

## BWLD Series



BWLD series is the newest open type ferrite wire wound chip inductors. The wire wound ferrite construction supports lower DCR than other open type inductors.

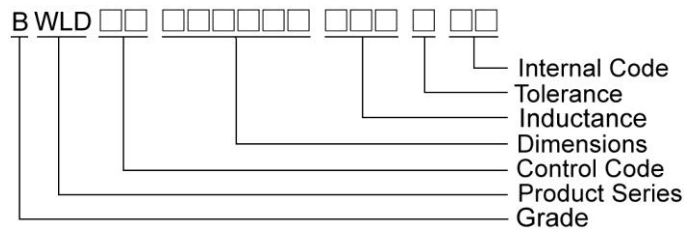
### Features

- RoHS compliant
- SMD type wire-wound chip inductor with low DC resistance
- Wide inductance range (0.9uH~100uH)

### Applications

- DSC, DVC, MD, PDA
- Portable digital devices

### Product Identification



### Shape and Dimensions / Recommended Pattern

FIG1

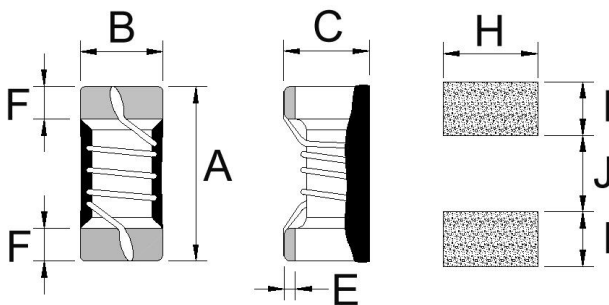
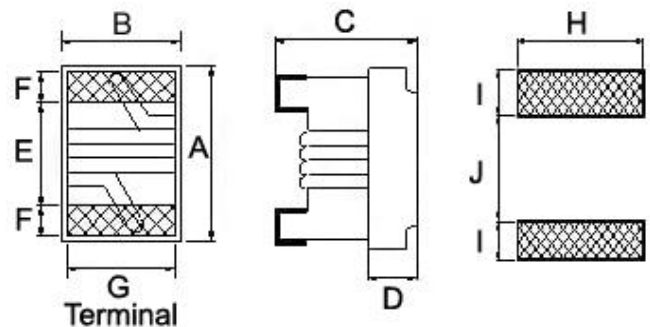


FIG2



Dimensions in mm

TYPE	FIG	A Max	B Max	C Max	D	E	F	G	H	I	J
BWLD00181010	1	1.80±0.1	1.0±0.1	0.95±0.1	-	0.1	0.35	-	1.02	0.64	0.64
BWLD00241715	2	2.4	1.72	1.52	0.70	1.00	0.50	1.27	1.78	1.02	0.76
BWLD00302522	2	2.99	2.50	2.20	0.70	1.52	0.51	2.03	2.54	1.02	1.27

# SMD Wire Wound Chip Inductors – BWLD Series

## Electrical Characteristics

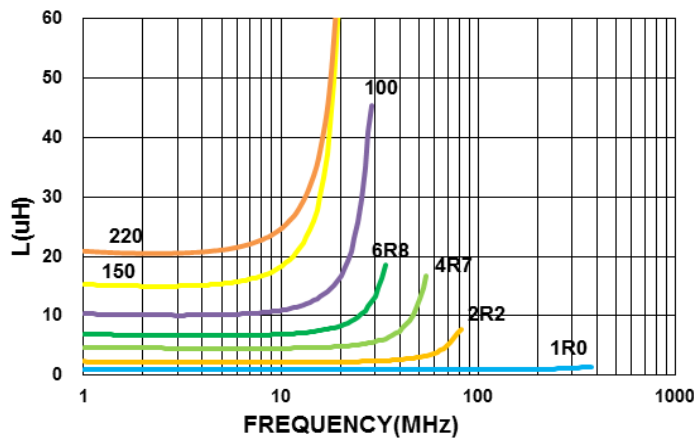
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Q Typ.	SRF (MHz)Typ.	RDC (Ω ±30%)	IDC (mA)Typ.	Color
BWLD001810101R0□00	1.0	5 / 10 / 20	7.96	16	390	0.32	700	Black
BWLD001810102R2□00	2.2	5 / 10 / 20	7.96	16	82	0.56	580	Orange
BWLD001810104R7□00	4.7	5 / 10 / 20	7.96	16	51	0.97	420	Violet
BWLD001810106R8□00	6.8	5 / 10 / 20	7.96	16	43	1.5	340	White
BWLD00181010100□00	10	5 / 10 / 20	7.96	14	36	1.85	280	Brown
BWLD00181010150□00	15	5 / 10 / 20	7.96	14	29	2.6	240	Orange
BWLD00181010220□00	22	5 / 10 / 20	2.52	14	24	3.61	200	Green

