

# DATA SHEET

## INDUCTOR

Wire Wound Chip Bead

BWCM Series

RoHS compliant & Halogen Free



**BWCM Series**



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

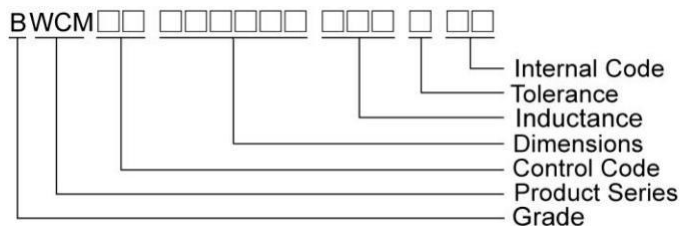
**Features**

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

**Applications**

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

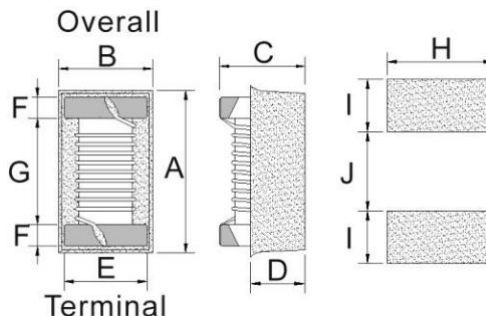
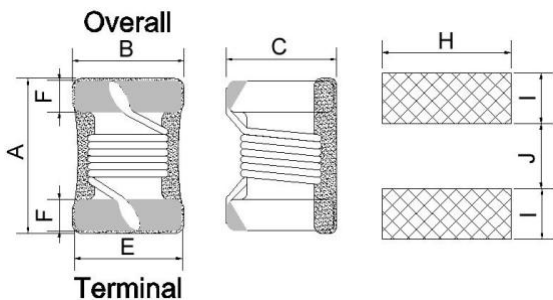
**Product Identification**



**Shape and Dimensions / Recommended**

Pattern **BWCM00060404**

**BWCM00110705/181010**



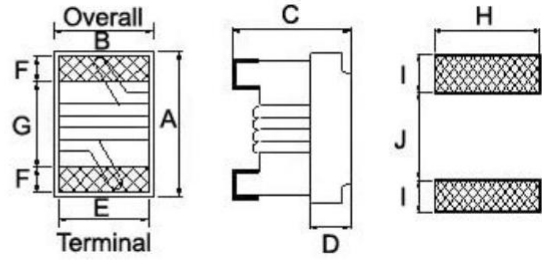
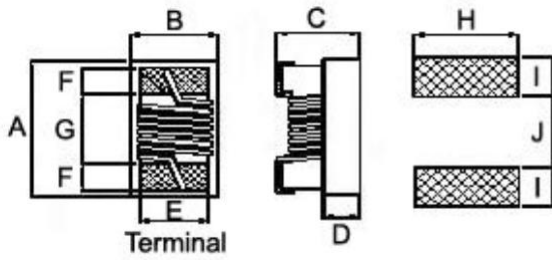
Dimensions

	A	B	C	D	E	F	G	H	I	J
<b>BWCM00060404</b>	0.53±0.05	0.40±0.05	0.40±0.05	-	0.38	0.10	-	0.40	0.21	0.23
<b>BWCM00110705</b>	1.1±0.1	0.70±0.1	0.5±0.1	0.35	0.60	0.15	0.70	0.66	0.40	0.60
<b>BWCM00181010</b>	1.80±0.1	1.00±0.1	0.95±0.1	0.60	0.90	0.23	1.15	1.15	0.57	0.86

**Shape and Dimensions / Recommended Pattern**

**BWCM00120707**

**BWCM00161008**



Dimensions

	A	B	C	D	E	F	G	H	I	J
<b>BWCM00120707</b>	1.19 Max	0.70 Max	0.66 Max	0.25	0.51	0.23	0.56	0.66	0.36	0.46
<b>BWCM00161008</b>	1.6 <sup>+0.2</sup> <sub>-0.1</sub>	1.02±0.1	0.82 <sup>+0.2</sup> <sub>-0.1</sub>	0.35	0.70	0.30	0.95	1.02	0.64	0.64

## Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Typ.	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Typ.
BWCM000604041N0□00	1.0	±0.2nH	250	48	900	19	0.03	900
BWCM000604041N1□00	1.1	±0.2nH	250	41	900	19	0.06	660
BWCM000604041N7□00	1.7	±0.2nH	250	41	900	19	0.07	600
BWCM000604041N8□00	1.8	±0.2nH	250	37	900	19	0.10	520
BWCM000604041N9□00	1.9	±0.2nH	250	41	900	19	0.08	620
BWCM000604042N0□00	2.0	±0.2nH	250	42	900	19	0.10	490
BWCM000604042N1□00	2.1	±0.2nH	250	35	900	19	0.16	400
BWCM000604042N2□00	2.2	±0.2nH	250	33	900	19	0.16	400
BWCM000604042N7□00	2.7	±0.2nH	250	46	900	15	0.06	720
BWCM000604042N8□00	2.8	±0.2nH	250	44	900	14	0.08	600
BWCM000604042N9□00	2.9	±0.2nH	250	41	900	13	0.10	540
BWCM000604043N0□00	3.0	±0.2nH	250	34	900	14	0.22	350
BWCM000604043N1□00	3.1	±0.2nH	250	48	900	12	0.07	720
BWCM000604043N2□00	3.2	±0.2nH	250	48	900	10	0.08	580
BWCM000604043N3□00	3.3	±0.2nH	250	47	900	11	0.11	520
BWCM000604043N4□00	3.4	±0.2nH	250	43	900	11	0.15	440
BWCM000604043N5□00	3.5	±0.2nH	250	43	900	12	0.15	440
BWCM000604043N6□00	3.6	±0.2nH	250	36	900	11	0.23	340
BWCM000604043N7□00	3.7	±0.2nH	250	38	900	11	0.23	340
BWCM000604043N9□00	3.9	±0.2nH	250	48	900	11	0.07	650
BWCM000604044N3□00	4.3	5	100	45	900	11	0.12	480
BWCM000604044N7□00	4.7	5	100	45	900	9.5	0.09	620
BWCM000604045N1□00	5.1	5	100	45	900	9.5	0.14	480
BWCM000604045N4□00	5.4	5	100	46	900	9.5	0.21	420
BWCM000604045N6□00	5.6	5	100	37	900	8.3	0.33	330
BWCM000604045N8□00	5.8	5	100	47	900	8.8	0.16	460
BWCM000604046N2□00	6.2	5	100	39	900	9.9	0.22	360
BWCM000604046N8□00	6.8	5	100	42	900	7.7	0.18	460
BWCM000604047N5□00	7.5	5	100	41	900	7.5	0.24	400
BWCM000604048N2□00	8.2	5	100	40	900	8.5	0.26	290

**Note: When ordering, please specify tolerance code. Tolerance : C=±0.2nH , J=±5%**

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Irms for a 20°C temperature rise from 25°C ambient with current
- Offset value : -0.48nH
- Measure Equipment :

