

## BWLM Series



BWLM Series is the newest in open type ferrite wire wound chip inductors. The wire wound ferrite construction supports higher SRF, lower DCR and superior Q values than other ferrite chip inductors.

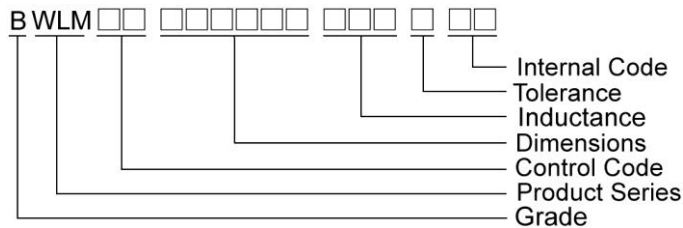
### Features

- RoHS compliant
- Very strong solderability by reflow soldering and soldering iron
- Highly accurate dimensions
- Can be mounted automatically
- Terminals are highly resistant to external forces
- Highly resistant to mechanical shocks and pressure
- Highly reliable in environments of sudden temperature change and humidity
- Low DCR & better Q value in ferrite series

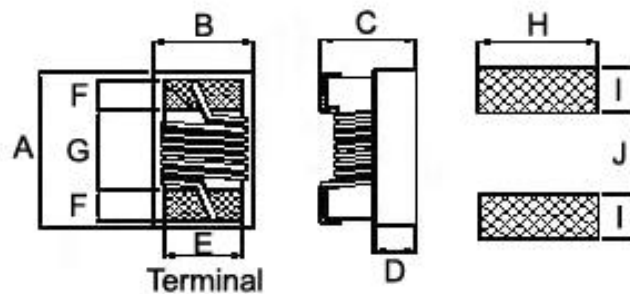
### Applications

- Telecom and datacom applications such as xDSL
- Cable modem
- Set-top box
- CATV filter/tuner
- Wireless LAN, etc

### Product Identification



### Shape and Dimensions / Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D	E	F	G	H	I	J
BWLM00110706	1.1±0.1	0.7±0.1	0.6±0.1	0.25	0.5	0.25	0.5	0.6	0.50	0.4
BWLM00181009	1.8±0.1	1.0±0.1	0.9±0.1	0.60	0.8	0.40	0.85	1.0	0.75	0.7

# SMD Wire Wound Ferrite Chip Inductors – BWLM Series

## Electrical Characteristics

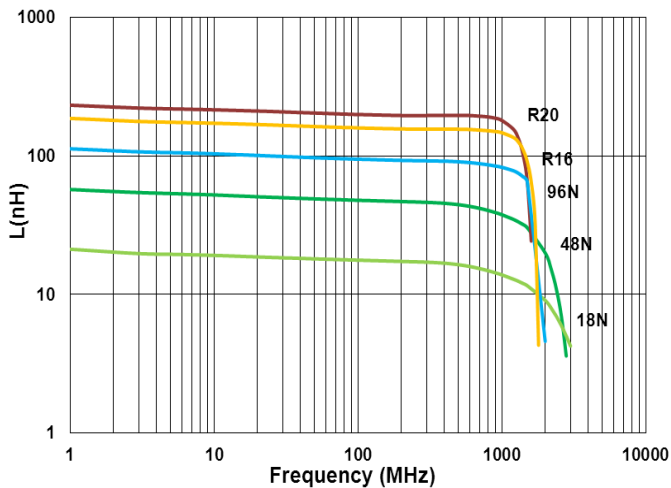
Part Number	Inductance (nH)	Offset Value (nH)	Tolerance (±%)	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Irms (mA) Max
BWLM0011070618N□00	18	-0.9	5	100	3000	0.046	1400
BWLM0011070633N□00	33	-0.9	5	100	1800	0.065	1300
BWLM0011070648N□00	48	-1.5	5	100	1400	0.078	1100
BWLM0011070670N□00	70	-1.8	5	100	1300	0.12	820
BWLM0011070696N□00	96	-1.1	5	100	1100	0.16	730
BWLM00110706R13□00	130	-5.0	5	100	1000	0.23	640
BWLM00110706R16□00	160	-2.6	5	100	900	0.33	480
BWLM00110706R20□00	200	-6.0	5	100	800	0.47	390