**Note: When ordering, please specify tolerance code. Tolerance: J=±5% , K=±10% , M=±20%**

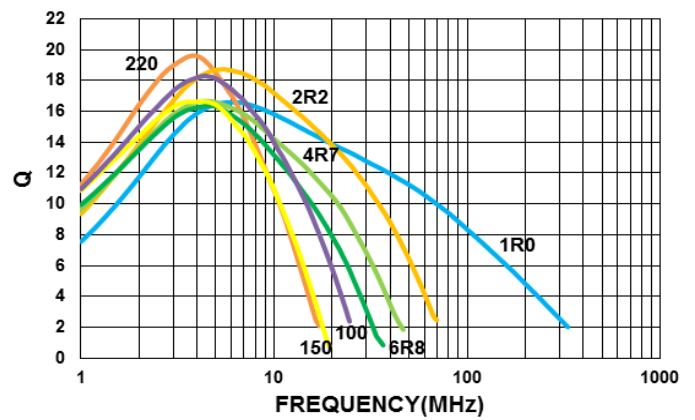
- Operating temperature range - 40°C ~ 105°C(Including self - temperature rise)
- IDC for Inductance drop 10% from its value with current
- Measure Equipment :  
 L & Q : Agilent E4991A+Agilent HP16197A(over 1MHz)/Agilent HP4285A(under 1MHz)  
 SRF : HP8753D/Agilent E4991A  
 RDC : Chroma 16502  
 IDC : HP4284A+HP42841A/HP4285A+HP42841A

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

### Typical L vs. Frequency



### Typical Q vs. Frequency



# SMD Wire Wound Chip Inductors – BWLD Series

## Electrical Characteristics

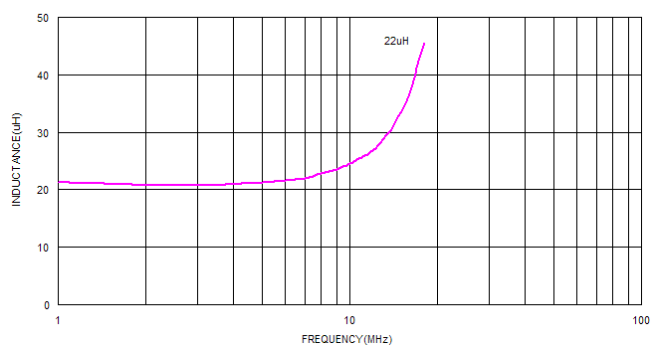
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Q Typ.	SRF (MHz) Min	RDC (Ω ±30%)	IDC (mA)	Color
BWLD002417151R0□00	1.0	10 / 20	7.96	18	100	0.10	800	Black
BWLD002417151R5□00	1.5	10 / 20	7.96	18	90	0.18	650	Brown
BWLD002417152R2□00	2.2	10 / 20	7.96	18	70	0.24	550	Red
BWLD002417153R3□00	3.3	10 / 20	7.96	18	55	0.30	450	Orange
BWLD002417154R7□00	4.7	10 / 20	7.96	18	50	0.47	360	Yellow
BWLD002417156R8□00	6.8	10 / 20	7.96	18	60	0.75	290	Green
BWLD00241715100□00	10	10 / 20	2.52	18	25	0.90	290	Blue
BWLD00241715150□00	15	10 / 20	2.52	18	25	1.60	230	Violet
BWLD00241715220□00	22	10 / 20	2.52	18	17	1.95	190	Gray
BWLD00241715330□00	33	10 / 20	2.52	17	15	2.60	120	White
BWLD00241715470□00	47	10 / 20	2.52	17	11	3.90	95	Black
BWLD00241715680□00	68	10 / 20	2.52	17	11	5.50	95	Brown
BWLD00241715101□00	100	10 / 20	1.00	12	9	9.00	70	Red

