

DATA SHEET

INDUCTOR

Chip Inductors

BWNC Series

RoHS compliant & Halogen Free



BWNC Series



The characteristics of this series perform low RDC and carry large current. These unique open type inductors offer many superior features in opposition to the molding type one of Japanese peers.

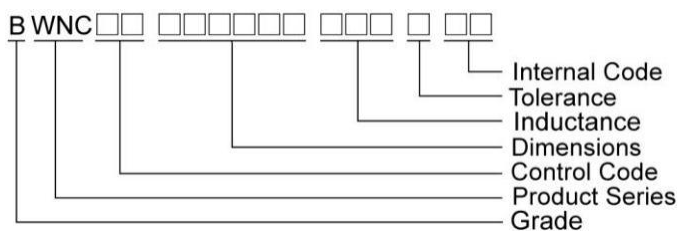
Features

- RoHS compliant
- Very strong solderability by reflow soldering and soldering iron
- Highly accurate dimensions can be mounted automatically
- Terminals are highly resistant to pull forces
- Highly resistant to mechanical shocks and pressure
- Highly reliable in environments of sudden temperature change and humidity
- Superior IDC for DC/DC converter

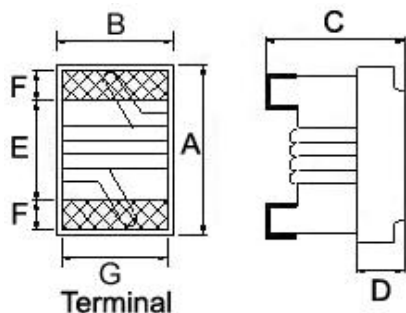
Applications

- DC/DC converter such as DSC
- LCD TV
- Game console
- Portable VCRs
- Conveyable telephone and others

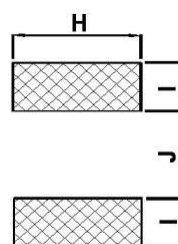
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A Max	B Max	C Max	D	E	F	G	H	I	J
BWNC00292522	2.92	2.50	2.20	0.7	1.5	0.5	2.0	2.54	1.02	1.27
BWNC00372926	3.70	2.90	2.60	0.7	2.0	0.6	2.4	2.70	1.00	2.00

Electrical Characteristics

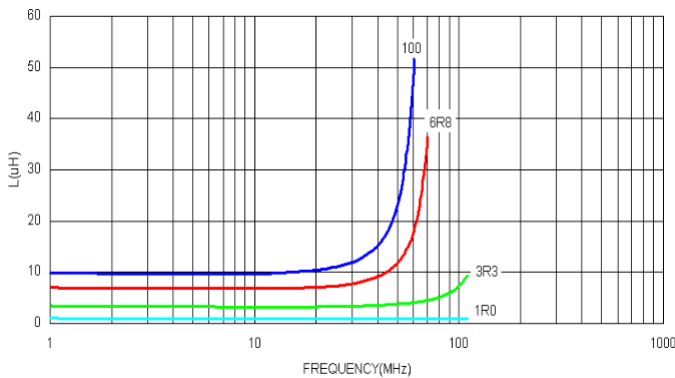
Part Number	Inductance (uH)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	IDC (mA)	Color Coding		
								1 ST	2 ND	3 RD
BWNC002925221R0 00	1.0	10/5	25	7.96	300	0.34	1500	Brown	Black	Red
BWNC002925221R2 00	1.2	10/5	25	7.96	280	0.40	1400	Brown	Red	Red
BWNC002925221R5 00	1.5	10/5	25	7.96	270	0.42	1400	Brown	Green	Red
BWNC002925221R8 00	1.8	10/5	25	7.96	150	0.45	1200	Brown	Gray	Red
BWNC002925222R2 00	2.2	10/5	25	7.96	140	0.50	1200	Red	Red	Red
BWNC002925223R3 00	3.3	10/5	25	7.96	95	0.65	1000	Orange	Orange	Red
BWNC002925224R7 00	4.7	10/5	25	7.96	90	0.80	800	Yellow	Violet	Red
BWNC002925226R8 00	6.8	10/5	25	7.96	68	1.00	730	Blue	Gray	Red
BWNC00292522100 00	10	10/5	20	2.52	45	1.50	700	Brown	Black	Orange
BWNC00292522150 00	15	10/5	20	2.52	40	2.20	500	Brown	Green	Orange
BWNC00292522220 00	22	10/5	20	2.52	25	2.70	470	Red	Red	Orange
BWNC00292522330 00	33	10/5	20	2.52	25	4.00	400	Orange	Orange	Orange
BWNC00292522390 00	39	10/5	16	2.52	20	7.00	320	Orange	White	Orange
BWNC00292522470 00	47	10/5	16	2.52	20	8.00	300	Yellow	Violet	Orange

