



The LQN21A Series consists of air-core chip coils using a subminiature alumina core as a bobbin. The High Q values at high frequencies and high self-resonant frequencies make this coil perfect for use in the high frequency circuits of communications equipment.

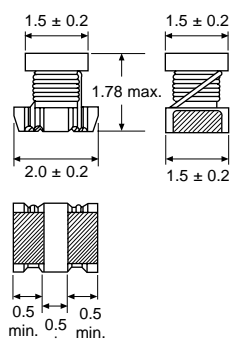
FEATURES

- LQN21A□□□□04
 - Broad inductance range
 - Inductance tolerance: $\pm 0.5\text{nH}$ ($\leq 8.2\text{nH}$); $\pm 5\%$ (10nH–470nH)
- LQN21A
 - Tight Inductance Tolerance $\pm 2\%$
- LQN21A□□□□44
 - High Q •High Rated Current •Low DCR

PART NUMBERING SYSTEM

LQN	21	A	3N3	D	04	M00
TYPE LQN: Non-epoxy coated	SIZE 21: 2.0 x 1.5mm (0805)	CORE MATERIAL A: Air Core	INDUCTANCE CODE 3N3: 3.3nH	TOLERANCE D: $\pm 0.5\text{nH}$ J: $\pm 5\%$ G: $\pm 2\%$	ELECTRODE MATERIAL 04/44: Nickel & Solder	UNMARKED

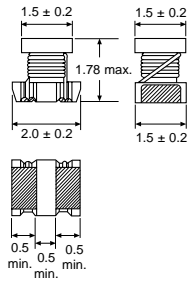
SPECIFICATIONS

Dimensions: mm	Part Number	Inductance			Q ※1		DC Resistance (Ohms max.)	※2 Self-resonant Frequency (MHz min.)	Allowable Current (mA)	Operating Temp. Range				
		Nominal Value (nH)	Tolerance	Test Frequency (MHz)	Peak Value (Typ.)	Minimum Value								
0805 	*LQN21A3N3D04	3.3	$\pm 0.5\text{nH}$	100	70	10	0.05	6000	910	-25°C ~ +85°C				
	*LQN21A6N8D04	6.8				20		5400	680					
	*LQN21A8N2D04	8.2			30	250		0.12	3900		630			
	*LQN21A10NJ04	10						80	0.03		3300	1320		
	*LQN21A12NJ04	12						65	0.11		3200	680		
	*LQN21A15NJ04	15									70	0.10	2700	630
	*LQN21A18NJ04	18						70	0.09				2600	690
	*LQN21A22NJ04	22									65	0.09	2100	720
	*LQN21A27NJ04	27						80	0.17				2300	540
	*LQN21A33NJ04	33									80	0.15	1900	570
	*LQN21A39NJ04	39	65	0.23	1700	730								
	*LQN21A47NJ04	47			70	0.26	1600	450						
	*LQN21A56NJ04	56	40	200			0.23	1500	430					
	*LQN21A68NJ04	68			65	0.23	1200	460						
	*LQN21A82NJ04	82	60	0.42			1100	320						
	*LQN21AR10J04	100			70	0.38	900	350						
	*LQN21AR12J04	120	50	150			0.40	750	320					
	*LQN21AR15J04	150			45	30	0.47	350	390					
	*LQN21AR18J04	180	35	100			0.71	700	250					
	*LQN21AR22J04	220			35	0.70	500	240						
	*LQN21AR27K04	270	50	15			25.2	2.00	550		190			
	*LQN21AR33K04	330			10	2.20		500	180					
	*LQN21AR39K04	390	10	2.50			400	170						
	*LQN21AR47K04	470			10	2.80	350	160						
	Tight Tolerance													
	*LQN21A33NG04	33	$\pm 2\%$	100	100	70	10	0.15	1900		570	-25°C ~ +85°C		
	*LQN21A33NG04	39					20		0.09		1700		730	
	*LQN21A33NG04	47				30	250		0.23		1600		450	
	*LQN21A33NG04	56							80		0.26		1500	430
	*LQN21A33NG04	68							65		0.23		1200	460
	*LQN21A33NG04	82											70	0.42
	*LQN21AR10G04	100							70		0.55			
	*LQN21AR12G04	120											65	0.40
*LQN21AR15G04	150	65							0.68	350	260			
*LQN21AR18G04	180									80	0.71		700	250
*LQN21AR22G04	220	80	0.02	500	240									

※1: Measured with LCR meter YHP4191A, measuring tap 16193A. ※2: Measured with Network Analyzer HP8753C.

