



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.

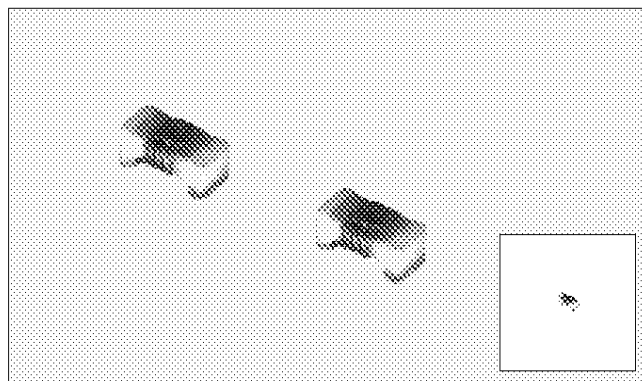
The tight inductance tolerance ($\pm 0.2\text{nH}$, $\pm 2\%$) is available due to Murata's original winding technology. The series has high Q value and high self resonant frequency in high frequency range. It is suitable for high frequency circuits which are used in telecommunication equipment.

■ FEATURES

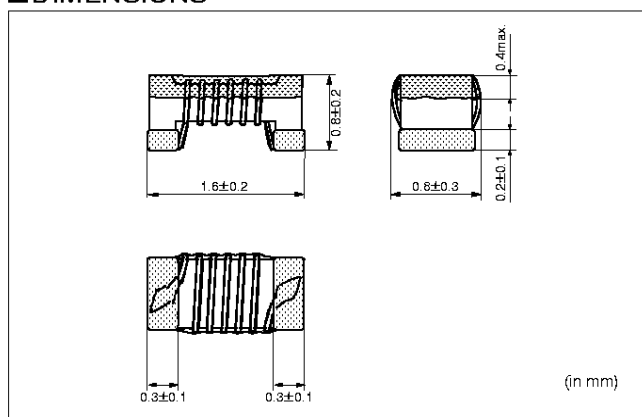
1. Horizontal winding structure enables tight inductance tolerance ($\pm 0.2\text{nH}$, $\pm 2\%$). Stable circuit operation is possible.
2. Broad range of inductance (3.9nH to 220nH).
3. The subminiature dimensions (1.6X0.8mm) allow high density mounting.
4. The high self resonant frequency realizes 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

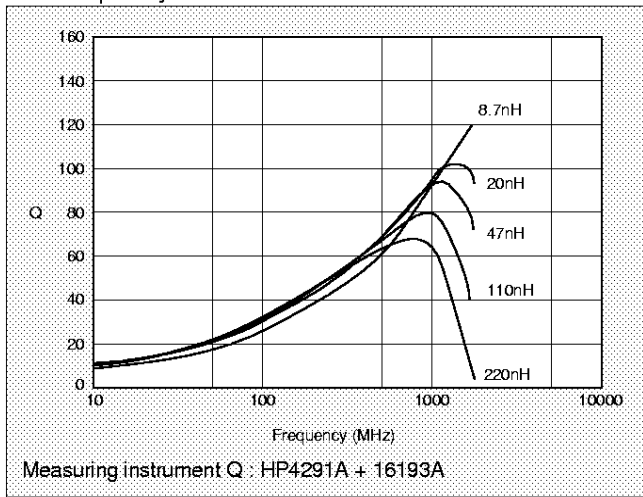


■SPECIFICATIONS

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	80	110	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			45	80	100		0.082		750									
LQW1608A5N6D(C)00	5.6	±0.5nH (±0.2nH)																				
LQW1608A6N2D(C)00	6.2																					
LQW1608A6N8D(C)00	6.8																					
LQW1608A7N5D00	7.5	±0.5nH																				
LQW1608A8N2D00	8.2																					
LQW1608A8N7D00	8.7																					
LQW1608A9N1D00	9.1																					
LQW1608A9N5D00	9.5																					
LQW1608A10NJ(G)00	10													±5% (±2%)	40	50	85	105	0.16	5500	550	
LQW1608A11NJ(G)00	11																			0.13		600
LQW1608A12NJ(G)00	12																					
LQW1608A13NJ(G)00	13			0.17			500															
LQW1608A15NJ(G)00	15																					
LQW1608A16NJ(G)00	16	0.21		440																		
LQW1608A18NJ(G)00	18																					
LQW1608A20NJ(G)00	20	0.23		420																		
LQW1608A22NJ(G)00	22																					
LQW1608A24NJ(G)00	24	0.26		400																		
LQW1608A27NJ(G)00	27																					
LQW1608A30NJ(G)00	30	0.29		380																		
LQW1608A33NJ(G)00	33																					
LQW1608A36NJ(G)00	36	0.33		370																		
LQW1608A39NJ(G)00	39																					
LQW1608A43NJ(G)00	43	0.35		360																		
LQW1608A47NJ(G)00	47																					
LQW1608A51NJ(G)00	51	0.51		280																		
LQW1608A56NJ(G)00	56																					
LQW1608A62NJ(G)00	62	0.38		340																		
LQW1608A68NJ(G)00	68																					
LQW1608A72NJ(G)00	72	0.56		270																		
LQW1608A75NJ(G)00	75																					
LQW1608A82NJ(G)00	82	0.60		250																		
LQW1608A91NJ(G)00	91																					
LQW1608A91NJ(G)00	91	0.64		230																		
LQW1608AR10J(G)00	100																					
LQW1608AR11J(G)00	110	0.68	220																			
LQW1608AR12J(G)00	120																					
LQW1608AR13J(G)00	130	1.2	200																			
LQW1608AR15J(G)00	150																					
LQW1608AR16J(G)00	160	1.3	180																			
LQW1608AR18J(G)00	180																					
LQW1608AR20J(G)00	200	1.4	170																			
LQW1608AR22J(G)00	220																					
LQW1608AR22J(G)00	220	1.5	160																			
LQW1608AR22J(G)00	220																					
LQW1608AR22J(G)00	220	2.1	150																			
LQW1608AR22J(G)00	220																					
LQW1608AR22J(G)00	220	2.2	140																			
LQW1608AR22J(G)00	220																					
LQW1608AR22J(G)00	220	2.4	120																			
LQW1608AR22J(G)00	220																					
LQW1608AR22J(G)00	220	2.5	120																			
LQW1608AR22J(G)00	220																					

■ TYPICAL ELECTRICAL CHARACTERISTICS

● Q-Frequency Characteristics



● Inductance - Frequency Characteristics