L & Q : HP4286A/HP4287A/AgilentE4991/Keysight E4982A

SRF : Agilent HP8753D/ AgilentE4991

RDC : HP4287A/Keysight E4982A

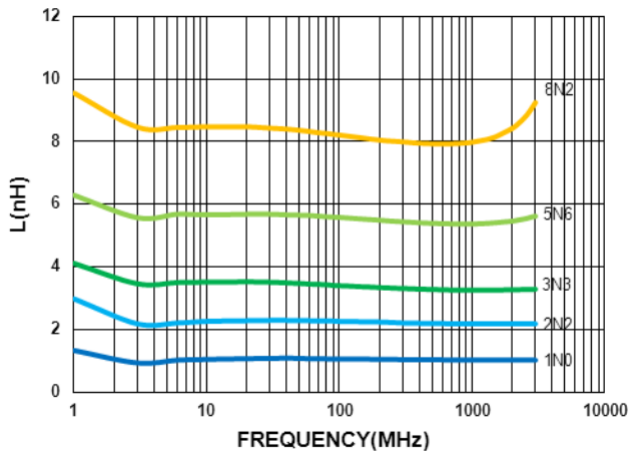
Irms : HP4284A+HP42841A/HP4285A+HP42841A

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Typ.	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Typ.
BWCM000604048N7□00	8.7	5	100	39	900	7.5	0.42	290
BWCM000604049N1□00	9.1	5	100	46	900	6.4	0.22	460
BWCM0006040410N□00	10	5	100	37	900	7.2	0.46	250
BWCM0006040411N□00	11	5	100	37	900	7.0	0.47	260
BWCM0006040412N□00	12.5	5	100	39	900	6.0	0.54	280
BWCM0006040413N□00	13	5	100	39	900	5.9	0.54	280
BWCM0006040414N□00	13.5	5	100	37	900	6.0	0.53	240
BWCM0006040415N□00	15.5	5	100	38	900	5.7	0.60	230

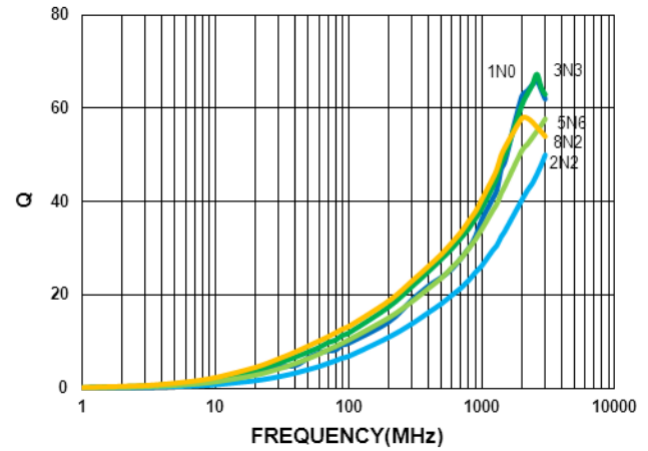
Note: When ordering, please specify tolerance code. Tolerance : C=±0.2nH , J=±5%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Irms for a 20°C temperature rise from 25°C ambient with current
- Offset value : -0.48nH
- Measure Equipment :  
L & Q : HP4286A/HP4287A/AgilentE4991/Keysight E4982A  
SRF : Agilent HP8753D/ AgilentE4991  
RDC : HP4287A/Keysight E4982A  
Irms : HP4284A+HP42841A/HP4285A+HP42841A

Typical L vs. Frequency



Typical Q vs. Frequency



## Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test		SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Typ.	
			Frequency (MHz)	Q Typ.				
BWCM001107051N5□H8	1.5	±0.2nH/±0.5nH	100	20	250	18	0.028	2100
BWCM001107052N5□H8	2.5	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	15.5	0.03	2100
BWCM001107052N7□H8	2.7	±0.1nH/±0.2nH/±0.5nH/2	100	28	250	14	0.047	1500
BWCM001107053N0□H8	3.0	±0.1nH/±0.2nH/±0.5nH/2	100	20	250	12.5	0.063	1350
BWCM001107053N8□H8	3.8	±0.1nH/±0.2nH/±0.5nH/2	100	35	250	10	0.03	1950
BWCM001107053N9□H8	3.9	±0.1nH/±0.2nH/±0.5nH/2	100	35	250	10	0.03	1950
BWCM001107054N0□H8	4.0	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	10	0.03	1950
BWCM001107054N1□H8	4.1	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	9.6	0.044	1800
BWCM001107054N3□H8	4.3	±0.1nH/±0.2nH/±0.5nH/2	100	32	250	9.6	0.044	1800
BWCM001107054N7□H8	4.7	±0.1nH/±0.2nH/±0.5nH/2	100	31	250	8	0.071	1200
BWCM001107055N8□H8	5.8	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	8	0.04	1770
BWCM001107056N2□H8	6.2	±0.1nH/±0.2nH/±0.5nH/2	100	33	250	8	0.056	1600
BWCM001107056N8□H8	6.8	2 / 5	100	30	250	7	0.068	1450
BWCM001107057N1□H8	7.1	2 / 5	100	32	250	7	0.069	1420
BWCM001107057N8□H8	7.8	2 / 5	100	30	250	7	0.05	1700
BWCM001107057N9□H8	7.9	2 / 5	100	30	250	7	0.05	1700
BWCM001107058N0□H8	8.0	2 / 5	100	30	250	7	0.05	1700
BWCM001107058N2□H8	8.2	2 / 5	100	32	250	6.5	0.069	1500
BWCM001107058N6□H8	8.6	2 / 5	100	31	250	6.5	0.07	1420
BWCM001107058N7□H8	8.7	2 / 5	100	31	250	6.5	0.07	1420
BWCM001107058N8□H8	8.8	2 / 5	100	31	250	6.5	0.07	1420
BWCM001107058N9□H8	8.9	2 / 5	100	31	250	6.5	0.07	1420
BWCM001107059N0□H8	9	2 / 5	100	30	250	6.5	0.07	1420
BWCM001107059N1□H8	9.1	2 / 5	100	32	250	6.5	0.08	1400
BWCM0011070511N□H8	11	2 / 5	100	32	250	6.2	0.083	1400
BWCM0011070515N□H8	15	2 / 5	100	31	250	5.5	0.114	1150
BWCM0011070518N□H8	18	2 / 5	100	30	250	5.2	0.13	1050
BWCM0011070519N□H8	19	2 / 5	100	30	250	5	0.156	920
BWCM0011070520N□H8	20	2 / 5	100	30	250	4.5	0.186	800
BWCM0011070523N□H8	23	2 / 5	100	29	250	4.5	0.201	760
BWCM0011070524N□H8	24	2 / 5	100	31	250	4	0.212	770
BWCM0011070527N□H8	27	2 / 5	100	30	250	4	0.288	680

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Irms for a 15°C temperature rise from 25°C ambient with current
- Offset value : -0.556nH
- Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A SRF :  
 Agilent HP8753D/Agilent HP8722ES RDC :  
 Chroma 16502 Irms :  
 HP4284A+HP42841A/HP4285A+HP42841A

