

CHIP COIL

muRata

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.

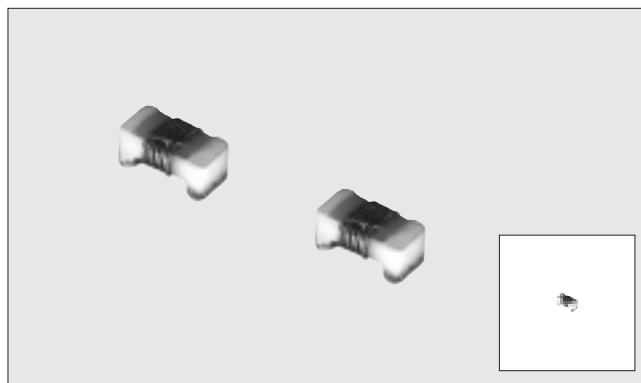
The tight inductance tolerance ($\pm 0.2\text{nH}$, $\pm 2\%$) is available due to Murata's original winding technology. The series has high Q value and high self resonant frequency in high frequency range. It is suitable for high frequency circuits which are used in telecommunication equipment.

■FEATURES

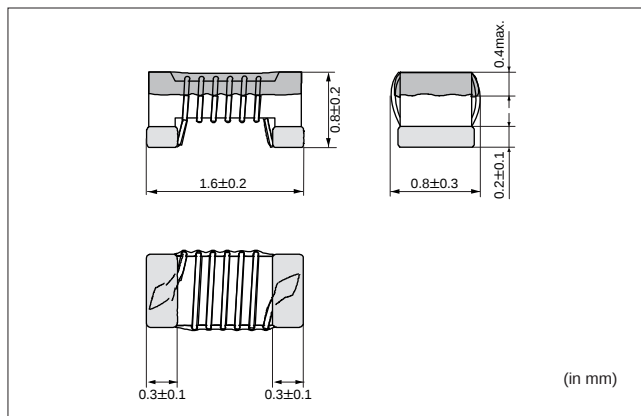
1. Horizontal winding structure enables tight inductance tolerance ($\pm 0.2\text{nH}$, $\pm 2\%$). Stable circuit operation is possible.
2. Broad range of inductance (3.9nH to 220nH).
3. The subminiature dimensions (1.6X0.8mm) allow high density mounting.
4. The high self resonant frequency realizes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

