

SMD Wire Wound Ferrite Chip Inductors

BWQV Series



BWQV Series comes in 2 sizes with wide inductance range, high Q value at high frequencies and low DC resistance.

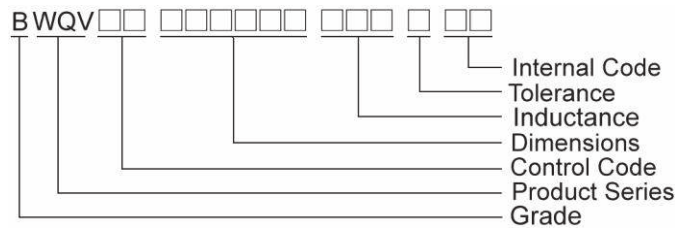
Features

- RoHS compliant
- Miniature chip inductors wound on a special ferrite core
- High Q value at high frequencies and low DC resistance
- Wide inductance range
- Excellent solder heat resistance
- Both flow and reflow soldering methods can be employed

Applications

- Personal, cordless phone
- High Freq. communication products
- GPS (global position system)
- Personal computers

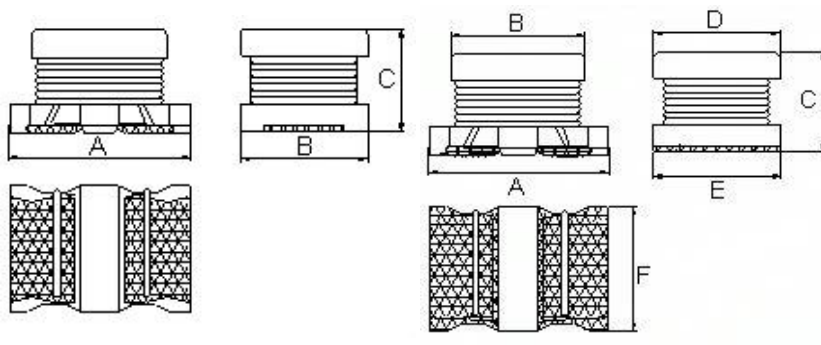
Product Identification



Shape and Dimensions

BWQV00322520

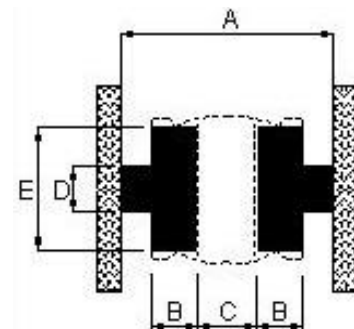
BWQV00453226



Dimensions in mm

TYPE	Shape and Dimensions						Recommended Pattern				
	A	B	C	D	E	F	A	B	C	D	E
BWQV00322520	3.2±0.3	2.5±0.2	2.0±0.2	-	-	-	5.5	1.0	1.3	1.0	2.0
BWQV00453226	4.5±0.3	3.6±0.2	2.6±0.2	3.2±0.2	3.2±0.2	3.2±0.2	7.5	1.5	1.5	1.5	3.0