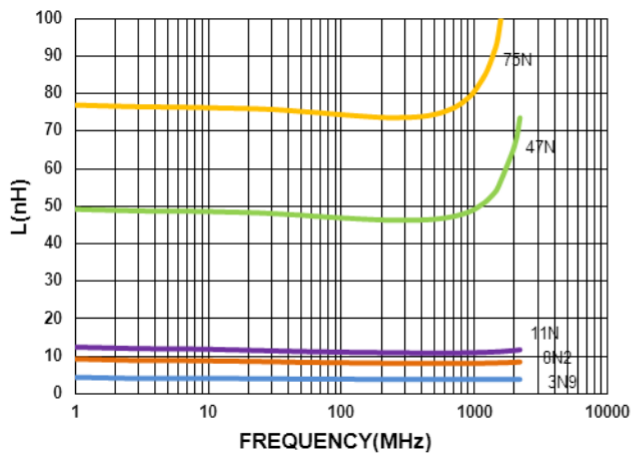
Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Typ.	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Typ.
BWCM0011070533N□H8	33	2 / 5	100	30	250	3.6	0.336	620
BWCM0011070539N□H8	39	2 / 5	100	28	250	3.4	0.456	530
BWCM0011070547N□H8	47	2 / 5	100	25	200	3.2	0.648	440
BWCM0011070551N□H8	51	2 / 5	100	25	200	2.9	0.696	415
BWCM0011070553N□H8	53	2 / 5	100	25	200	2.9	0.696	415
BWCM0011070556N□H8	56	2 / 5	100	25	200	2.9	0.996	340
BWCM0011070568N□H8	68	2 / 5	100	25	200	2.5	1.128	320
BWCM0011070575N□H8	75	2 / 5	100	25	200	2.4	1.224	320

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

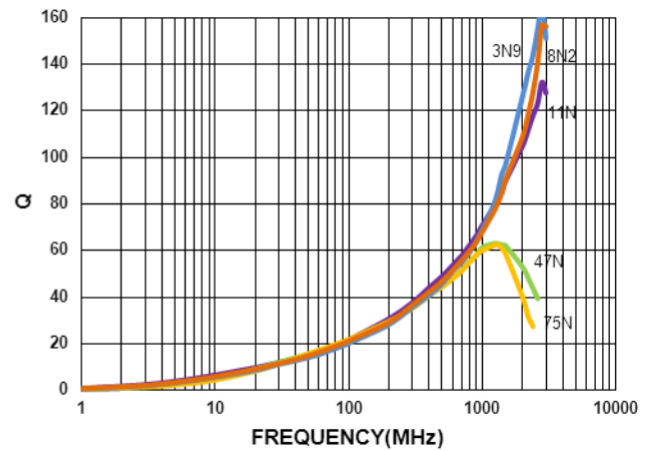
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Irms for a 15°C temperature rise from 25°C ambient with current
- Offset value : -0.556nH
- Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A SRF :  
 Agilent HP8753D/Agilent HP8722ES RDC :  
 Chroma 16502 Irms :  
 HP4284A+HP42841A/HP4285A+HP42841A

**Typical L vs. Frequency**



**Typical Q vs. Frequency**



## Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Typ.	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	I <sub>rms</sub> (mA) Typ.
BWCM001107052N2□L8	2.2	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	15.5	0.022	2530
BWCM001107052N4□L8	2.4	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	15.5	0.022	2530
BWCM001107053N3□L8	3.3	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	14	0.03	2000
BWCM001107053N4□L8	3.4	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	10	0.03	1950
BWCM001107053N5□L8	3.5	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	10	0.03	1950
BWCM001107053N6□L8	3.6	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	10	0.03	1950
BWCM001107055N0□L8	5	±0.1nH/±0.2nH/±0.5nH/2	100	32	250	10	0.04	1770
BWCM001107055N1□L8	5.1	±0.1nH/±0.2nH/±0.5nH/2	100	35	250	8	0.04	1770
BWCM001107055N2□L8	5.2	±0.1nH/±0.2nH/±0.5nH/2	100	35	250	8	0.04	1770
BWCM001107055N3□L8	5.3	±0.1nH/±0.2nH/±0.5nH/2	100	35	250	8	0.04	1770
BWCM001107055N4□L8	5.4	±0.1nH/±0.2nH/±0.5nH/2	100	35	250	8	0.04	1770
BWCM001107055N5□L8	5.5	±0.1nH/±0.2nH/±0.5nH/2	100	35	250	8	0.04	1770
BWCM001107055N6□L8	5.6	±0.1nH/±0.2nH/±0.5nH/2	100	35	250	8	0.04	1770
BWCM001107055N7□L8	5.7	±0.1nH/±0.2nH/±0.5nH/2	100	30	250	8	0.04	1770
BWCM001107057N2□L8	7.2	2 / 5	100	32	250	7	0.05	1700
BWCM001107057N3□L8	7.3	2 / 5	100	32	250	7	0.05	1700
BWCM001107057N4□L8	7.4	2 / 5	100	30	250	7	0.05	1700
BWCM001107057N5□L8	7.5	2 / 5	100	35	250	7	0.05	1700
BWCM001107057N6□L8	7.6	2 / 5	100	30	250	7	0.05	1700
BWCM001107057N7□L8	7.7	2 / 5	100	30	250	7	0.05	1700
BWCM001107059N2□L8	9.2	2 / 5	100	32	250	6	0.081	1400
BWCM001107059N3□L8	9.3	2 / 5	100	34	250	6	0.081	1400
BWCM001107059N4□L8	9.4	2 / 5	100	33	250	6	0.081	1400
BWCM001107059N5□L8	9.5	2 / 5	100	32	250	6	0.081	1400
BWCM001107059N6□L8	9.6	2 / 5	100	33	250	6	0.081	1400
BWCM001107059N7□L8	9.7	2 / 5	100	33	250	6	0.081	1400
BWCM001107059N8□L8	9.8	2 / 5	100	34	250	6	0.081	1400
BWCM001107059N9□L8	9.9	2 / 5	100	32	250	6	0.081	1400
BWCM0011070510N□L8	10	2 / 5	100	31	250	6	0.081	1400
BWCM0011070512N□L8	12	2 / 5	100	30	250	5.2	0.093	1240

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- I<sub>rms</sub> for a 15°C temperature rise from 25°C ambient with current
- Offset value : -0.556nH
- Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A SRF :

Agilent HP8753D/Agilent HP8722ES RDC :

Chroma 16502 I<sub>rms</sub> :

