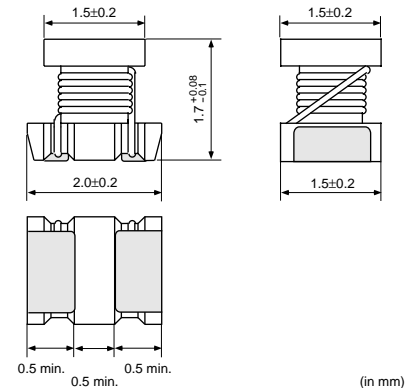


Chip Coils



High Frequency Winding Type LQW2BH/LQW31H Series

LQW2BH series consists of air-core chip coil using a sub-miniature alumina core as a bobbin. The series has excellent solder heat resistance. Both flow and reflow soldering methods can be employed.



■ Features (LQW2BH_03)

1. Inductance: 3.3 to 470nH (Wide inductance ranges)
2. High self-resonant frequency characteristics
3. High Q value and highly stable inductance in high frequency
4. Low DC resistance and large rated current

■ Features (LQW2BH_13)

LQW2BH_13 using thick wire has higher Q value than existing LQW2BH_03 series.

1. Inductance: 2.7 to 27nH
2. DC resistance: 0.02 to 0.06 ohm
3. Q value: 85 to 95 (Typ.) at 800MHz
4. Rated current: 900 to 1900mA

■ Applications

1. High frequency circuit in telecommunication equipment, such as DECT, PHS, PCS, PCN, GSM and CDMA.
2. Impedance Matching
 - PA module
 - SAW filter
3. Resonance circuit
 - VCO

LQW2BH_03 Series

Part Number	Inductance (nH)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Q (min.)	Test Frequency (MHz)	Self Resonance Frequency (min.) (MHz)	EIA
LQW2BHN3N3D03	3.3 ±0.5nH	100	910	0.05 max.	10	250	6000	0805
LQW2BHN6N8D03	6.8 ±0.5nH	100	680	0.11 max.	20	250	5400	0805
LQW2BHN8N2D03	8.2 ±0.5nH	100	630	0.12 max.	20	250	3900	0805
LQW2BHN10NJ03	10 ±5%	100	1320	0.03 max.	30	250	3300	0805
LQW2BHN12NJ03	12 ±5%	100	680	0.11 max.	30	250	3200	0805
LQW2BHN15NJ03	15 ±5%	100	630	0.12 max.	30	250	2700	0805
LQW2BHN18NJ03	18 ±5%	100	690	0.10 max.	30	250	2600	0805
LQW2BHN22NJ03	22 ±5%	100	720	0.09 max.	30	250	2100	0805
LQW2BHN27NJ03	27 ±5%	100	540	0.17 max.	40	250	2300	0805
LQW2BHN33NG03	33 ±2%	100	570	0.15 max.	40	250	1900	0805
LQW2BHN33NJ03	33 ±5%	100	570	0.15 max.	40	250	1900	0805
LQW2BHN39NG03	39 ±2%	100	730	0.09 max.	40	250	1700	0805
LQW2BHN39NJ03	39 ±5%	100	730	0.09 max.	40	250	1700	0805
LQW2BHN47NG03	47 ±2%	100	450	0.23 max.	40	200	1600	0805
LQW2BHN47NJ03	47 ±5%	100	450	0.23 max.	40	200	1600	0805
LQW2BHN56NG03	56 ±2%	100	430	0.26 max.	40	200	1500	0805
LQW2BHN56NJ03	56 ±5%	100	430	0.26 max.	40	200	1500	0805

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Part Number	Inductance (nH)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Q (min.)	Test Frequency (MHz)	Self Resonance Frequency (min.) (MHz)	EIA
LQW2BHN68NG03	68 ±2%	100	460	0.23 max.	40	200	1200	0805
LQW2BHN68NJ03	68 ±5%	100	460	0.23 max.	40	200	1200	0805
LQW2BHN82NG03	82 ±2%	100	320	0.42 max.	40	150	1100	0805
LQW2BHN82NJ03	82 ±5%	100	320	0.42 max.	40	150	1100	0805
LQW2BHNR10G03	100 ±2%	100	270	0.55 max.	35	150	900	0805
LQW2BHNR10J03	100 ±5%	100	350	0.38 max.	40	150	900	0805
LQW2BHNR12G03	120 ±2%	100	320	0.40 max.	40	150	750	0805
LQW2BHNR12J03	120 ±5%	100	320	0.40 max.	40	150	750	0805
LQW2BHNR15G03	150 ±2%	100	260	0.68 max.	30	150	350	0805
LQW2BHNR15J03	150 ±5%	100	390	0.47 max.	30	150	350	0805
LQW2BHNR18G03	180 ±2%	100	250	0.71 max.	35	100	700	0805
LQW2BHNR18J03	180 ±5%	100	250	0.71 max.	35	100	700	0805
LQW2BHNR22G03	220 ±2%	100	240	0.70 max.	35	100	500	0805
LQW2BHNR22J03	220 ±5%	100	240	0.70 max.	35	100	500	0805
LQW2BHNR27J03	270 ±5%	10	190	2.00 max.	15	25.2	550	0805
LQW2BHNR27K03	270 ±10%	10	190	2.00 max.	15	25.2	550	0805
LQW2BHNR33J03	330 ±5%	10	180	2.20 max.	15	25.2	500	0805
LQW2BHNR33K03	330 ±10%	10	180	2.20 max.	15	25.2	500	0805
LQW2BHNR39J03	390 ±5%	10	170	2.50 max.	15	25.2	400	0805
LQW2BHNR39K03	390 ±10%	10	170	2.50 max.	15	25.2	400	0805
LQW2BHNR47J03	470 ±5%	10	160	2.80 max.	15	25.2	350	0805
LQW2BHNR47K03	470 ±10%	10	160	2.80 max.	15	25.2	350	0805

