



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 custom designs are available.

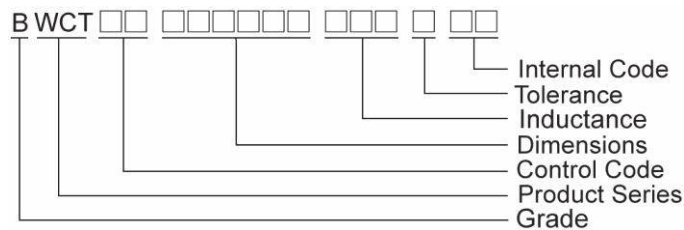
Features

- RoHS compliant.
- Ceramic body and wire wound construction provide highest SRFs
- Exceptional Q values even at high frequencies
- Highest possible SRFs as well as excellent Q values
- The non-magnetic coil form assures utmost thermal stability, predictability and batch consistency

Applications

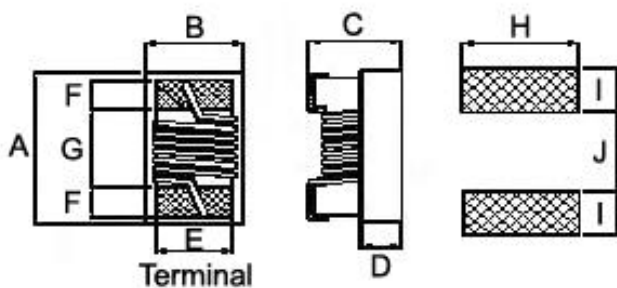
- RF products for cellular phone
- GPS receiver
- Base Station
- Repeater
- Wireless LAN/ mouse/ keyboard/ earphone
- Remote control
- Security system and other RF modules

Product Identification

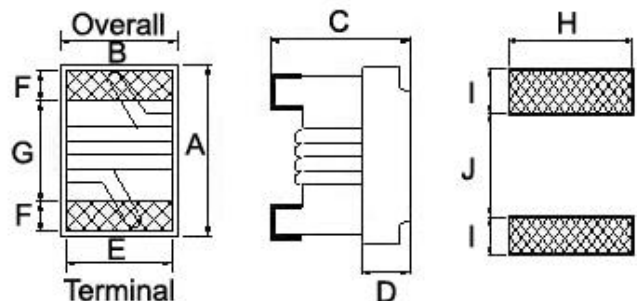


Shape and Dimensions/ Recommended Pattern

BWCT00160906



BWCT00231711



Dimensions

		A	B	C	D	E	F	G	H	I	J
BWCT00160906	mm	1.6 ^{+0.2} _{-0.1}	0.9±0.1	0.55±0.05	0.25	0.76	0.30	0.92	1.02	0.64	0.64
		A Max	B Max	C Max	D	E	F	G	H	I	J
BWCT00231711	inch	0.093	0.068	0.039	0.020	0.050	0.020	0.040	0.070	0.040	0.030
	mm	2.35	1.73	1.10	0.51	1.27	0.51	1.02	1.78	1.02	0.76

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Irms (mA) Max
BWCT001609061N0□00	1.0	10	250	13	250	16000	0.045	1600
BWCT001609061N2□00	1.2	10	250	12	250	16000	0.105	1100
BWCT001609062N0□00	2.0	5,10	250	21	250	12000	0.034	1900
BWCT001609062N2□00	2.2	5,10	250	21	250	10700	0.046	1600
BWCT001609062N3□00	2.3	5,10	250	25	250	11000	0.046	1600
BWCT001609062N5□00	2.5	5,10	250	20	250	11000	0.060	1300
BWCT001609063N0□00	3	5,10	250	25	250	10700	0.039	1600
BWCT001609063N3□00	3.3	3,5	250	26	250	7000	0.039	1600
BWCT001609063N6□00	3.6	3,5	250	28	250	7000	0.044	1600
BWCT001609063N9□00	3.9	3,5	250	26	250	6300	0.050	1400
BWCT001609064N3□00	4.3	3,5	250	22	250	6300	0.076	1300
BWCT001609064N7□00	4.7	3,5	250	22	250	5600	0.120	960
BWCT001609065N1□00	5.1	3,5	250	24	250	5500	0.050	1400
BWCT001609065N6□00	5.6	3,5	250	27	250	5050	0.058	1300
BWCT001609066N8□00	6.8	3,5	250	24	250	4500	0.080	1200
BWCT001609067N2□00	7.2	3,5	250	29	250	4500	0.047	1500
BWCT001609068N2□00	8.2	3,5	250	27	250	4250	0.075	1300
BWCT001609069N5□00	9.5	3,5	250	27	250	3950	0.092	1100
BWCT0016090610N□00	10	2,5	250	27	250	3950	0.075	1300
BWCT0016090611N□00	11	2,5	250	26	250	4000	0.110	1000
BWCT0016090612N□00	12	2,5	250	28	250	3500	0.130	920
BWCT0016090615N□00	15	2,5	250	26	250	3300	0.145	800
BWCT0016090616N□00	16	2,5	250	26	250	3100	0.175	760
BWCT0016090618N□00	18	2,5	250	26	250	2950	0.200	720
BWCT0016090620N□00	20	2,5	250	28	250	2900	0.175	760
BWCT0016090622N□00	22	2,5	250	28	250	2750	0.220	700
BWCT0016090624N□00	24	2,5	250	29	250	2700	0.240	680
BWCT0016090627N□00	27	2,5	250	27	250	2550	0.270	670
BWCT0016090630N□00	30	2,5	250	27	250	2450	0.330	600
BWCT0016090633N□00	33	2,5	250	27	250	2200	0.330	600
BWCT0016090636N□00	36	2,5	250	28	250	2300	0.335	600
BWCT0016090639N□00	39	2,5	250	28	250	2250	0.400	570
BWCT0016090643N□00	43	2,5	250	27	250	2100	0.440	530
BWCT0016090647N□00	47	2,5	250	27	250	1900	0.540	470