*Available as standard through authorized Murata Electronics Distributors.

SPECIFICATIONS

Dimensions: mm	Part Number	Inductance			Q				DC Resistance (Ohms 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)	800 MHz (Typ.)	1.5 GHz (Typ.)								
	★LQN21A2N7D44	2.7	±0.5nH	100	20	85	120	0.02	6000	1900	-25°C ~ +85°C					
	★LQN21A3N1D44	3.1								1800						
	★LQN21A3N3D44	3.3								1700						
	★LQN21A5N6D44	5.6								1500						
	★LQN21A6N8D44	6.8								5400		1400				
	★LQN21A8N6D44	8.6								3900		1300				
	★LQN21A10NJ44	10	±5%	35	250	95	115	0.03	3300	1320						
	★LQN21A12NK44	12	±10%							40		100	90	0.04	3200	1100
	★LQN21A15NK44	15														105
	★LQN21A18NK44	18.8	65							2200		950				
	★LQN21A21NK44	21										95	45	0.06	1800	
	★LQN21A27NK44	27														

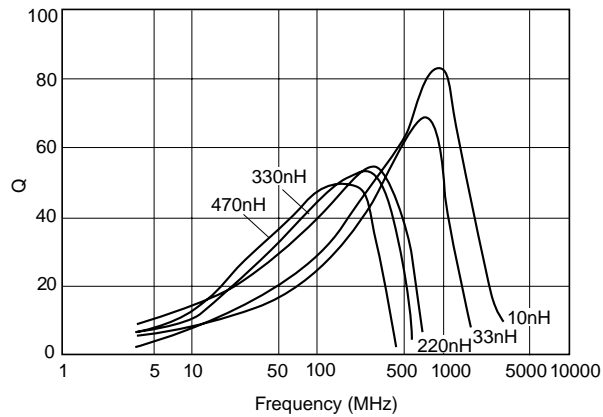
※1: Measured with LCR meter YHP4191A, measuring tap 16193A.

※2: Measured with Network Analyzer HP8753C.

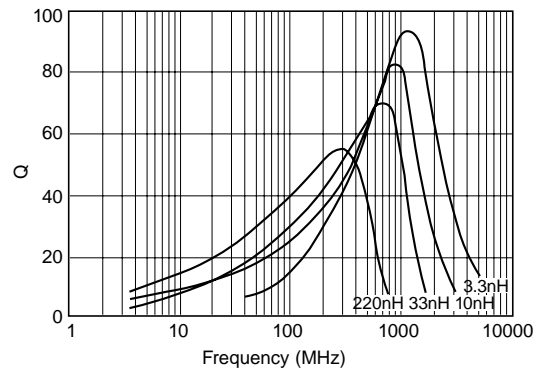
*Available as standard through authorized Murata Electronics Distributors.

TYPICAL ELECTRICAL CHARACTERISTICS

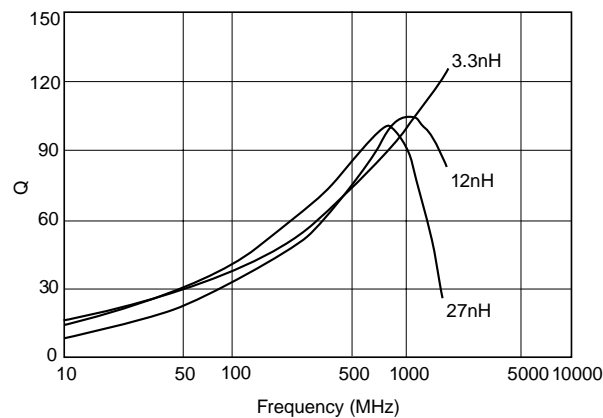
Q-FREQUENCY CHARACTERISTICS
LQN21A□□□□04



Q-FREQUENCY CHARACTERISTICS
LQN21A (Tight Inductance Tolerance)



LQN21A□□□□44



INDUCTANCE-FREQUENCY CHARACTERISTICS
LQN21A□□□□44