HP4284A+HP42841A/HP4285A+HP42841A



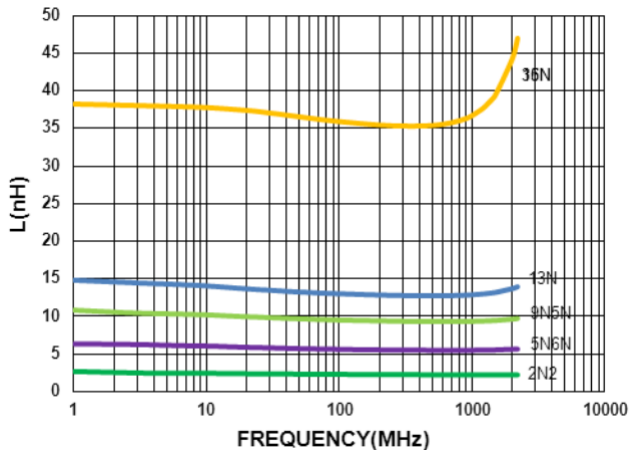
Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Typ.	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Typ.
BWCM0011070513N□L8	13	2 / 5	100	30	250	5.2	0.093	1240
BWCM0011070516N□L8	16	2 / 5	100	31	250	5	0.126	1000
BWCM0011070522N□L8	22	2 / 5	100	30	250	4.5	0.202	780
BWCM0011070530N□L8	30	2 / 5	100	30	250	3.8	0.309	660
BWCM0011070536N□L8	36	2 / 5	100	30	250	3.5	0.431	540
BWCM0011070543N□L8	43	2 / 5	100	30	250	3.4	0.516	515

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

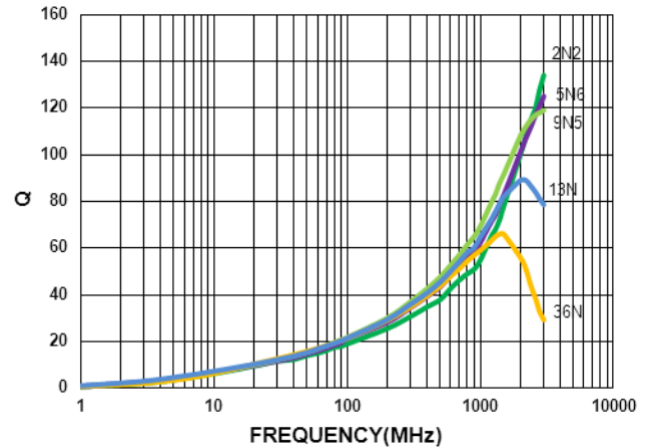
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Irms for a 15°C temperature rise from 25°C ambient with current
- Offset value : -0.556nH
- Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A SRF :  
 Agilent HP8753D/Agilent HP8722ES RDC :  
 Chroma 16502 Irms :  
 HP4284A+HP42841A/HP4285A+HP42841A

**Typical L vs. Frequency**



**Typical Q vs. Frequency**



## Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test		SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Max	
			Frequency (MHz)	Q Min				
BWCM001207071N5□00	1.5	±0.1nH/±0.2nH/±0.5nH	100	10	250	18.0	0.03	1000
BWCM001207072N4□00	2.4	±0.1nH/±0.2nH/±0.5nH	100	20	250	15.0	0.05	850
BWCM001207072N5□00	2.5	±0.1nH/±0.2nH/±0.5nH	100	20	250	15.0	0.05	850
BWCM001207072N7□00	2.7	±0.1nH/±0.2nH/±0.5nH	100	20	250	15.0	0.05	850
BWCM001207072N9□00	2.9	±0.1nH/±0.2nH/±0.5nH	100	20	250	15.0	0.07	750
BWCM001207073N9□00	3.9	3 / 5	100	25	250	10.0	0.07	750
BWCM001207074N1□00	4.1	3 / 5	100	25	250	10.0	0.07	750
BWCM001207074N3□00	4.3	3 / 5	100	25	250	10.0	0.07	750
BWCM001207074N7□00	4.7	3 / 5	100	25	250	8.0	0.07	750
BWCM001207075N1□00	5.1	3 / 5	100	25 typ	250	8.0	0.12	600
BWCM001207075N8□00	5.8	3 / 5	100	25	250	8.0	0.12	700
BWCM001207076N2□00	6.2	3 / 5	100	25	250	8.0	0.09	700
BWCM001207076N8□00	6.8	3 / 5	100	25	250	6.0	0.09	700
BWCM001207077N3□00	7.3	3 / 5	100	25	250	6.0	0.13	570
BWCM001207077N5□00	7.5	3 / 5	100	25	250	6.0	0.13	570
BWCM001207078N2□00	8.2	3 / 5	100	25	250	5.5	0.14	540
BWCM001207078N7□00	8.7	3 / 5	100	25	250	5.5	0.14	540
BWCM001207079N1□00	9.1	3 / 5	100	25	250	5.5	0.14	540
BWCM001207079N5□00	9.5	3 / 5	100	25	250	5.5	0.14	540
BWCM0012070710N□00	10	2/3/5	100	25	250	5.5	0.17	500
BWCM0012070711N□00	11	2/3/5	100	30	250	5.5	0.14	500
BWCM0012070712N□00	12	2/3/5	100	30	250	5.5	0.14	500
BWCM0012070713N□00	13	2/3/5	100	25	250	5.0	0.21	430
BWCM0012070715N□00	15	2/3/5	100	30	250	5.0	0.16	460
BWCM0012070716N□00	16	2/3/5	100	25	250	4.5	0.24	370
BWCM0012070718N□00	18	2/3/5	100	25	250	4.5	0.27	370
BWCM0012070719N□00	19	2/3/5	100	25	250	4.5	0.27	370
BWCM0012070720N□00	20	2/3/5	100	25	250	4.0	0.27	370
BWCM0012070722N□00	22	2/3/5	100	25	250	4.0	0.30	310
BWCM0012070723N□00	23	2/3/5	100	25	250	3.8	0.30	310
BWCM0012070724N□00	24	2/3/5	100	25	250	3.5	0.52	280
BWCM0012070727N□00	27	2/3/5	100	25	250	3.5	0.52	280

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

● Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)

● Irms for a 15°C temperature rise from 25°C ambient with current

● Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A SRF :

Agilent HP8753D/Agilent HP8722ES RDC :

Chroma 16502 Irms :

HP4284A+HP42841A/HP4285A+HP42841A



Electrical Characteristics

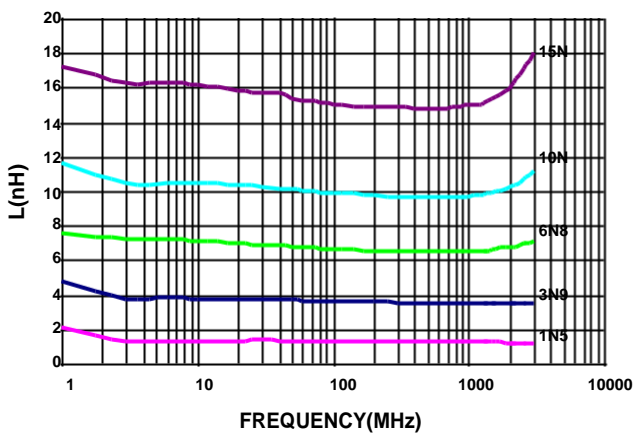
Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Max
BWCM0012070730N□00	30	2/3/5	100	25	250	3.3	0.58	270
BWCM0012070733N□00	33	2/3/5	100	25	250	3.2	0.63	260
BWCM0012070736N□00	36	2/3/5	100	25	250	3.1	0.63	260
BWCM0012070739N□00	39	2/3/5	100	25	250	3.0	0.70	250
BWCM0012070740N□00	40	2/3/5	100	25	250	3.0	0.70	250
BWCM0012070747N□00	47	2/3/5	100	25	200	2.9	1.08	210
BWCM0012070751N□00	51	2/3/5	100	25	200	2.85	1.08	210
BWCM0012070756N□00	56	2/3/5	100	25	200	2.80	1.17	200
BWCM0012070762N□00	62	2/3/5	100	20	200	2.60	1.82	145
BWCM0012070768N□00	68	2/3/5	100	20	200	2.50	1.96	140
BWCM0012070772N□00	72	2/3/5	100	20	150	2.50	2.10	135
BWCM0012070775N□00	75	2/3/5	100	20	150	2.40	2.10	135
BWCM0012070782N□00	82	2/3/5	100	20	150	2.30	2.24	130
BWCM0012070791N□00	91	2/3/5	100	20	150	2.10	2.38	125
BWCM00120707R10□00	100	2/3/5	100	20	150	1.50	2.52	120
BWCM00120707R12□00	120	2/3/5	100	20	150	1.00	2.66	110