BWCT0016090651N□00	51	2,5	250	26	250	1850	0.570	440
BWCT0016090656N□00	56	2,5	250	26	250	1750	0.700	420

Note: When ordering, please specify tolerance code. Tolerance : G=±2% , H=±3% , J=±5% , K=±10%

- 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 E4991A

RDC: HP4338B or Chroma 16502

Irms : HP4284A+HP42841A/HP4285A+HP42841A

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Irms (mA) Max	Color
BWCT002317111N8□00	1.8	10	250	55	1500	9400	0.03	800	Black
BWCT002317113N9□00	3.9	10	250	50	1000	6100	0.06	800	Brown
BWCT002317114N7□00	4.7	10 / 5	250	50	1000	5500	0.06	800	Red
BWCT002317115N1□00	5.1	10 / 5	250	50	1000	5500	0.06	800	-
BWCT002317116N8□00	6.8	10 / 5	250	50	1000	5500	0.08	800	Orange
BWCT002317118N2□00	8.2	10 / 5	250	50	1000	4800	0.08	800	Yellow
BWCT0023171110N□00	10	10 / 5 / 2	250	55	750	3300	0.08	800	Green
BWCT0023171112N□00	12	10 / 5 / 2	250	55	750	3800	0.10	800	Blue
BWCT0023171115N□00	15	10 / 5 / 2	250	50	500	2950	0.10	800	Violet
BWCT0023171118N□00	18	10 / 5 / 2	250	50	500	3100	0.13	800	Gray
BWCT0023171122N□00	22	10 / 5 / 2	250	50	500	2900	0.15	800	White
BWCT0023171127N□00	27	10 / 5 / 2	250	50	500	2450	0.23	600	Black
BWCT0023171133N□00	33	10 / 5 / 2	250	55	500	2350	0.28	600	Brown
BWCT0023171139N□00	39	10 / 5 / 2	250	55	500	2200	0.33	600	Red
BWCT0023171147N□00	47	10 / 5 / 2	200	50	500	2000	0.39	600	Orange
BWCT0023171156N□00	56	10 / 5 / 2	200	50	500	1850	0.39	500	Yellow
BWCT0023171168N□00	68	10 / 5 / 2	200	50	500	1500	0.40	500	Green
BWCT0023171182N□00	82	10 / 5 / 2	150	50	500	1500	0.44	500	Blue
BWCT002317111R10□00	100	10 / 5 / 2	150	50	500	1200	0.64	400	Violet
BWCT002317111R12□00	120	10 / 5 / 2	150	40	250	1150	0.68	300	Gray
BWCT002317111R15□00	150	10 / 5 / 2	150	40	250	1050	0.80	300	White
BWCT002317111R18□00	180	10 / 5 / 2	150	40	250	950	0.90	300	Black
BWCT002317111R22□00	220	10 / 5 / 2	150	40	250	900	0.98	300	Brown
BWCT002317111R27□00	270	10 / 5 / 2	150	40	250	850	1.30	300	Red