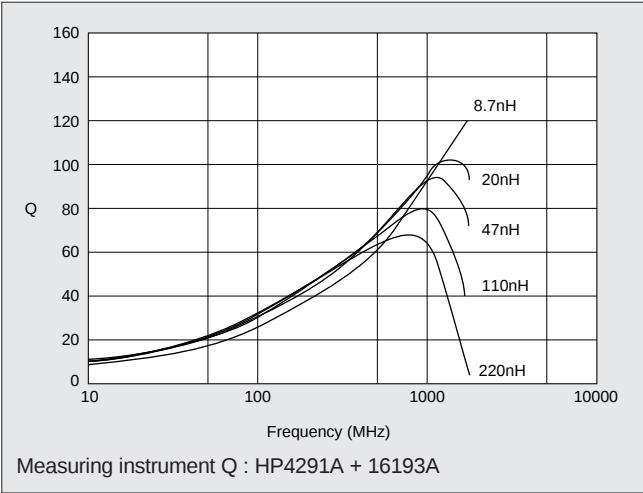


■ SPECIFICATIONS

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		0.082			750										
LQW1608A5N6D(C)00	5.6	±0.5nH (±0.2nH)															
LQW1608A6N2D(C)00	6.2																
LQW1608A6N8D(C)00	6.8			±0.5nH			0.11	650									
LQW1608A7N5D00	7.5																
LQW1608A8N2D00	8.2																
LQW1608A8N7D00	8.7																
LQW1608A9N1D00	9.1	±5% (±2%)					0.13	600									
LQW1608A9N5D00	9.5																
LQW1608A10NJ(G)00	10																
LQW1608A11NJ(G)00	11			40	50	85	0.16	5500	550								
LQW1608A12NJ(G)00	12							4900									
LQW1608A13NJ(G)00	13							4600		500							
LQW1608A15NJ(G)00	15				200	55	90	105	3800	440							
LQW1608A16NJ(G)00	16								3700								
LQW1608A18NJ(G)00	18								3300		420						
LQW1608A20NJ(G)00	20					85	90	0.23	3200								
LQW1608A22NJ(G)00	22								75	0.26			2900	400			
LQW1608A24NJ(G)00	24										85		90		0.29	2800	
LQW1608A27NJ(G)00	27					50	75	0.33								2700	380
LQW1608A30NJ(G)00	30	38							200	75				0.35		2600	
LQW1608A33NJ(G)00	33										34		150		75	50	
LQW1608A36NJ(G)00	36					32	45	75									50
LQW1608A39NJ(G)00	39	25		100					60	—				2300			
LQW1608A43NJ(G)00	43										32		45		60	—	
LQW1608A47NJ(G)00	47					32	45	60									—
LQW1608A51NJ(G)00	51	32		45	60				—	2050				2050			
LQW1608A56NJ(G)00	56										32		45	60	—	2000	
LQW1608A62NJ(G)00	62					32	45	60									—
LQW1608A68NJ(G)00	68	32		45	60				—	1800							
LQW1608A72NJ(G)00	72										32		45	60	—	1700	
LQW1608A75NJ(G)00	75					32	45	60									—
LQW1608A82NJ(G)00	82	32		45	60				—	1500							
LQW1608A91NJ(G)00	91										32		45	60	—	1400	
LQW1608AR10J(G)00	100					32	45	60									—
LQW1608AR11J(G)00	110	32		45	60				—	1300							
LQW1608AR12J(G)00	120										32		45	60	—	1250	
LQW1608AR13J(G)00	130					32	45	60									—
LQW1608AR15J(G)00	150	32		45	60				—	1150							
LQW1608AR16J(G)00	160										32		45	60	—	1100	
LQW1608AR18J(G)00	180					32	45	60									—
LQW1608AR20J(G)00	200	32		45	60				—	1000							
LQW1608AR22J(G)00	220										32		45	60	—	950	
LQW1608AR24J(G)00	240					32	45	60									—
LQW1608AR26J(G)00	260	32		45	60				—	850							
LQW1608AR28J(G)00	280										32		45	60	—	800	
LQW1608AR30J(G)00	300		32			45	60	—				750					750
LQW1608AR32J(G)00	320	32		45	60				—	700							700
LQW1608AR34J(G)00	340										32		45	60	—	650	650
LQW1608AR36J(G)00	360		32			45	60	—				600					600
LQW1608AR38J(G)00	380	32		45	60				—	550							550
LQW1608AR40J(G)00	400										32		45	60	—	500	500
LQW1608AR42J(G)00	420		32			45	60	—				450					450
LQW1608AR44J(G)00	440	32		45	60				—	400							400
LQW1608AR46J(G)00	460										32		45	60	—	350	350
LQW1608AR48J(G)00	480		32			45	60	—				300					300
LQW1608AR50J(G)00	500	32		45	60				—	250							250
LQW1608AR52J(G)00	520										32		45	60	—	200	200
LQW1608AR54J(G)00	540		32			45	60	—				150					150
LQW1608AR56J(G)00	560	32		45	60				—	100							100
LQW1608AR58J(G)00	580										32		45	60	—	50	50
LQW1608AR60J(G)00	600		32			45	60	—				0					0
LQW1608AR62J(G)00	620	32		45	60				—	0							0
LQW1608AR64J(G)00	640										32		45	60	—	0	0
LQW1608AR66J(G)00	660		32			45	60	—				0					0
LQW1608AR68J(G)00	680	32		45	60				—	0							0