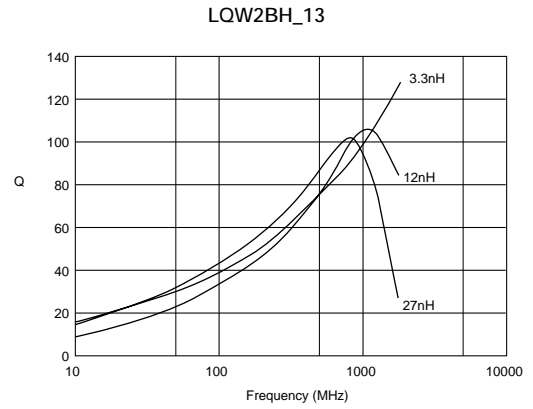
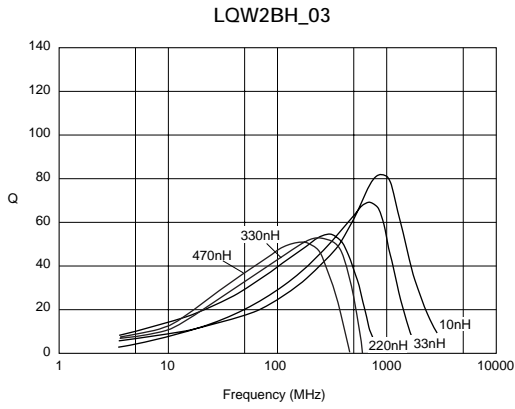
Operating Temp. Range : -25°C to +85°C

LQW2BH_13 (High Q/Low DC Resistance Type)

Part Number	Inductance (nH)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Q (min.)	Test Frequency (MHz)	Self Resonance Frequency (min.) (MHz)	EIA
LQW2BHN2N7D13	2.7 ±0.5nH	100	1900	0.02 max.	20	250	6000	0805
LQW2BHN3N1D13	3.1 ±0.5nH	100	1800	0.02 max.	20	250	6000	0805
LQW2BHN3N3D13	3.3 ±0.5nH	100	1700	0.02 max.	20	250	6000	0805
LQW2BHN5N6D13	5.6 ±0.5nH	100	1500	0.02 max.	35	250	6000	0805
LQW2BHN6N8D13	6.8 ±0.5nH	100	1400	0.02 max.	35	250	5400	0805
LQW2BHN8N6D13	8.6 ±0.5nH	100	1300	0.03 max.	35	250	3900	0805
LQW2BHN10NJ13	10 ±5%	100	1320	0.03 max.	35	250	3300	0805
LQW2BHN12NK13	12 ±10%	100	1100	0.04 max.	40	250	3200	0805
LQW2BHN15NK13	15 ±10%	100	1000	0.04 max.	40	250	3100	0805
LQW2BHN18NK13	18.8 ±10%	100	1000	0.05 max.	40	250	2600	0805
LQW2BHN21NK13	21 ±10%	100	950	0.05 max.	40	250	2200	0805
LQW2BHN27NK13	27 ±10%	100	900	0.06 max.	40	250	1800	0805