SMD Wire Wound Ceramic Chip Inductors

BWCT Series



BWCT00231711R33□00	330	10 / 5 / 2	100	40	250	800	1.45	300	Orange
BWCT00231711R39□00	390	10 / 5 / 2	100	35	250	700	1.60	300	Yellow
BWCT00231711R47□00	470	10 / 5 / 2	50	25	100	600	1.80	300	Green
BWCT00231711R56□00	560	10 / 5 / 2	25	18	50	550	1.90	300	Blue
BWCT00231711R62□00	620	10 / 5 / 2	25	18	50	450	2.00	300	Violet
BWCT00231711R68□00	680	10 / 5 / 2	25	18	50	420	2.10	300	Gray
BWCT00231711R75□00	750	10 / 5 / 2	25	18	50	400	2.20	300	White
BWCT00231711R82□00	820	10 / 5 / 2	25	18	50	400	2.50	300	Black
BWCT00231711R0□00	1000	10 / 5	25	17	50	330	3.10	300	Brown

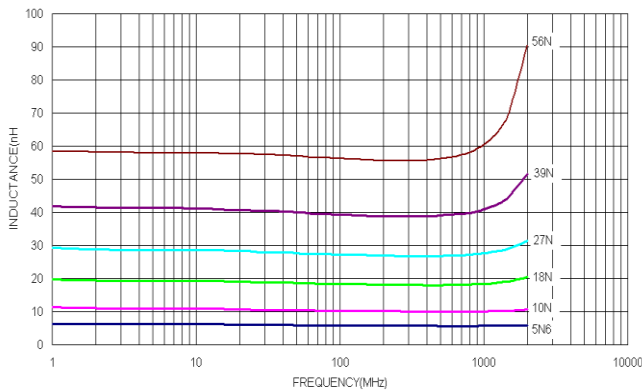
Note: When ordering, please specify tolerance code. Tolerance : G=±2% , J=±5% , K=±10%

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- Irms for a 15°C temperature rise from 25°C ambient with current
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 SRF : Agilent/HP8753D/Agilent E4991A
 RDC: HP4338B or Chroma 16502
 Irms : HP4284A+HP42841A/HP4285A+HP42841A

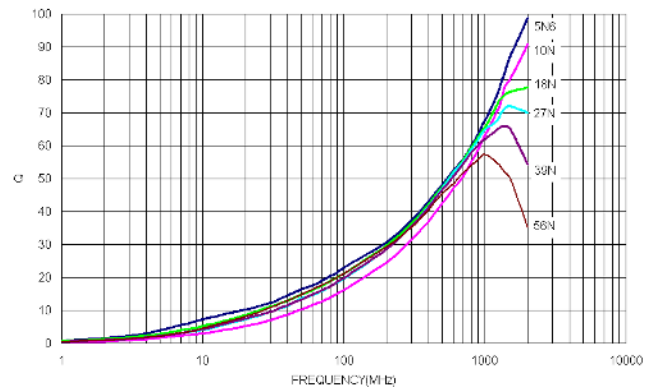
Test Instruments : Agilent E4991A Material/Impedance Analyzer

BWCT00160906

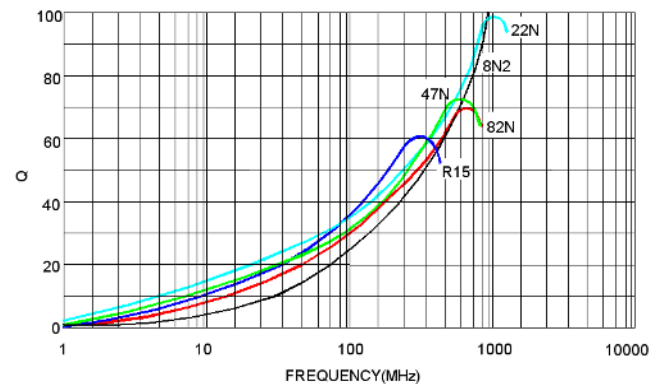
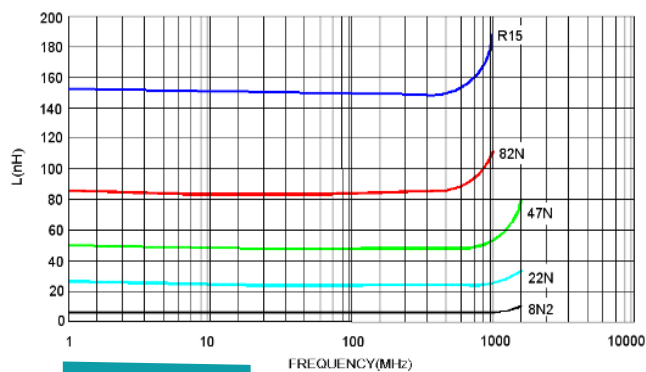
Typical **L** vs. **Frequency**



