

CHIP COIL

Wire Wound Chip Coil **LQW1608A** Series for High Frequency

High-Q and Tight Inductance Tolerance ($\pm 0.2\text{nH}$ or $\pm 2\%$) Ultra Small Wire Wound Air-core Chip Coil

The LQW1608A series which consists of air-core chip coil using a miniature alumina core.

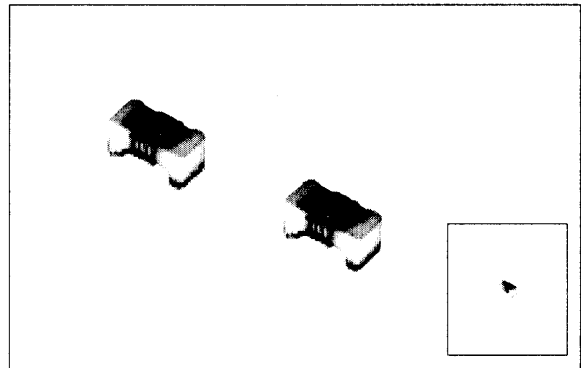
The tight inductance tolerance ($\pm 0.2\text{nH}$, $\pm 2\%$) is available due to Murata's original winding technology. The series has high Q value and high self resonant frequency in high frequency range. It is suitable for high frequency circuits which are used in telecommunication equipment.

■ FEATURES

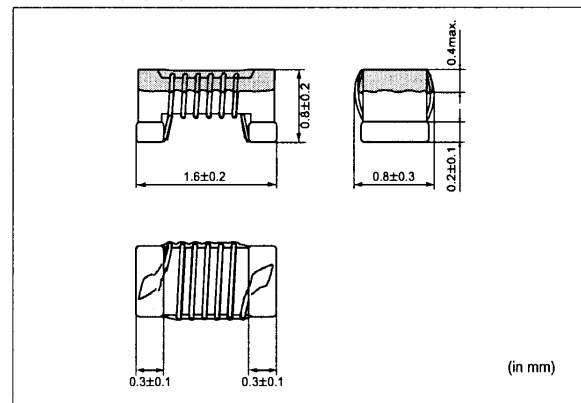
1. Horizontal winding structure enables tight inductance tolerance ($\pm 0.2\text{nH}$, $\pm 2\%$). Stable circuit operation is possible.
2. Broad range of inductance (3.9nH to 220nH).
3. The subminiature dimensions (1.6×0.8mm) allow high density mounting.
4. The high self resonant frequency realizes high-Q value and stable inductance at high frequency.
5. Low DC resistance design is ideal for low loss, high output and low power consumption.
4. Resin-coated surface enables excellent mounting.

■ APPLICATIONS

- High frequency circuit in telecommunication equipment, such as DECT, PHS, PCS, PCN, GSM and CDMA.
- Impedance Matching—Power-AMP Module (PA), SAW filter
- Resonance circuits—VCO



■ DIMENSIONS

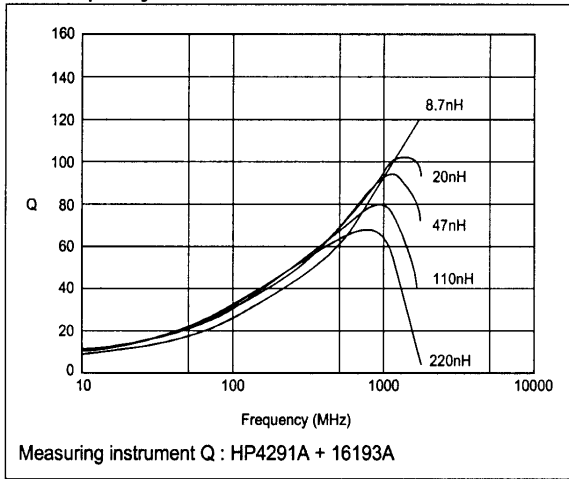


■ SPECIFICATIONS

Part Number	Inductance			Q			DC Resistance (Ω max.)	Self-resonant Frequency (MHz min.)	Allowable Current (mA)	Operating Temp. Range										
	Nominal Value (nH)	Tolerance	Test Frequency (MHz)	Nominal Value (min.)	Test Frequency (MHz)	300 (MHz) Typical					800 (MHz) Typical	1.5 (GHz) Typical								
LQW1608A2N2D00	2.2	±0.5nH	100	16	250	45	0.049	6000	700	-25 to +85°C										
LQW1608A3N6D(C)00	3.6	±0.5nH (±0.2nH)		25							75	95	0.059	850						
LQW1608A3N9D(C)00	3.9																			
LQW1608A4N3D(C)00	4.3																			
LQW1608A4N7D00	4.7	±0.5nH		35							250	45	0.082	750						
LQW1608A5N6D(C)00	5.6	±0.5nH (±0.2nH)													35	80	100	0.11	650	
LQW1608A6N2D(C)00	6.2																			
LQW1608A6N8D(C)00	6.8																			
LQW1608A7N5D00	7.5	±0.5nH													40	250	50	0.13	600	
LQW1608A8N2D00	8.2																			±5% (±2%)
LQW1608A8N7D00	8.7		4900																	
LQW1608A9N1D00	9.1		4600		500															
LQW1608A9N5D00	9.5		0.17			3800	440													
LQW1608A10NJ(G)00	10							0.21	3700											420
LQW1608A11NJ(G)00	11			0.23	3300						420									
LQW1608A12NJ(G)00	12		0.26			3200	400													
LQW1608A13NJ(G)00	13							0.29	2900			380								
LQW1608A15NJ(G)00	15			0.33	2700						370									
LQW1608A16NJ(G)00	16	0.35	2600			360														
LQW1608A18NJ(G)00	18						0.51	2300	280											
LQW1608A20NJ(G)00	20			0.38	2200						340									
LQW1608A22NJ(G)00	22	0.56	2100			270														
LQW1608A24NJ(G)00	24						0.60	2050	250											
LQW1608A27NJ(G)00	27			0.64	1900						230									
LQW1608A30NJ(G)00	30	0.68	1800			220														
LQW1608A33NJ(G)00	33						1.2	1350	200											
LQW1608A36NJ(G)00	36			1.3	1600						180									
LQW1608A39NJ(G)00	39	1.4	1450			170														
LQW1608A43NJ(G)00	43						1.5	1400	160											
LQW1608A47NJ(G)00	47			2.1	1350						150									
LQW1608A51NJ(G)00	51	2.2	1300			140														
LQW1608A56NJ(G)00	56						2.4	1250	120											
LQW1608A62NJ(G)00	62			2.5	1200															
LQW1608A68NJ(G)00	68	2.5	1200																	
LQW1608A72NJ(G)00	72					2.5	1200													
LQW1608A75NJ(G)00	75			2.5	1200															
LQW1608A82NJ(G)00	82	2.5	1200																	
LQW1608A91NJ(G)00	91					2.5	1200													
LQW1608AR10J(G)00	100			2.5	1200															
LQW1608AR11J(G)00	110	2.5	1200																	
LQW1608AR12J(G)00	120					2.5	1200													
LQW1608AR13J(G)00	130			2.5	1200															
LQW1608AR15J(G)00	150	2.5	1200																	
LQW1608AR16J(G)00	160					2.5	1200													
LQW1608AR18J(G)00	180			2.5	1200															
LQW1608AR20J(G)00	200	2.5	1200																	
LQW1608AR22J(G)00	220					2.5	1200													

■ TYPICAL ELECTRICAL CHARACTERISTICS

● Q-Frequency Characteristics



● Inductance - Frequency Characteristics

