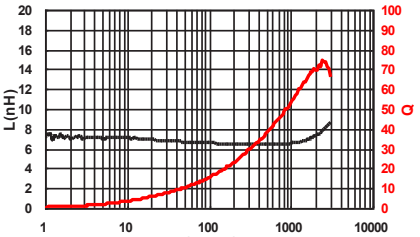
RDC<0.16Ω SRF:4750MHz IDC:600mA

BSCH001608085N6S00



RDC<0.18Ω SRF:4100MHz IDC:600mA

BSCH001608086N8J00



RDC<0.22Ω SRF:3750MHz IDC:600mA

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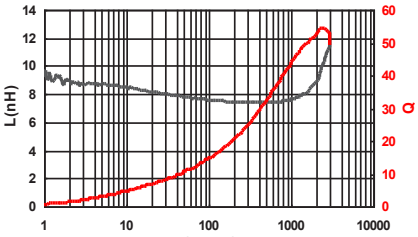

RDC<0.24Ω SRF:3300MHz IDC:600mA

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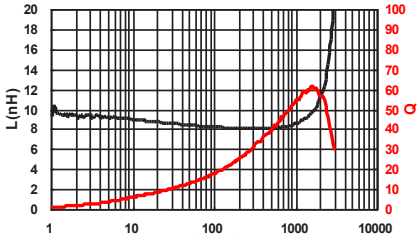

RDC<0.24Ω SRF:3300MHz IDC:600mA

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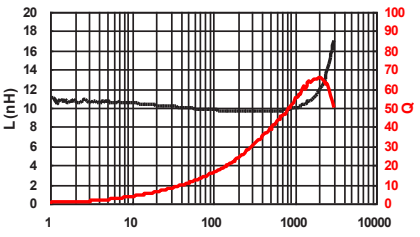

RDC<0.26Ω SRF:3000MHz IDC:600mA

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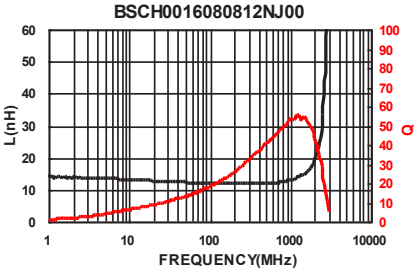

RDC<0.28Ω SRF:2600MHz IDC:600mA

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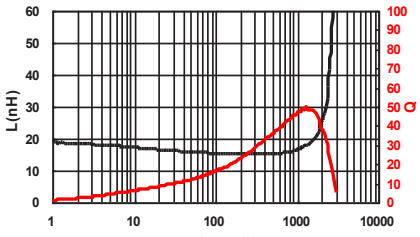

RDC<0.32Ω SRF:2400MHz IDC:600mA

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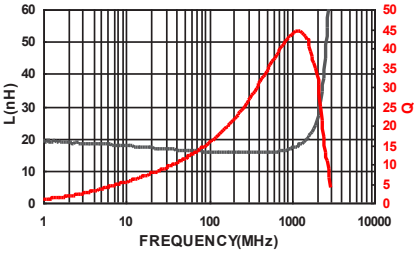

RDC<0.35Ω SRF:2400MHz IDC:600mA

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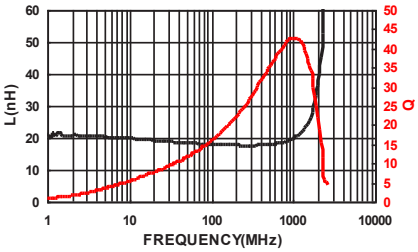

RDC<0.35Ω SRF:2400MHz IDC:600mA

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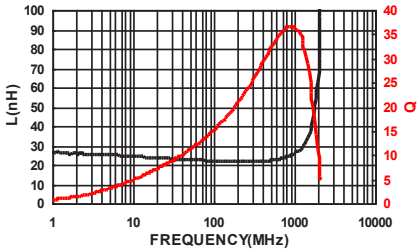

RDC<0.4Ω SRF:2000MHz IDC:500mA

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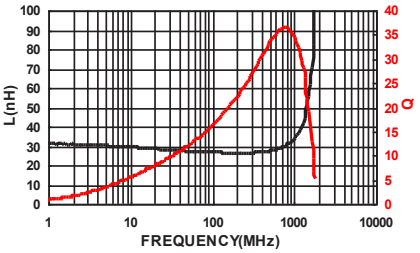

RDC<0.45Ω SRF:1900MHz IDC:500mA

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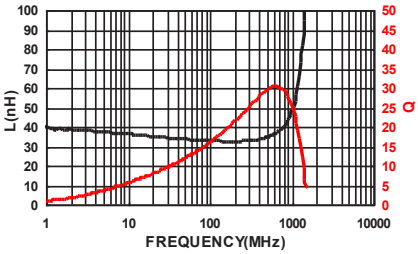