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

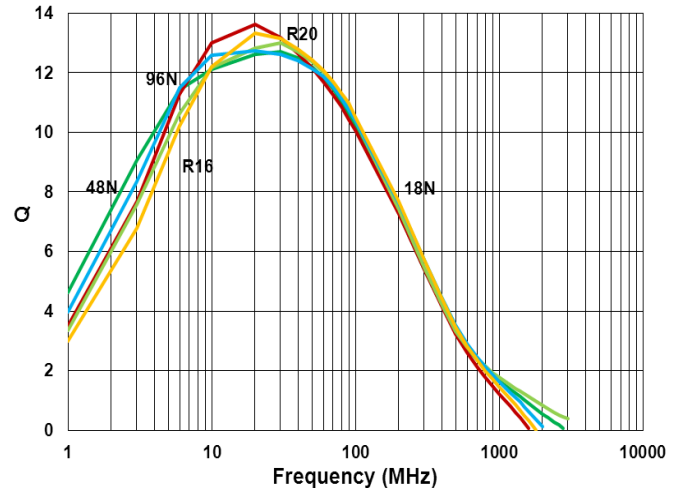
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Irms for a 20°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L & Q : Agilent E4991A+Agilent HP16197A  
 SRF : Agilent E4991A  
 RDC : HP4338B or Chroma 16502  
 Irms : HP4284A+HP42841A/HP4285A+HP42841A

**Test Instruments :** Agilent E4991A Material/Impedance Analyzer

**Typical L vs. Frequency**



**Typical Q vs. Frequency**



# SMD Wire Wound Ferrite Chip Inductors – BWLM Series

## Electrical Characteristics

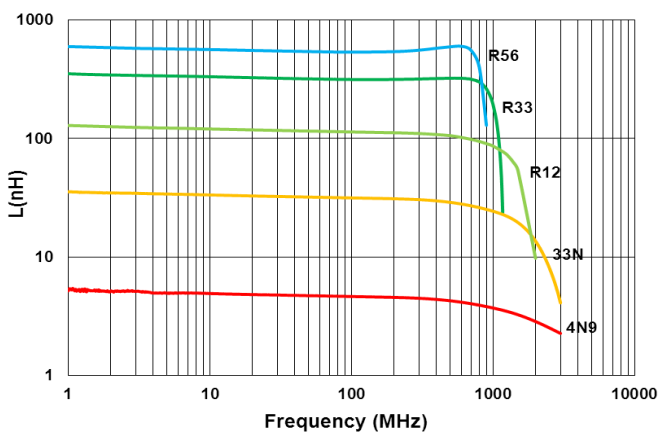
Part Number	Inductance (nH)	Offset Value (nH)	Tolerance (±%)	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Irms (mA) Max
BWLM001810094N7□00	4.9	-0.8	±0.5nH	10	2300	0.015	2600
BWLM0018100915N□00	15	-1.2	5	10	2000	0.025	2200
BWLM0018100933N□00	33	-2.3	5	10	1800	0.035	1700
BWLM0018100955N□00	55	-3.9	5	10	1600	0.045	1500
BWLM0018100985N□00	85	-5.4	5	10	1380	0.060	1400
BWLM00181009R10□00	100	-10.7	10	10	1260	0.10	1000
BWLM00181009R12□00	120	-6.6	5	10	1200	0.085	1100
BWLM00181009R16□00	160	-7.0	5	10	900	0.10	1000
BWLM00181009R21□00	210	-12.3	5	10	720	0.15	800
BWLM00181009R27□00	270	-10.9	5	10	660	0.16	750
BWLM00181009R33□00	330	-13.4	5	10	600	0.25	630
BWLM00181009R39□00	390	-14.5	5	10	570	0.28	620
BWLM00181009R47□00	470	-19.5	5	10	555	0.45	500
BWLM00181009R56□00	560	-25	5	10	540	0.48	450
BWLM00181009R65□00	650	-25	5	10	510	0.52	430

**Note:** When ordering, please specify tolerance code. Tolerance : D=±0.5nH , J=±5% , K=±10%

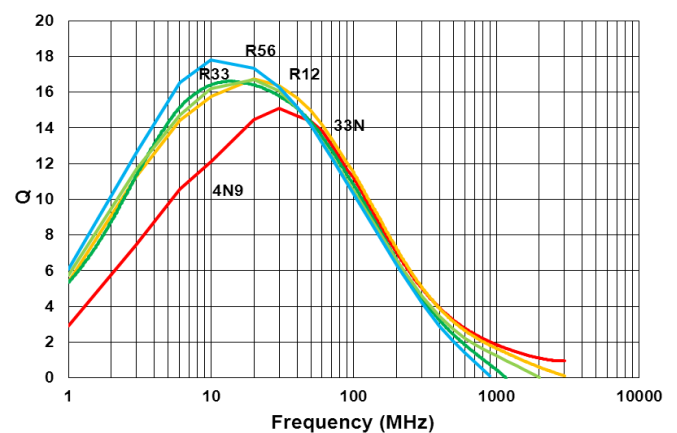
- Operating temperature range - 40°C ~ 85°C(Including self - temperature rise)
- Irms for a 20°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L & Q : Agilent E4991A+Agilent HP16197A  
 SRF : Agilent E4991A  
 RDC : HP4338B or Chroma 16502  
 Irms : HP4284A+HP42841A/HP4285A+HP42841A