**Note: When ordering, please specify tolerance code. Tolerance: K=±10% , M=±20%**

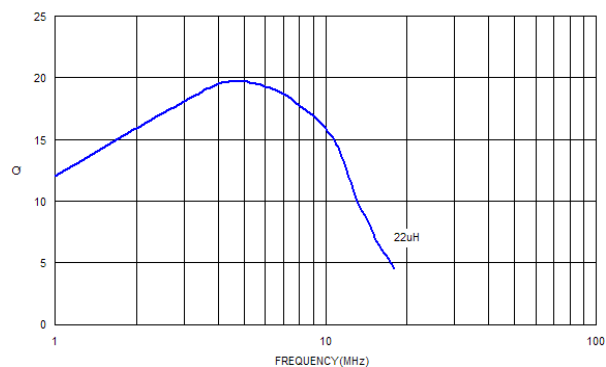
- Operating temperature range - 25°C ~ 105°C(Including self - temperature rise)
- IDC for Inductance drop 10% from its value with current
- Measure Equipment :  
 L & Q : Agilent E4991A+Agilent HP16197A(over 1MHz)/Agilent HP4285A(under 1MHz)  
 SRF : HP8753D/Agilent E4991A  
 RDC : Chroma 16502  
 IDC : HP4284A+HP42841A/HP4285A+HP42841A

## Test Instruments : Agilent E4991A Material/Impedance Analyzer

### Typical L vs. Frequency



### Typical Q vs. Frequency



# SMD Wire Wound Chip Inductors – BWLD Series

## Electrical Characteristics

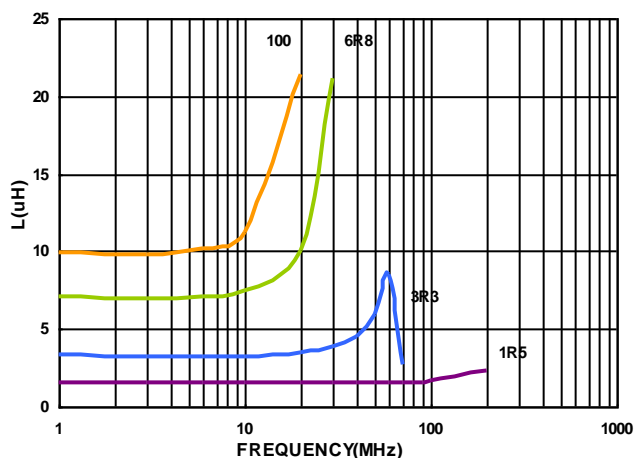
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Q Typ.	SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Typ.	I <sub>rms</sub> (mA) Max	Color		
									1 <sup>ST</sup>	2 <sup>ND</sup>	3 <sup>RD</sup>
BWLD00302522R9□00	0.9	10	2.5	25	300	0.1	1400	1300	White	Black	Brown
BWLD003025221R1□00	1.1	10	2.5	24	275	0.105	1300	1200	Brown	Brown	Red
BWLD003025221R3□00	1.3	5 / 10	2.5	24	220	0.11	1200	1100	Brown	Orange	Red
BWLD003025221R5□00	1.5	5 / 10	2.5	22	210	0.125	1100	1000	Brown	Yellow	Red
BWLD003025221R9□00	1.9	5 / 10	2.5	22	165	0.14	1000	1000	Brown	White	Red
BWLD003025222R2□00	2.2	5 / 10	2.5	21	75	0.155	950	950	Red	Red	Red
BWLD003025222R7□00	2.7	5 / 10	2.5	22	57	0.19	800	900	Red	Violet	Red
BWLD003025223R3□00	3.3	5 / 10	2.5	21	54	0.21	750	800	Orange	Orange	Red
BWLD003025223R9□00	3.9	5 / 10	2.5	21	50	0.22	700	800	Orange	White	Red
BWLD003025224R7□00	4.7	5 / 10	2.5	27	48	0.435	700	650	Yellow	Violet	Red
BWLD003025225R8□00	5.8	5 / 10	2.5	21	33	0.28	550	750	Green	Gray	Red
BWLD003025226R8□00	6.8	5 / 10	2.5	20	28	0.315	500	700	Blue	Gray	Red
BWLD003025228R2□00	8.2	5 / 10	2.5	20	24	0.395	500	650	Gray	Red	Red
BWLD00302522100□00	10	5 / 10	2.5	22	20	0.48	450	550	Brown	Black	Orange