RDC<0.55Ω SRF:1600MHz IDC:400mA

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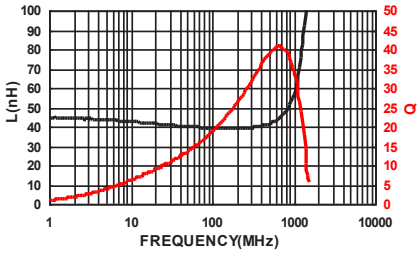

RDC<0.60Ω SRF:1400MHz IDC:400mA

Test Instruments： Agilent E4991A Material/Impedance Analyzer

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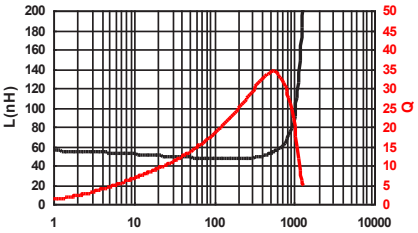

RDC<0.7Ω SRF:1300MHz IDC:400mA

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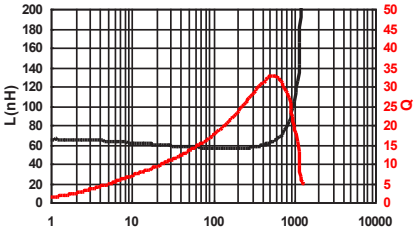

RDC<0.75Ω SRF:1100MHz IDC:400mA

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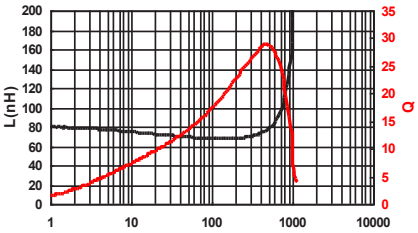

RDC<0.85Ω SRF:1050MHz IDC:400mA

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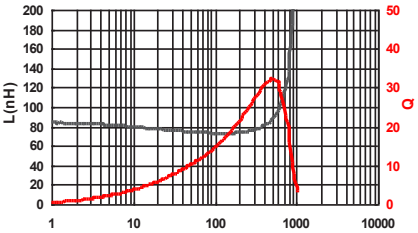

RDC<1.0Ω SRF:900MHz IDC:300mA

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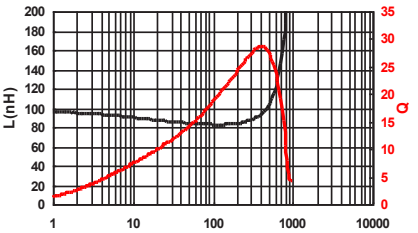

RDC<1.0Ω SRF:900MHz IDC:300mA

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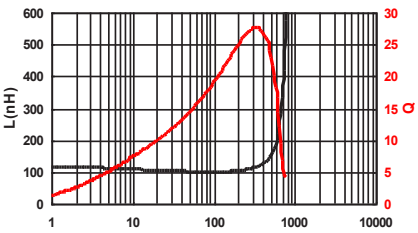

RDC<1.20Ω SRF:770MHz IDC:300mA

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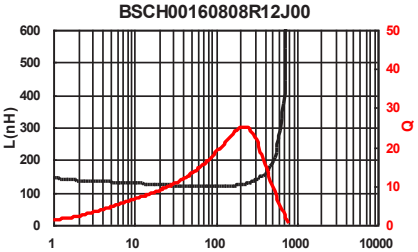

RDC<1.30 Ω SRF:650MHz IDC:300mA

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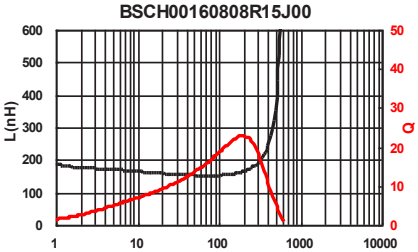

RDC<1.70 Ω SRF:550MHz IDC:250mA

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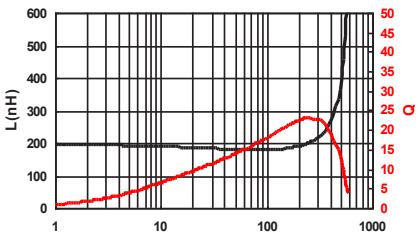