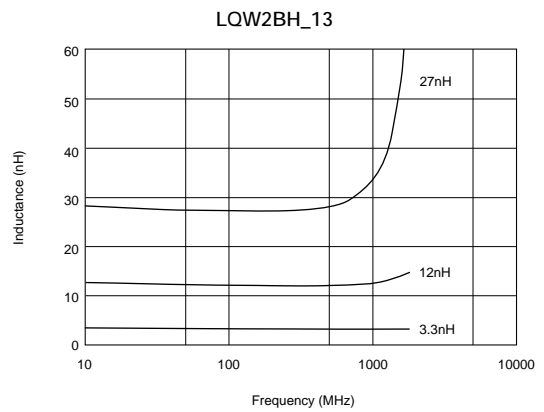
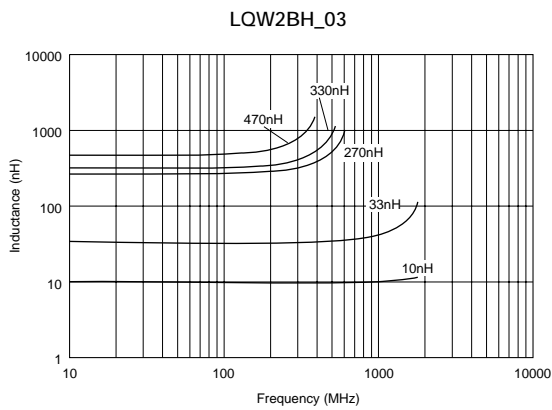
Operating Temp. Range : -25°C to +85°C

■ Q-Frequency Characteristics



4

■ Inductance-Frequency Characteristics

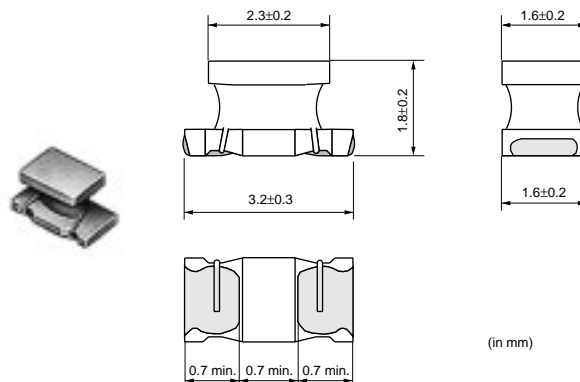


LQW31H Series

LQW31H series is alumina-core-type chip inductor for high frequency circuit. Its low dc resistance and high Q due to wound structure are suitable for hand telecommunication equipment.

■ Features

1. Inductance range from 8.8 to 100nH.
2. Because of the high self resonant frequency, it can be used in high frequency range.
3. Tight inductance tolerance (+-5%)



4

Part Number	Inductance (nH)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Q (min.)	Test Frequency (MHz)	Self Resonance Frequency (min.) (MHz)	EIA
LQW31HN8N8J03	8.8 ±5%	100	750	0.029 ±40%	50	436	1000	1206
LQW31HN8N8K03	8.8 ±10%	100	750	0.029 ±40%	50	436	1000	1206
LQW31HN15NJ03	14.7 ±5%	100	680	0.035 ±40%	60	436	1000	1206
LQW31HN15NK03	14.7 ±10%	100	680	0.035 ±40%	60	436	1000	1206
LQW31HN17NJ03	17 ±5%	100	650	0.037 ±40%	60	436	1000	1206
LQW31HN17NK03	17 ±10%	100	650	0.037 ±40%	60	436	1000	1206
LQW31HN23NJ03	23 ±5%	100	590	0.046 ±40%	60	436	1000	1206
LQW31HN23NK03	23 ±10%	100	590	0.046 ±40%	60	436	1000	1206
LQW31HN27NJ03	27 ±5%	100	560	0.051 ±40%	60	436	1000	1206
LQW31HN27NK03	27 ±10%	100	560	0.051 ±40%	60	436	1000	1206
LQW31HN33NJ03	33 ±5%	100	530	0.057 ±40%	60	436	1000	1206
LQW31HN33NK03	33 ±10%	100	530	0.057 ±40%	60	436	1000	1206
LQW31HN39NJ03	39 ±5%	100	490	0.067 ±40%	60	436	1000	1206
LQW31HN39NK03	39 ±10%	100	490	0.067 ±40%	60	436	1000	1206
LQW31HN47NJ03	47 ±5%	100	380	0.11 ±40%	60	436	1000	1206
LQW31HN47NK03	47 ±10%	100	380	0.11 ±40%	60	436	1000	1206
LQW31HN56NJ03	56 ±5%	100	330	0.14 ±40%	60	436	1000	1206
LQW31HN56NK03	56 ±10%	100	330	0.14 ±40%	60	436	1000	1206
LQW31HN64NJ03	64 ±5%	100	290	0.18 ±40%	60	436	1000	1206
LQW31HN64NK03	64 ±10%	100	290	0.18 ±40%	60	436	1000	1206
LQW31HN84NJ03	84 ±5%	100	240	0.28 ±40%	60	436	1000	1206
LQW31HN84NK03	84 ±10%	100	240	0.28 ±40%	60	436	1000	1206
LQW31HNR10J03	100 ±5%	100	230	0.3 ±40%	60	436	900	1206
LQW31HNR10K03	100 ±10%	100	230	0.3 ±40%	60	436	900	1206

Operating Temp. Range : -25°C to +85°C

■ Q-Frequency Characteristics