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

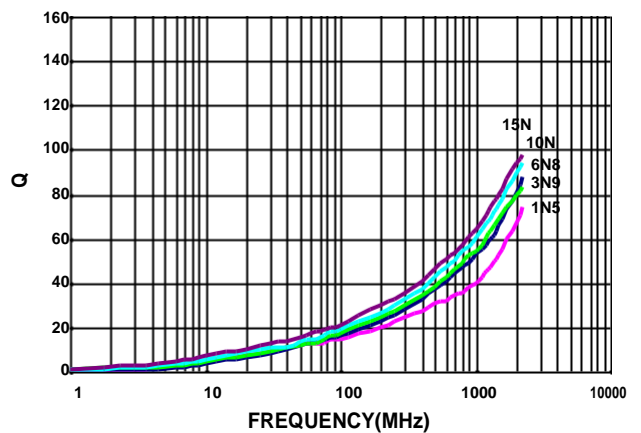
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Irms for a 15°C temperature rise from 25°C ambient with current
- Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A SRF :  
 Agilent HP8753D/Agilent HP8722ES RDC :  
 Chroma 16502 Irms :  
 HP4284A+HP42841A/HP4285A+HP42841A

Typical L vs. Frequency



Typical Q vs. Frequency



## Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test		SRF (GHz) Min	RDC (Ω) Max	I <sub>rms</sub> (mA) Max	
			Frequency (MHz)	Q Min				
BWCM001610082N2□00	2.2	±0.1nH/±0.2nH/±0.5nH	100	16	250	6.0	0.049	700
BWCM001610083N6□00	3.6	3 / 5	100	25	250	6.0	0.059	850
BWCM001610083N9□00	3.9	3 / 5	100	35	250	6.0	0.059	850
BWCM001610084N3□00	4.3	3 / 5	100	35	250	6.0	0.059	850
BWCM001610084N7□00	4.7	3 / 5	100	35	250	6.0	0.059	850
BWCM001610085N6□00	5.6	3 / 5	100	35	250	6.0	0.082	750
BWCM001610086N2□00	6.2	3 / 5	100	35	250	6.0	0.082	750
BWCM001610086N8□00	6.8	3 / 5	100	35	250	6.0	0.082	750
BWCM001610087N5□00	7.5	3 / 5	100	35	250	6.0	0.082	750
BWCM001610088N2□00	8.2	3 / 5	100	35	250	6.0	0.110	650
BWCM001610088N7□00	8.7	3 / 5	100	35	250	6.0	0.110	650
BWCM001610089N1□00	9.1	3 / 5	100	35	250	6.0	0.110	650
BWCM001610089N5□00	9.5	3 / 5	100	35	250	6.0	0.110	650
BWCM0016100810N□00	10	2/3/5	100	35	250	6.0	0.110	650
BWCM0016100811N□00	11	2/3/5	100	35	250	6.0	0.110	650
BWCM0016100812N□00	12	2/3/5	100	35	250	6.0	0.130	600
BWCM0016100813N□00	13	2/3/5	100	35	250	6.0	0.130	600
BWCM0016100815N□00	15	2/3/5	100	40	250	6.0	0.130	600
BWCM0016100816N□00	16	2/3/5	100	40	250	5.5	0.160	550
BWCM0016100818N□00	18	2/3/5	100	40	250	5.5	0.160	550
BWCM0016100820N□00	20	2/3/5	100	40	250	4.9	0.160	550
BWCM0016100822N□00	22	2/3/5	100	40	250	4.6	0.170	500
BWCM0016100824N□00	24	2/3/5	100	40	250	3.8	0.210	500
BWCM0016100827N□00	27	2/3/5	100	40	250	3.7	0.210	440
BWCM0016100830N□00	30	2/3/5	100	40	250	3.3	0.230	420
BWCM0016100833N□00	33	2/3/5	100	40	250	3.2	0.230	420
BWCM0016100836N□00	36	2/3/5	100	40	250	2.9	0.260	400
BWCM0016100839N□00	39	2/3/5	100	40	250	2.8	0.260	400
BWCM0016100843N□00	43	2/3/5	100	40	200	2.7	0.290	380
BWCM0016100847N□00	47	2/3/5	100	38	200	2.6	0.290	380
BWCM0016100851N□00	51	2/3/5	100	38	200	2.5	0.330	370
BWCM0016100856N□00	56	2/3/5	100	38	200	2.4	0.350	360

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- I<sub>rms</sub> for a 15°C temperature rise from 25°C ambient with current

- Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A SRF :  
 Agilent HP8753D/Agilent HP8722ES RDC :  
 Chroma 16502 I<sub>rms</sub> :  
 HP4284A+HP42841A/HP4285A+HP42841A

**Electrical Characteristics**

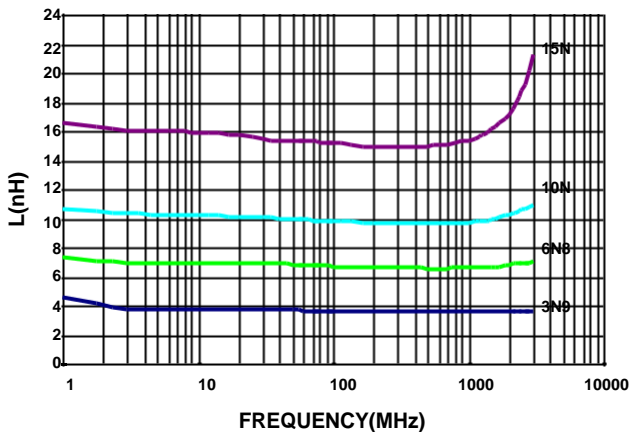
Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Max
BWCM0016100862N□00	62	2/3/5	100	38	200	2.3	0.510	280
BWCM0016100868N□00	68	2/3/5	100	38	200	2.2	0.380	340
BWCM0016100872N□00	72	2/3/5	100	34	150	2.1	0.560	270
BWCM0016100875N□00	75	2/3/5	100	34	150	2.05	0.560	270
BWCM0016100882N□00	82	2/3/5	100	34	150	2.00	0.600	250
BWCM0016100891N□00	91	2/3/5	100	34	150	1.90	0.640	230
BWCM00161008R10□00	100	2/3/5	100	34	150	1.80	0.680	220
BWCM00161008R11□00	110	2/3/5	100	32	150	1.70	1.200	200
BWCM00161008R12□00	120	2/3/5	100	32	150	1.60	1.300	180
BWCM00161008R13□00	130	2/3/5	100	32	150	1.45	1.400	170
BWCM00161008R15□00	150	2/3/5	100	32	150	1.40	1.500	160
BWCM00161008R16□00	160	2/3/5	100	32	150	1.35	2.100	150
BWCM00161008R18□00	180	2/3/5	100	25	100	1.30	2.200	140
BWCM00161008R20□00	200	2/3/5	100	25	100	1.25	2.400	120
BWCM00161008R22□00	220	2/3/5	100	25	100	1.20	2.500	120
BWCM00161008R27□00	270	2/3/5	100	30	100	0.96	3.400	110
BWCM00161008R33□00	330	2/3/5	100	30	100	0.80	5.500	85
BWCM00161008R39□00	390	2/3/5	100	30	100	0.80	6.200	80
BWCM00161008R47□00	470	2/3/5	100	30	100	0.70	7.000	75