RDC<1.90 Ω SRF:520MHz IDC:250mA

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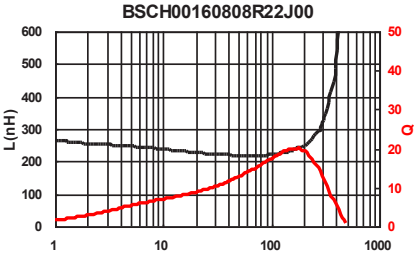
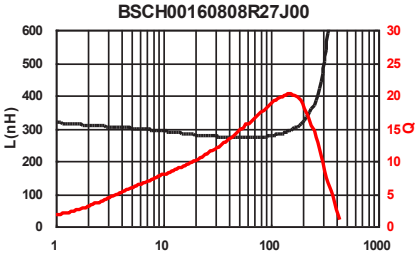


RDC<2.00 Ω SRF:500MHz IDC:250mA

BSCH00160808R27J00



RDC<2.20 Ω SRF:470MHz IDC:150mA

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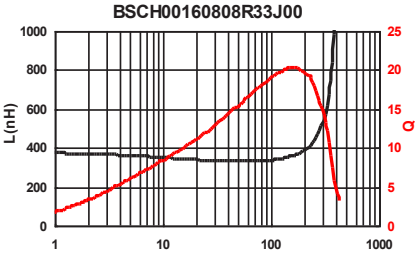

RDC<2.8 Ω SRF:320MHz IDC:100mA

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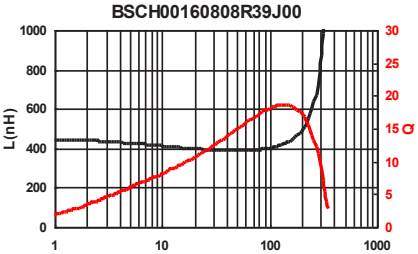


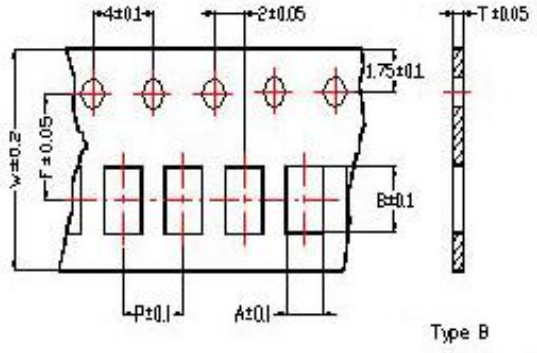
RDC<3.0 Ω SRF:300MHz IDC:100mA

SMD Ceramic Multilayer Chip Inductors

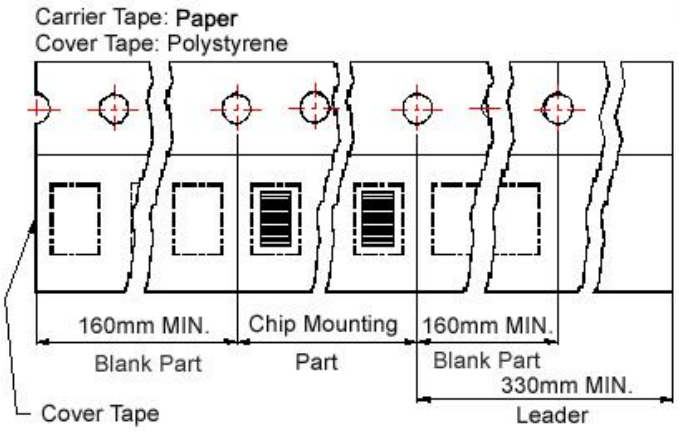
BSCH Series

Packaging Specifications

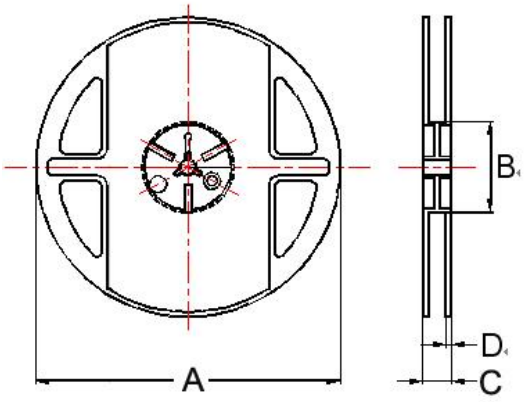
Tape Dimensions



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
BSCH00060303	0.37	0.67	0.42	8	2	3.5	180	60	13	1.5	15000
BSCH00100505	0.62	1.12	0.60	8	2	3.5	178	60	12	1.5	10000
BSCH00160808	1.00	1.80	0.95	8	4	3.5	178	60	12	1.5	4000

For More Information:

Americas - prodinfo_power_americas@yageo.com | **Europe -** prodinfo_power_emea@yageo.com | **Asia -** prodinfo_power_asia@yageo.com

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