Recommended Pattern



Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Rated current (mA)
BWQV00322520R47□00	0.47	20	1	20	1	150	0.06	1100
BWQV00322520R82□00	0.82	20	1	20	1	120	0.25	450
BWQV003225201R0□00	1.0	20	1	20	1	100	0.50	445
BWQV003225201R2□00	1.2	20	1	20	1	100	0.60	425
BWQV003225201R5□00	1.5	20 / 10	1	20	1	75	0.60	400
BWQV003225201R8□00	1.8	20 / 10	1	20	1	60	0.70	390
BWQV003225202R2□00	2.2	20 / 10	1	20	1	50	0.80	370
BWQV003225202R7□00	2.7	20 / 10	1	20	1	43	0.90	320
BWQV003225203R3□00	3.3	20 / 10	1	20	1	38	1.0	300
BWQV003225203R9□00	3.9	20 / 10	1	20	1	35	1.1	290
BWQV003225204R7□00	4.7	20 / 10	1	20	1	31	1.2	270
BWQV003225205R6□00	5.6	20 / 10	1	20	1	28	1.3	250
BWQV003225206R8□00	6.8	20 / 10	1	20	1	25	1.5	240
BWQV003225208R2□00	8.2	20 / 10	1	20	1	23	1.6	225
BWQV00322520100□00	10	20 / 10	1	35	1	20	1.8	190
BWQV00322520120□00	12	20 / 10	1	35	1	18	2.0	180
BWQV00322520150□00	15	20 / 10	1	35	1	16	2.2	170
BWQV00322520180□00	18	20 / 10	1	35	1	15	2.5	165
BWQV00322520220□00	22	20 / 10 / 5	1	35	1	14	2.8	150
BWQV00322520270□00	27	20 / 10	1	35	1	13	3.1	125
BWQV00322520330□00	33	20 / 10 / 5	1	40	1	12	3.5	115
BWQV00322520390□00	39	20 / 10	1	40	1	11	3.9	110
BWQV00322520470□00	47	20 / 10	1	40	1	11	4.3	100
BWQV00322520560□00	56	20 / 10	1	40	1	10.0	4.9	85
BWQV00322520680□00	68	20 / 10 / 5	1	40	1	9.0	5.5	80
BWQV00322520820□00	82	20 / 10 / 5	1	40	1	8.5	6.2	70
BWQV00322520101□00	100	20 / 10 / 5	1	40	0.796	8.0	7.0	80
BWQV00322520121□00	120	20 / 10	1	40	0.796	7.5	8.0	75
BWQV00322520151□00	150	20 / 10	1	40	0.796	7.0	9.3	70
BWQV00322520181□00	180	20 / 10	1	40	0.796	6.0	10.2	65
BWQV00322520221□00	220	20 / 10	1	40	0.796	5.5	11.8	65
BWQV00322520271□00	270	20 / 10	1	40	0.796	5.0	12.5	65
BWQV00322520331□00	330	20 / 10	1	40	0.796	5.0	13.0	65
BWQV00322520391□00	390	20 / 10	1	50	0.796	5.0	22.0	50

BWQV00322520471□00	470	20 / 10	0.001	50	0.796	5.0	25.0	45
BWQV00322520561□00	560	20 / 10 / 5	0.001	50	0.796	2.0	28.0	40

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Rated Current : Self temperature rise shall be limited to 35°C Max Inductance drop 10% typ.
- Measure Equipment :
 - L : Agilent HP4285A(1MHz)/Agilent HP4192A(1kHz)
 - Q : Agilent HP4285A
 - SRF : Agilent HP4286A
 - RDC : HP4338B or Chroma 16502
 - Rated Current : HP4284A+HP42841A

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Rated current (mA)
BWQV004532261R0□00	1.0	20	1	20	1	120	0.20	500
BWQV004532261R2□00	1.2	20	1	20	1	100	0.20	500
BWQV004532261R5□00	1.5	20	1	20	1	85	0.30	500
BWQV004532261R8□00	1.8	20	1	20	1	75	0.30	500
BWQV004532262R2□00	2.2	20	1	20	1	62	0.30	500
BWQV004532262R7□00	2.7	20	1	20	1	53	0.32	500
BWQV004532263R3□00	3.3	20	1	20	1	47	0.35	500
BWQV004532263R9□00	3.9	20	1	20	1	41	0.38	500
BWQV004532264R7□00	4.7	20 / 10	1	30	1	38	0.40	500
BWQV004532265R6□00	5.6	20 / 10	1	30	1	33	0.47	500
BWQV004532266R8□00	6.8	20 / 10	1	30	1	31	0.50	450
BWQV004532268R2□00	8.2	20 / 10	1	30	1	27	0.56	450
BWQV00453226100□00	10	20 / 10	1	35	1	23	0.56	400
BWQV00453226120□00	12	20 / 10	1	35	1	21	0.62	380
BWQV00453226150□00	15	20 / 10 / 5	1	35	1	19	0.73	360
BWQV00453226180□00	18	20 / 10	1	35	1	17	0.82	340
BWQV00453226220□00	22	20 / 10 / 5	1	35	1	15	0.94	320
BWQV00453226270□00	27	20 / 10 / 5	1	35	1	14	1.1	300
BWQV00453226330□00	33	20 / 10	1	35	1	12	1.2	270
BWQV00453226390□00	39	20 / 10 / 5	1	35	1	11	1.4	240
BWQV00453226470□00	47	20 / 10 / 5	1	35	1	10	1.5	220
BWQV00453226560□00	56	20 / 10	1	35	1	9.3	1.7	200
BWQV00453226680□00	68	20 / 10 / 5	1	35	1	8.4	1.9	180
BWQV00453226820□00	82	20 / 10	1	35	1	7.5	2.2	170
BWQV00453226101□00	100	20 / 10 / 5	1	40	0.796	6.8	2.5	160
BWQV00453226121□00	120	20 / 10	1	40	0.796	6.2	3.0	150