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

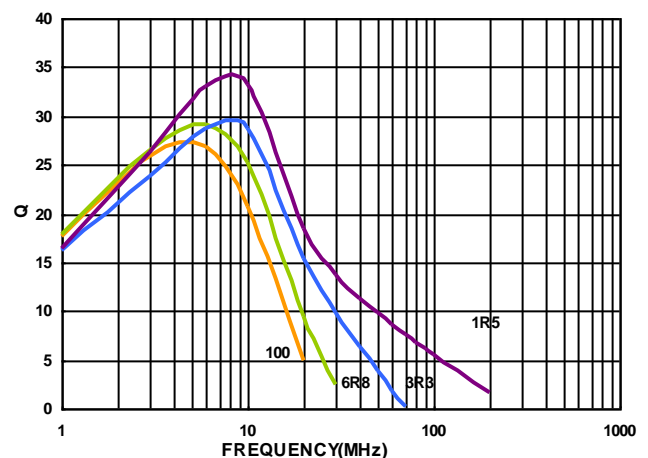
- Operating temperature range - 25°C ~ 105°C(Including self - temperature rise)
- IDC for Inductance drop 10% from its value with current
- I<sub>rms</sub> for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L : Agilent E4991A/HP4287A+16197A  
 SRF : HP8753D/Agilent E4991A  
 RDC : Chroma 16502  
 IDC : HP4284A+HP42841A/HP4285A+HP42841A

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

**Typical L vs. Frequency**



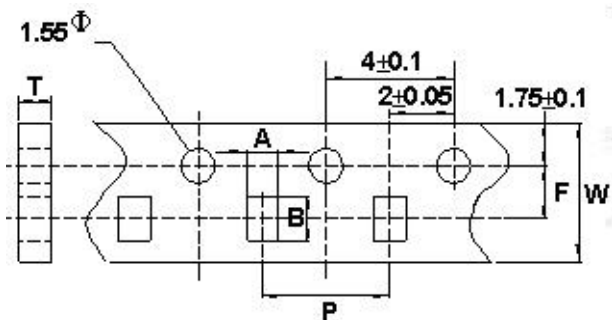
**Typical Q vs. Frequency**



## Packaging Specifications

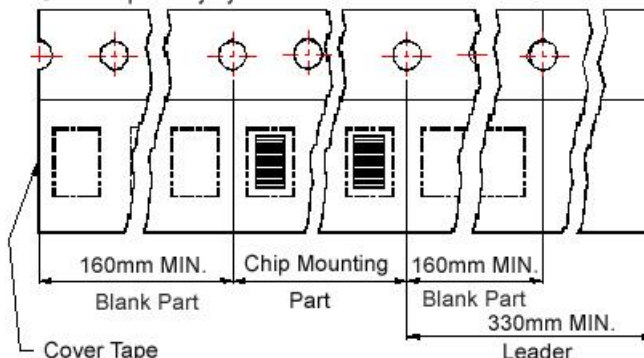
Tape Dimensions

FIG1



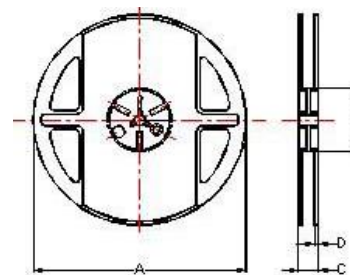
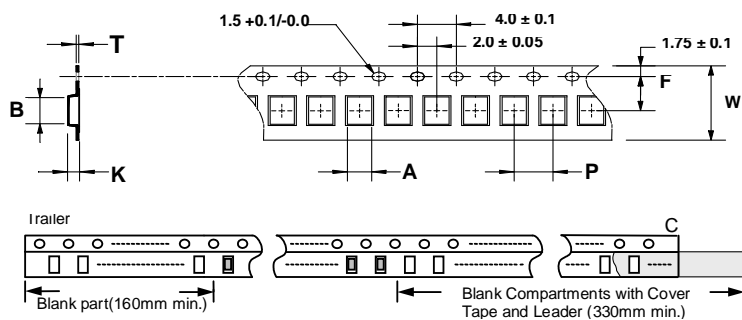
Tape Material

Carrier Tape: Paper  
Cover Tape: Polystyrene



Reel Dimensions

FIG2



Dimensions in mm

TYPE	FIG	Tape Dimensions							Reel Dimensions				Quantity PCS / REEL
		A	B	T	W	P	F	K	A	B	C	D	
BWLD00181010	1	1.20	2.42	1.1	8	4	3.5	-	178	60	12	1.5	4000
BWLD00241715	2	1.60	2.42	0.22	8	4	3.5	1.45	178	60	12	1.5	2000
BWLD00302522	2	2.40	2.93	0.26	8	4	3.5	2.25	178	60	12	1.5	2000