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

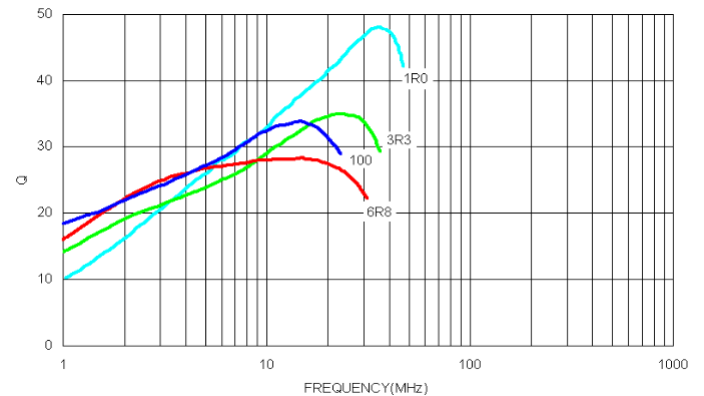
- Operating temperature range - 25°C ~ 105°C(Including self - temperature rise)
- IDC for Inductance drop 10% from its value with current
- Measure Equipment :
L & Q : Agilent HP4291A/Agilent HP4285A+Agilent HP16197A
SRF : Agilent HP4291A
RDC : HP4338B or Chroma 16502

Test Instruments : Agilent HP4291A Material/Impedance Analyzer

Typical L vs. Frequency



Typical Q vs. Frequency



Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance (\pm %)	Q Min	Test	SRF (MHz) Typ.	RDC (Ω) \pm 30%	IDC (mA)	Color Coding		
				Frequency (MHz)				1 ST	2 ND	3 RD
BWNC00372926R47 [□] 00	0.47	5/10	40	25.2	450	0.07	1800	Yellow	Violet	Brown
BWNC003729261R0 [□] 00	1.0	5/10	20	7.96	100	0.08	1500	Brown	Black	Red
BWNC003729261R2 [□] 00	1.2	5/10	20	7.96	90	0.12	1400	Brown	Red	Red
BWNC003729261R5 [□] 00	1.5	5/10	20	7.96	80	0.13	1125	Brown	Green	Red
BWNC003729261R8 [□] 00	1.8	5/10	20	7.96	70	0.13	970	Brown	Gray	Red
BWNC003729262R2 [□] 00	2.2	5/10	20	7.96	68	0.13	970	Red	Red	Red
BWNC003729262R7 [□] 00	2.7	5/10	20	7.96	62	0.15	900	Red	Violet	Red
BWNC003729263R3 [□] 00	3.3	5/10	20	7.96	54	0.16	837	Orange	Orange	Red
BWNC003729264R7 [□] 00	4.7	5/10	20	7.96	43	0.23	675	Yellow	Violet	Red
BWNC003729265R6 [□] 00	5.6	5/10	20	7.96	36	0.26	620	Green	Blue	Red
BWNC003729266R8 [□] 00	6.8	5/10	20	7.96	33	0.27	600	Blue	Gray	Red
BWNC003729268R2 [□] 00	8.2	5/10	20	7.96	30	0.32	580	Gray	Red	Red
BWNC00372926100 [□] 00	10	5/10	15	2.52	28	0.36	520	Brown	Black	Orange
BWNC00372926120 [□] 00	12	5/10	15	2.52	25	0.50	500	Brown	Red	Orange
BWNC00372926150 [□] 00	15	5/10	15	2.52	19	0.56	480	Brown	Green	Orange
BWNC00372926180 [□] 00	18	5/10	15	2.52	17	0.67	330	Brown	Gray	Orange
BWNC00372926220 [□] 00	22	5/10	15	2.52	16	0.77	310	Red	Red	Orange
BWNC00372926270 [□] 00	27	5/10	15	2.52	13	1.00	280	Red	Violet	Orange
BWNC00372926330 [□] 00	33	5/10	15	2.52	12	1.10	270	Orange	Orange	Orange
BWNC00372926390 [□] 00	39	5/10	15	2.52	11	1.40	220	Orange	White	Orange
BWNC00372926470 [□] 00	47	5/10	15	2.52	10	1.64	210	Yellow	Violet	Orange
BWNC00372926560 [□] 00	56	5/10	15	2.52	9	2.49	189	Green	Blue	Orange
BWNC00372926680 [□] 00	68	5/10	15	2.52	9	2.80	189	Blue	Gray	Orange
BWNC00372926820 [□] 00	82	5/10	15	2.52	6	3.00	145	Gray	Red	Orange
BWNC00372926101 [□] 00	100	5/10	15	0.796	6	3.70	145	Brown	Black	Yellow
BWNC00372926151 [□] 00	150	5/10	15	0.796	5	6.10	120	Brown	Green	Yellow
BWNC00372926181 [□] 00	180	5/10	15	0.796	4	8.00	105	Brown	Gray	Yellow
BWNC00372926221 [□] 00	220	5/10	15	0.796	4	8.40	100	Red	Red	Yellow
BWNC00372926331 [□] 00	330	5/10	15	0.796	3.5	12.3	80	Orange	Orange	Yellow
BWNC00372926391 [□] 00	390	5/10	15	0.796	2.8	17.6	75	Orange	White	Yellow
BWNC00372926471 [□] 00	470	5/10	15	0.796	2.8	22.0	75	Yellow	Violet	Yellow
BWNC00372926561 [□] 00	560	5/10	15	0.796	2.5	23.0	65	Green	Blue	Yellow
BWNC00372926681 [□] 00	680	5/10	15	0.796	2	28.0	65	Blue	Gray	Yellow