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

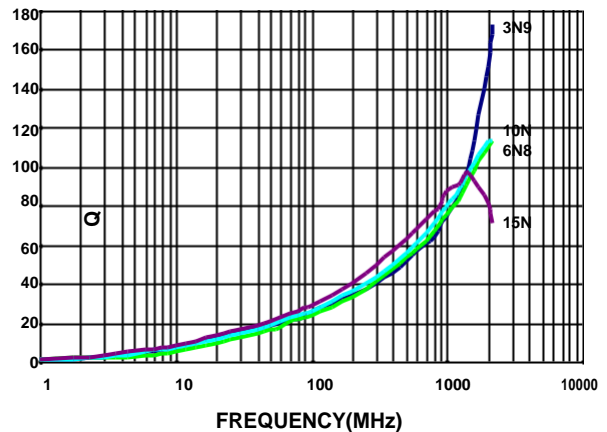
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Irms for a 15°C temperature rise from 25°C ambient with current
- Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A SRF :  
 Agilent HP8753D/Agilent HP8722ES RDC :  
 Chroma 16502 I rms :  
 HP4284A+HP42841A/HP4285A+HP42841A

**Typical L vs. Frequency**



**Typical Q vs. Frequency**



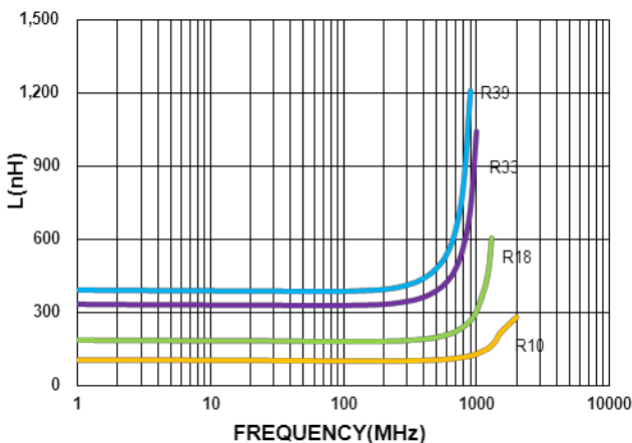
**Electrical Characteristics**

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (GHz) Min	RDC (Ω) Max	Irms (mA) Typ.
BWCM00181010R10□H8	100	2 / 5	100	34	150	1.75	0.63	490
BWCM00181010R11□H8	110	2 / 5	100	32	150	1.73	0.7	450
BWCM00181010R12□H8	120	2 / 5	100	32	150	1.65	0.72	450
BWCM00181010R15□H8	150	2 / 5	100	28	150	1.58	0.87	420
BWCM00181010R18□H8	180	2 / 5	100	25	100	1.38	1.65	310
BWCM00181010R20□H8	200	2 / 5	100	25	100	1.35	1.74	290
BWCM00181010R21□H8	210	2 / 5	100	27	100	1.33	1.98	280
BWCM00181010R22□H8	220	2 / 5	100	25	100	1.33	2.08	280
BWCM00181010R25□H8	250	2 / 5	100	24	100	1.33	2.28	250
BWCM00181010R27□H8	270	2 / 5	100	24	100	1.25	2.42	260
BWCM00181010R30□H8	300	2 / 5	100	25	100	1.2	3.12	220
BWCM00181010R33□H8	330	2 / 5	100	25	100	1.1	3.84	190
BWCM00181010R36□H8	360	2 / 5	100	25	100	1.05	3.98	190
BWCM00181010R39□H8	390	2 / 5	100	25	100	1	4.23	190

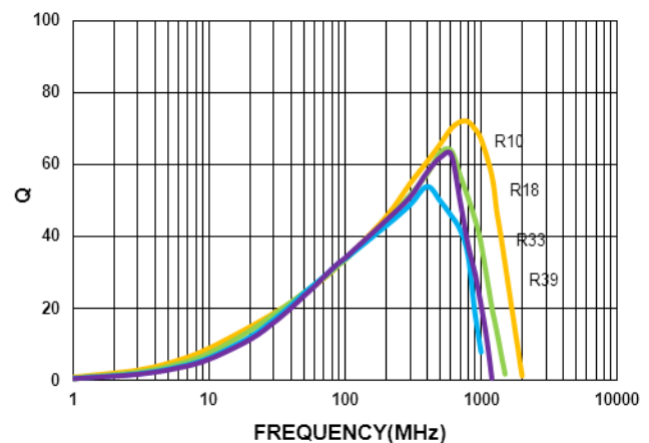
**Note: When ordering, please specify tolerance code. Tolerance : G=±2% , J=±5%**

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Irms for a 15°C temperature rise from 25°C ambient with current
- Offset value : -0.771nH
- Measure Equipment :  
L & Q : Agilent E4991A+Agilent HP16197A SRF :  
Agilent HP8753D/Agilent HP8722ES RDC :  
Chroma 16502 Irms :  
HP4284A+HP42841A/HP4285A+HP42841A