Typical **Q** vs. **Frequency**



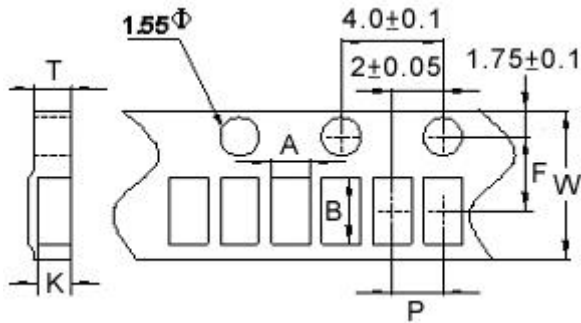
BWCT00231711



Packaging Specifications

Tape Dimensions

Figure 1



Tape Material

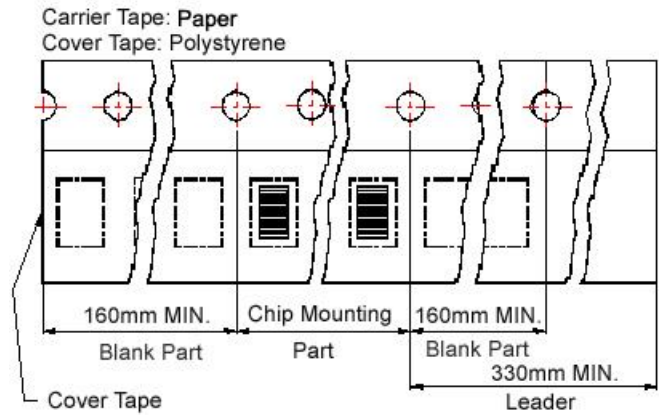
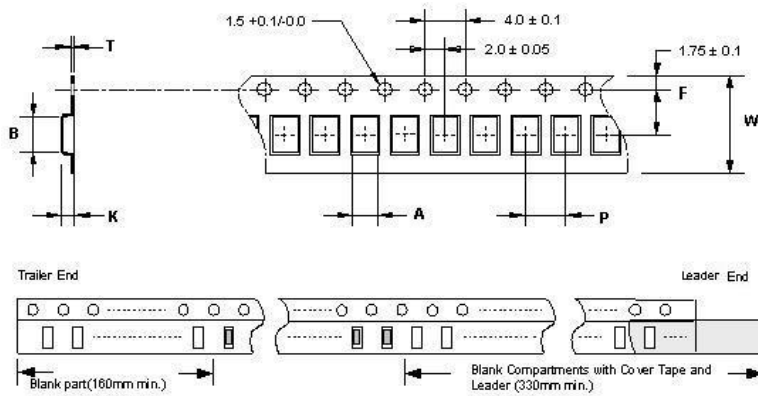
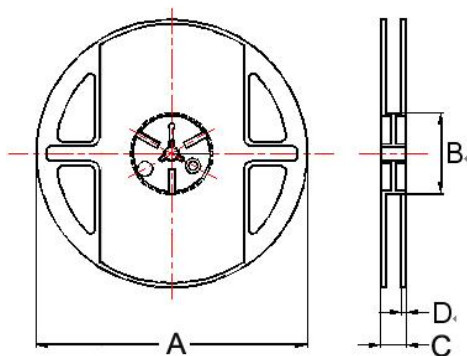


Figure 2



Reel Dimensions



SMD Wire Wound Ceramic Chip Inductors

BWCT Series



Dimensions in mm

TYPE	Fig.	Tape Dimensions							Reel Dimensions				Quantity
		A	B	T	W	P	F	K	A	B	C	D	PCS / Reel
BWCT00160906	1	1.05	1.80	0.75	8	4	3.5	0.60	178	60	12	1.5	4000
BWCT00231711	2	1.85	2.45	0.23	8	4	3.5	1.10	178	60	12	1.5	2000

For More Information:

[Americas - prodinfo_power_americas@yageo.com](mailto:prodinfo_power_americas@yageo.com) | [Europe - prodinfo_power_emea@yageo.com](mailto:prodinfo_power_emea@yageo.com) | [Asia - prodinfo_power_asia@yageo.com](mailto:prodinfo_power_asia@yageo.com)

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