LQW1608AR70J(G)00	700										32		45	60	—	0	0
LQW1608AR72J(G)00	720		32			45	60	—				0					0
LQW1608AR74J(G)00	740	32		45	60				—	0							0
LQW1608AR76J(G)00	760										32		45	60	—	0	0
LQW1608AR78J(G)00	780		32			45	60	—				0					0
LQW1608AR80J(G)00	800	32		45	60				—	0							0
LQW1608AR82J(G)00	820										32		45	60	—	0	0
LQW1608AR84J(G)00	840		32			45	60	—				0					0
LQW1608AR86J(G)00	860	32		45	60				—	0							0
LQW1608AR88J(G)00	880										32		45	60	—	0	0
LQW1608AR90J(G)00	900		32			45	60	—				0					0
LQW1608AR92J(G)00	920	32		45	60				—	0							0
LQW1608AR94J(G)00	940										32		45	60	—	0	0
LQW1608AR96J(G)00	960		32			45	60	—				0					0
LQW1608AR98J(G)00	980	32		45	60				—	0							0
LQW1608AR100J(G)00	1000										32		45	60	—	0	0
LQW1608AR102J(G)00	1020		32			45	60	—				0					0
LQW1608AR104J(G)00	1040	32		45	60				—	0							0
LQW1608AR106J(G)00	1060										32		45	60	—	0	0
LQW1608AR108J(G)00	1080		32			45	60	—				0					0
LQW1608AR110J(G)00	1100	32		45	60				—	0							0
LQW1608AR112J(G)00	1120										32		45	60	—	0	0
LQW1608AR114J(G)00	1140		32			45	60	—				0					0
LQW1608AR116J(G)00	1160	32		45	60				—	0							0
LQW1608AR118J(G)00	1180										32		45	60	—	0	0
LQW1608AR120J(G)00	1200		32			45	60	—				0					0
LQW1608AR122J(G)00	1220	32		45	60				—	0							0
LQW1608AR124J(G)00	1240										32		45	60	—	0	0
LQW1608AR126J(G)00	1260		32			45	60	—				0					0
LQW1608AR128J(G)00	1280	32		45	60				—	0							0
LQW1608AR130J(G)00	1300										32		45	60	—	0	0
LQW1608AR132J(G)00	1320		32			45	60	—				0					0
LQW1608AR134J(G)00	1340	32		45	60				—	0							0
LQW1608AR136J(G)00	1360										32		45	60	—	0	0
LQW1608AR138J(G)00	1380		32			45	60	—				0					0
LQW1608AR140J(G)00	1400	32		45	60				—	0							0
LQW1608AR142J(G)00	1420										32		45	60	—	0	0
LQW1608AR144J(G)00	1440		32			45	60	—				0					0
LQW1608AR146J(G)00	1460	32		45	60				—	0							0
LQW1608AR148J(G)00	1480										32		45	60	—	0	0
LQW1608AR150J(G)00	1500		32			45	60	—				0					0
LQW1608AR152J(G)00	1520	32		45	60				—	0							0
LQW1608AR154J(G)00	1540										32		45	60	—	0	0
LQW1608AR156J(G)00	1560		32			45	60	—				0					0
LQW1608AR158J(G)00	1580	32		45	60				—	0							0
LQW1608AR160J(G)00	1600										32		45	60	—	0	0
LQW1608AR162J(G)00	1620		32			45	60	—				0					0
LQW1608AR164J(G)00	1640	32		45	60				—	0							0
LQW1608AR166J(G)00	1660										32		45	60	—	0	0
LQW1608AR168J(G)00	1680		32			45	60	—				0					0
LQW1608AR170J(G)00	1700	32		45	60				—	0							0
LQW1608AR172J(G)00	1720										32		45	60	—	0	0
LQW1608AR174J(G)00	1740		32			45	60	—				0					0
LQW1608AR176J(G)00	1760	32		45	60				—	0							0
LQW1608AR178J(G)00	1780										32		45	60	—	0	0
LQW1608AR180J(G)00	1800		32			45	60	—				0					0
LQW1608AR182J(G)00	1820	32		45	60				—	0							0
LQW1608AR184J(G)00	1840										32		45	60	—	0	0
LQW1608AR186J(G)00	1860		32			45	60	—				0					0
LQW1608AR188J(G)00	1880	32		45	60				—	0							0
LQW1608AR190J(G)00	1900										32		45	60	—	0	0
LQW1608AR192J(G)00	1920		32			45	60	—				0					0
LQW1608AR194J(G)00	1940	32		45	60				—	0							0
LQW1608AR196J(G)00	1960										32		45	60			

■TYPICAL ELECTRICAL CHARACTERISTICS

●Q-Frequency Characteristics



●Inductance - Frequency Characteristics