**Typical L vs. Frequency**



**Typical Q vs. Frequency**



## Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test	Q Min	Test	SRF (GHz) Min	RDC (Ω) Max	I <sub>rms</sub> (mA) Typ.
			Frequency (MHz)		Frequency (MHz)			
BWCM001810102N2□L8	2.2	±0.2nH	100	24	250	15	0.018	3200
BWCM001810102N4□L8	2.4	±0.2nH	100	18	250	15	0.026	2400
BWCM001810103N9□L8	3.9	±0.1nH/±0.2nH/ 2	100	30	250	10	0.028	2200
BWCM001810104N3□L8	4.3	±0.1nH/±0.2nH/ 2	100	35	250	11.6	0.036	2100
BWCM001810104N7□L8	4.7	±0.1nH/±0.2nH/ 2	100	25	250	10.4	0.054	1500
BWCM001810104N9□L8	4.9	±0.1nH/±0.2nH/ 2	100	23	250	7.3	0.081	1200
BWCM001810105N6□L8	5.6	±0.2nH/ 2	100	38	250	6.65	0.04	1900
BWCM001810106N8□L8	6.8	±0.2nH/ 2	100	40	250	6.65	0.04	1900
BWCM001810107N5□L8	7.5	±0.2nH/ 2	100	35	250	7	0.048	1500
BWCM001810108N2□L8	8.2	±0.2nH/ 2	100	38	250	4.75	0.052	1600
BWCM001810108N7□L8	8.7	±0.2nH/ 2	100	38	250	4.75	0.052	1600
BWCM001810109N1□L8	9.1	±0.2nH/ 2	100	38	250	4.75	0.052	1600
BWCM001810109N5□L8	9.5	±0.2nH/ 2	100	38	250	4.75	0.052	1600
BWCM0018101010N□L8	10	2 / 5	100	38	250	4.75	0.052	1600
BWCM0018101011N□L8	11	2 / 5	100	40	250	4.75	0.052	1600
BWCM0018101012N□L8	12	2 / 5	100	37	250	5	0.064	1500
BWCM0018101013N□L8	13	2 / 5	100	37	250	5	0.064	1500
BWCM0018101015N□L8	15	2 / 5	100	38	250	4.6	0.075	1400
BWCM0018101016N□L8	16	2 / 5	100	40	250	4.6	0.075	1400
BWCM0018101018N□L8	18	2 / 5	100	40	250	4.6	0.075	1400
BWCM0018101022N□L8	22	2 / 5	100	40	250	3.45	0.086	1300
BWCM0018101023N□L8	23	2 / 5	100	40	250	3.45	0.086	1300
BWCM0018101024N□L8	24	2 / 5	100	40	250	3.45	0.086	1300
BWCM0018101027N□L8	27	2 / 5	100	40	250	3.6	0.098	1200
BWCM0018101028N□L8	28	2 / 5	100	40	250	3.6	0.098	1200
BWCM0018101030N□L8	30	2 / 5	100	40	250	2.88	0.12	1100
BWCM0018101033N□L8	33	2 / 5	100	40	250	3.15	0.11	1100
BWCM0018101036N□L8	36	2 / 5	100	37	250	3	0.2	910
BWCM0018101039N□L8	39	2 / 5	100	40	250	3.28	0.16	1000
BWCM0018101043N□L8	43	2 / 5	100	40	250	2.78	0.21	840
BWCM0018101047N□L8	47	2 / 5	100	32	200	2.7	0.23	830
BWCM0018101051N□L8	51	2 / 5	100	32	200	2.7	0.23	830
BWCM0018101056N□L8	56	2 / 5	100	38	200	2.6	0.26	770

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- I<sub>rms</sub> for a 15°C temperature rise from 25°C ambient with current
- Offset value : -0.771nH
- Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A  
SRF : Agilent HP8753D/Agilent HP8722ES  
RDC : Chroma 16502

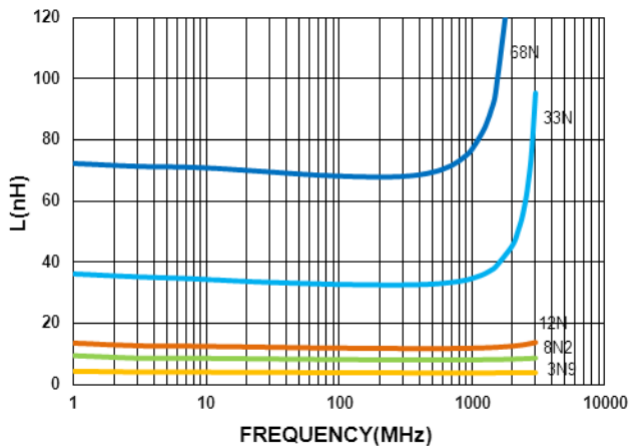
Part Number	Inductance (nH)	Tolerance (±%)	Test	Q Min	Test	SRF (GHz) Min	RDC (Ω) Max	I <sub>rms</sub> (mA) Typ.
			Frequency (MHz)		Frequency (MHz)			
BWCM0018101068N□L8	68	2 / 5	100	37	200	2.38	0.38	630
BWCM0018101072N□L8	72	2 / 5	100	34	150	2.33	0.47	560
BWCM0018101075N□L8	75	2 / 5	100	28	150	2.28	0.41	590
BWCM0018101082N□L8	82	2 / 5	100	34	150	2.23	0.5	550
BWCM0018101091N□L8	91	2 / 5	100	33	150	1.9	0.54	520

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

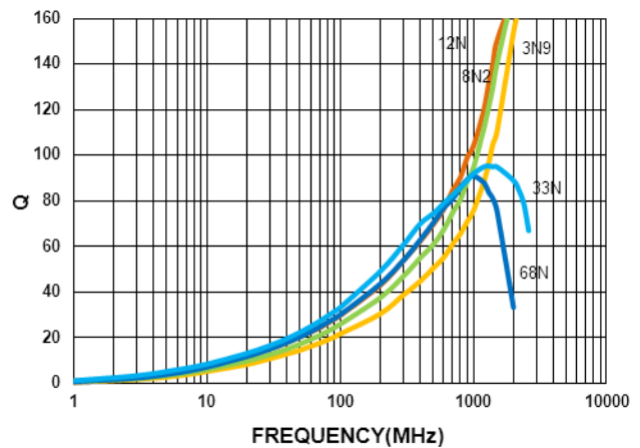
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- I<sub>rms</sub> for a 15°C temperature rise from 25°C ambient with current
- Offset value : -0.771nH
- Measure Equipment :

L & Q : Agilent E4991A+Agilent HP16197A SRF :  
 Agilent HP8753D/Agilent HP8722ES RDC :  
 Chroma 16502 I<sub>rms</sub> :  
 HP4284A+HP42841A/HP4285A+HP42841A