BWQV00453226151□00	150	20 / 10	1	40	0.796	5.5	3.7	130
BWQV00453226181□00	180	20 / 10	1	40	0.796	5.0	4.5	120
BWQV00453226221□00	220	20 / 10 / 5	1	40	0.796	4.5	5.4	110
BWQV00453226271□00	270	20 / 10	1	40	0.796	4.0	6.8	100
BWQV00453226331□00	330	20 / 10	1	40	0.796	3.6	8.2	95
BWQV00453226391□00	390	20 / 10 / 5	1	40	0.796	3.3	9.7	90
BWQV00453226471□00	470	20 / 10 / 5	0.001	40	0.796	3.0	11.8	80
BWQV00453226561□00	560	20 / 10 / 5	0.001	40	0.796	2.7	14.5	70

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
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 - L : Agilent HP4285A(1MHz)/Agilent HP4192A(1kHz)
 - Q : Agilent HP4285A
 - SRF : Agilent HP4291A
 - RDC : HP4338B or Chroma 16502
 - Rated Current : HP4284A+HP42841A

Electrical Characteristics

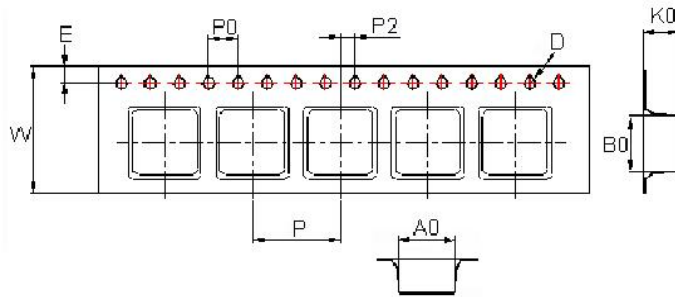
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Rated current (mA)
BWQV00453226681□00	680	20 / 10	0.001	40	0.796	2.5	17.5	65
BWQV00453226821□00	820	20 / 10	0.001	40	0.796	2.2	20.5	60
BWQV00453226102□00	1000	20 / 10 / 5	0.001	40	0.252	2.0	25.0	50
BWQV00453226122□00	1200	20 / 10	0.001	40	0.252	1.8	30.0	45
BWQV00453226152□00	1500	20 / 10	0.001	40	0.252	1.6	37.0	40
BWQV00453226182□00	1800	20 / 10	0.001	40	0.252	1.5	45.0	35
BWQV00453226222□00	2200	20 / 10 / 5	0.001	40	0.252	1.3	50.0	30

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

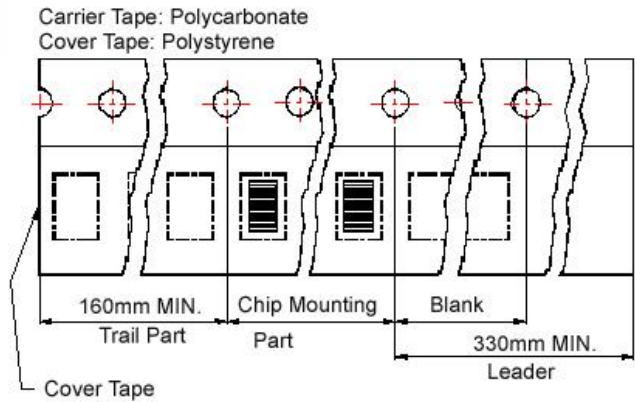
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Packaging Specifications

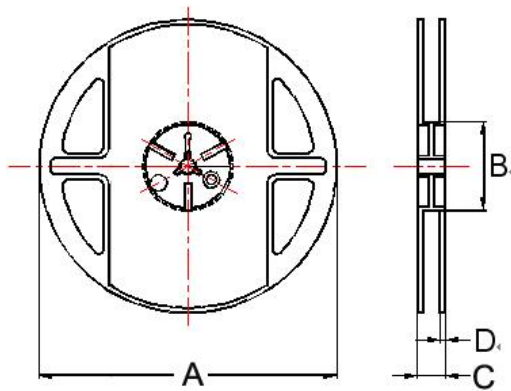
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions									Reel Dimensions				Quantity
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	PCS / REEL
BWQV00322520	2.85	3.60	2.25	1.5	1.75	8	4	4	2	178	60	9	1.5	2000
BWQV00453226	3.60	4.90	3.00	1.5	1.75	12	8	4	2	178	60	13.2	1.5	500

For More Information:

Americas - prodinfo_power_americas@yageo.com | Europe - prodinfo_power_emea@yageo.com | Asia - prodinfo_power_asia@yageo.com

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