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

- 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 HP4291A(over 1MHz)/Agilent HP4285A+Agilent HP16197A (under 1MHz)

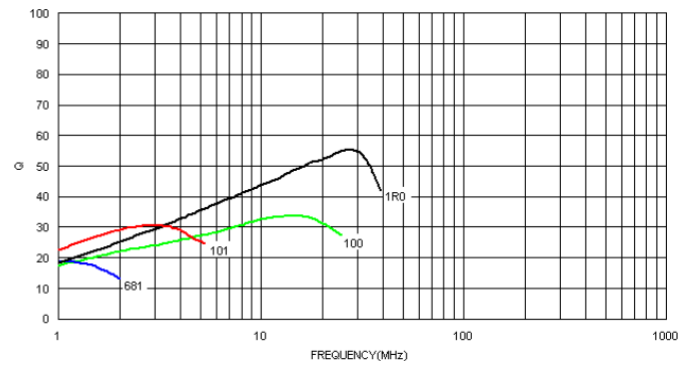
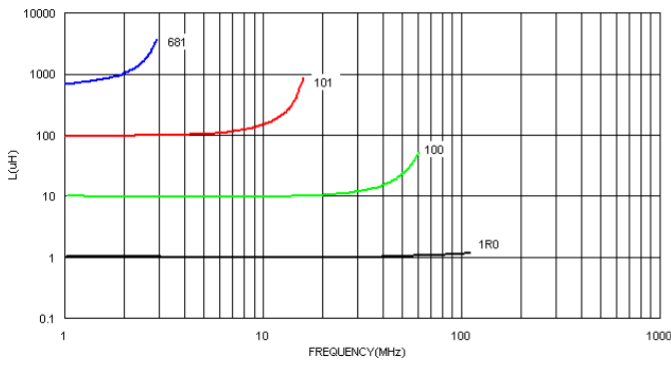
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RDC : HP4338B or Chroma 16502

Test Instruments : Agilent HP4291A Material/Impedance Analyzer

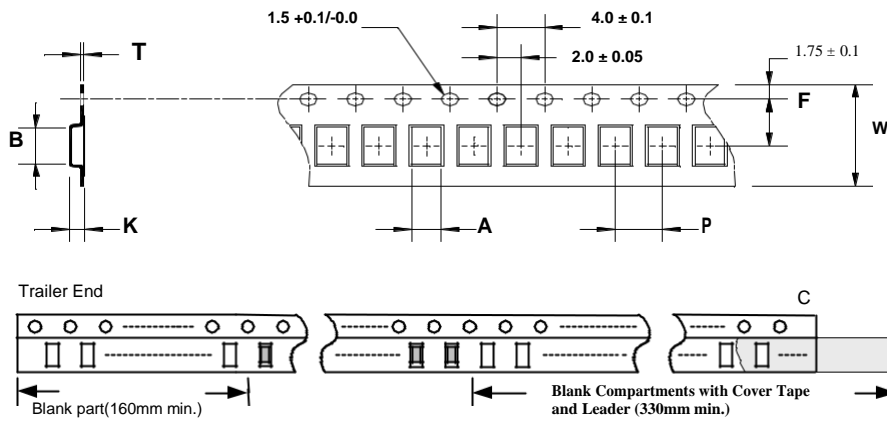
Typical L vs. Frequency

Typical Q vs. Frequency

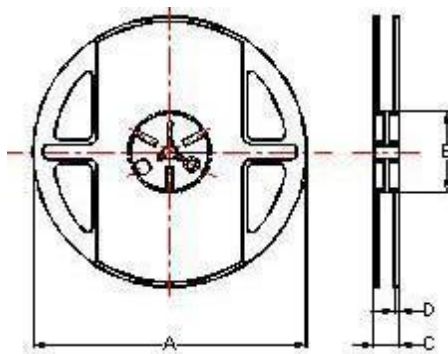


Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
	A	B	T	W	P	F	K	A	B	C	D	
BWNC00292522	2.40	2.93	0.26	8	4	3.5	2.25	178	60	12	1.5	2000
BWNC00372926	2.85	3.58	0.27	12	4	5.5	2.60	178	60	16	1.4	2000