**Typical L vs. Frequency**



**Typical Q vs. Frequency**





Packaging Specifications

Tape Dimensions

Tape Material

Figure 1

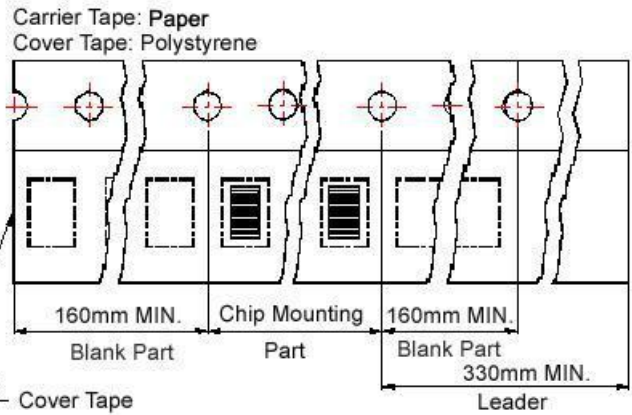
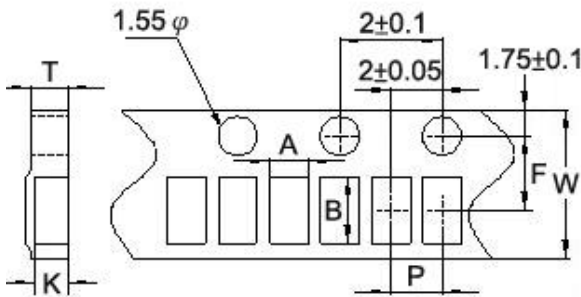
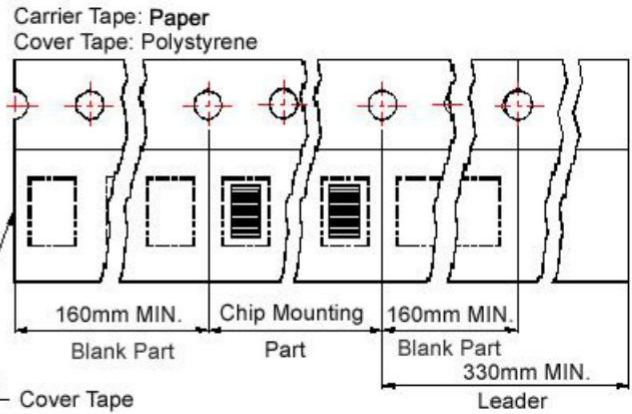
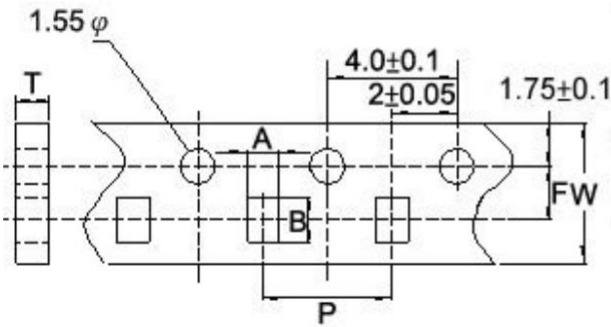
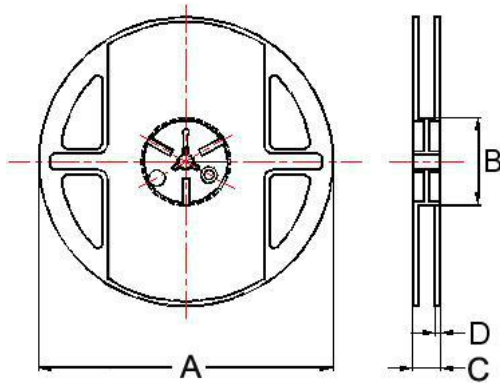


Figure 2



Reel Dimensions



Dimensions in mm

TYPE	Fig.	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
		A	B	T	W	P	F	K	A	B	C	D	
BWCM00060404	1	0.79	0.89	0.65	8	2	3.5	0.45	178	60	12	1.5	4000
BWCM00110705	1	0.85	1.25	0.75	8	2	3.5	0.60	178	60	12	1.5	4000
BWCM00120707	1	0.67	1.20	0.75	8	2	3.5	0.59	178	60	12	1.5	4000
BWCM00161008	2	1.20	1.80	1.05	8	4	3.5	-	178	60	12	1.5	4000
BWCM00181010	2	1.20	2.00	1.10	8	4	3.5	-	178	60	12	1.5	4000

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Pulse:

[BWCM0006040410NJ00](#) [BWCM0006040411NJ00](#) [BWCM0006040412NJ00](#) [BWCM0006040413NJ00](#)  
[BWCM0006040414NJ00](#) [BWCM0006040415NJ00](#) [BWCM000604041N0C00](#) [BWCM000604041N1C00](#)  
[BWCM000604041N7C00](#) [BWCM000604041N8C00](#) [BWCM000604041N9C00](#) [BWCM000604042N0C00](#)  
[BWCM000604042N1C00](#) [BWCM000604042N2C00](#) [BWCM000604042N7C00](#) [BWCM000604042N8C00](#)  
[BWCM000604042N9C00](#) [BWCM000604043N0C00](#) [BWCM000604043N1C00](#) [BWCM000604043N2C00](#)  
[BWCM000604043N3C00](#) [BWCM000604043N4C00](#) [BWCM000604043N5C00](#) [BWCM000604043N6C00](#)  
[BWCM000604043N7C00](#) [BWCM000604043N9C00](#) [BWCM000604044N3J00](#) [BWCM000604044N7J00](#)  
[BWCM000604045N1J00](#) [BWCM000604045N4J00](#) [BWCM000604045N6J00](#) [BWCM000604045N8J00](#)  
[BWCM000604046N2J00](#) [BWCM000604046N8J00](#) [BWCM000604047N5J00](#) [BWCM000604048N2J00](#)  
[BWCM000604048N7J00](#) [BWCM000604049N1J00](#) [BWCM0011070510NGL8](#) [BWCM0011070510NJL8](#)  
[BWCM0011070511NGH8](#) [BWCM0011070511NJH8](#) [BWCM0011070512NGL8](#) [BWCM0011070512NJL8](#)  
[BWCM0011070513NGL8](#) [BWCM0011070513NJL8](#) [BWCM0011070515NGH8](#) [BWCM0011070515NJH8](#)  
[BWCM0011070516NGL8](#) [BWCM0011070516NJL8](#) [BWCM0011070518NGH8](#) [BWCM0011070518NJH8](#)  
[BWCM0011070519NGH8](#) [BWCM0011070519NJH8](#) [BWCM001107051N5CH8](#) [BWCM001107051N5DH8](#)  
[BWCM0011070520NGH8](#) [BWCM0011070520NJH8](#) [BWCM0011070522NGL8](#) [BWCM0011070522NJL8](#)  
[BWCM0011070523NGH8](#) [BWCM0011070523NJH8](#) [BWCM0011070524NGH8](#) [BWCM0011070524NJH8](#)  
[BWCM0011070527NGH8](#) [BWCM0011070527NJH8](#) [BWCM001107052N2BL8](#) [BWCM001107052N2CL8](#)  
[BWCM001107052N2DL8](#) [BWCM001107052N2GL8](#) [BWCM001107052N4BL8](#) [BWCM001107052N4CL8](#)  
[BWCM001107052N4DL8](#) [BWCM001107052N4GL8](#) [BWCM001107052N5BH8](#) [BWCM001107052N5CH8](#)  
[BWCM001107052N5DH8](#) [BWCM001107052N5GH8](#) [BWCM001107052N7BH8](#) [BWCM001107052N7CH8](#)  
[BWCM001107052N7DH8](#) [BWCM001107052N7GH8](#) [BWCM0011070530NGL8](#) [BWCM0011070530NJL8](#)  
[BWCM0011070533NGH8](#) [BWCM0011070533NJH8](#) [BWCM0011070536NGL8](#) [BWCM0011070536NJL8](#)  
[BWCM0011070539NGH8](#) [BWCM0011070539NJH8](#) [BWCM001107053N0BH8](#) [BWCM001107053N0CH8](#)  
[BWCM001107053N0DH8](#) [BWCM001107053N0GH8](#) [BWCM001107053N3BL8](#) [BWCM001107053N3CL8](#)  
[BWCM001107053N3DL8](#) [BWCM001107053N3GL8](#) [BWCM001107053N4BL8](#) [BWCM001107053N4CL8](#)