## Test Instruments : Agilent E4991A Material/Impedance Analyzer

### Typical L vs. Frequency



### Typical Q vs. Frequency



# SMD Wire Wound Ferrite Chip Inductors - BWLM Series

## Packaging Specifications

### Tape Dimensions

Figure 1

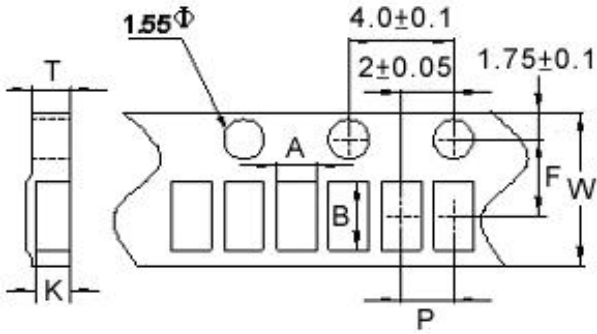
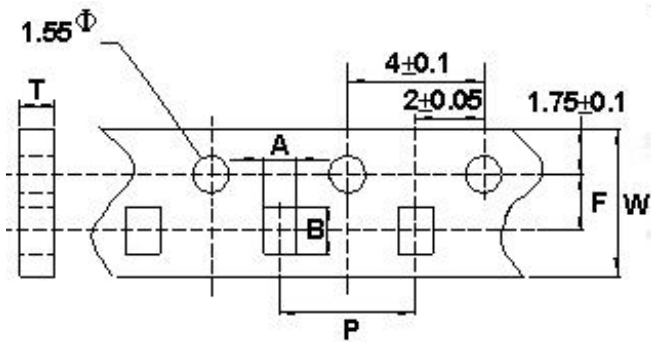
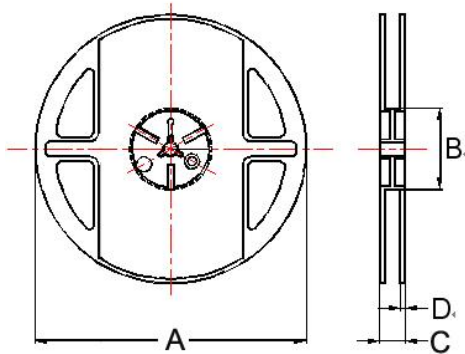


Figure 2

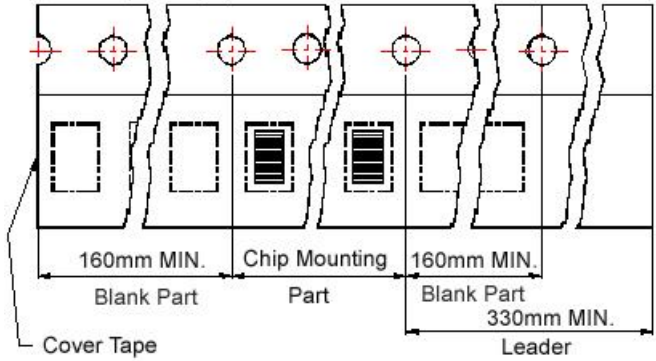


### Reel Dimensions

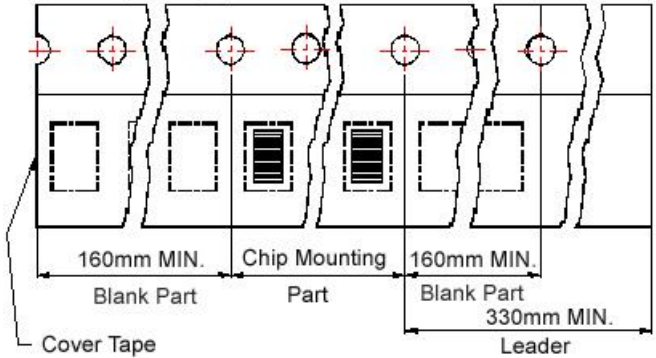


### Tape Material

Carrier Tape: Paper  
Cover Tape: Polystyrene



Carrier Tape: Paper  
Cover Tape: Polystyrene



### Dimensions in mm

TYPE	Fig.	Tape Dimensions							Reel Dimensions				Quantity PCS / REEL
		A	B	T	W	P	F	K	A	B	C	D	
BWLM00110706	1	0.8	1.2	0.75	8	2	3.5	0.62	178	60	12	1.5	4000
BWLM00181009	2	1.2	2.0	1.1	8	4	3.5	-	178	60	12	1.5	4000