



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.

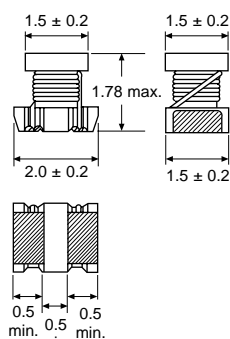
FEATURES

- 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

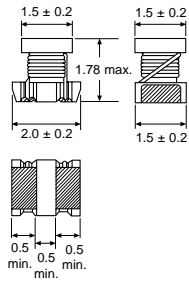
SPECIFICATIONS

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 Q Value Test Frequency (MHz)											
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									0.12	2700	630				
	*LQN21A18NJ04	18						70	0.10		2600	690					
	*LQN21A22NJ04	22									0.09	2100	720				
	*LQN21A27NJ04	27						40	200		0.17	2300	540				
	*LQN21A33NJ04	33									65	0.15	1900	570			
	*LQN21A39NJ04	39	80	0.09	1700	730											
	*LQN21A47NJ04	47	65	0.23	1600	450											
	*LQN21A56NJ04	56			70	0.26	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			0.70	500	240										
	*LQN21AR27K04	270	$\pm 10\%$	10	50	15	25.2	2.00	550		190						
	*LQN21AR33K04	330						2.20	500		180						
	*LQN21AR39K04	390						2.50	400		170						
	*LQN21AR47K04	470						2.80	350		160						
	Tight Tolerance																
	*LQN21A33NG04	33						$\pm 2\%$	100		70	10	20	0.15	1900	570	
	*LQN21A33NG04	39	0.09	1700	730												
	*LQN21A33NG04	47	80	0.23	1600	450											
	*LQN21A33NG04	56			0.26	1500	430										
	*LQN21A33NG04	68	65	0.23	1200	460											
*LQN21A33NG04	82	0.42			1100	320											
*LQN21AR10G04	100	70	0.55	900	270												
*LQN21AR12G04	120			0.40	750	320											
*LQN21AR15G04	150	65	0.68	350	260												
*LQN21AR18G04	180			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	0.06	1800	950										
	★LQN21A21NK44	21				95	45	900								
	★LQN21A27NK44	27														

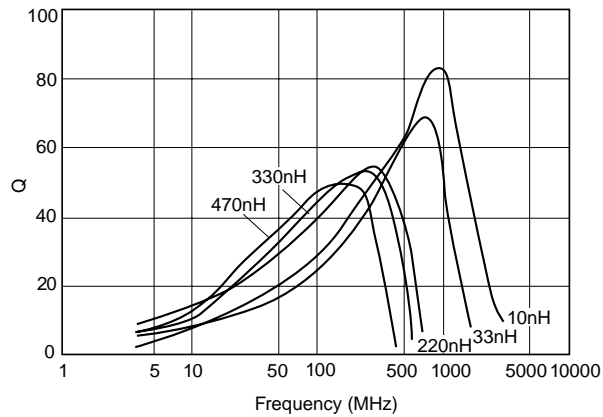
※1: Measured with LCR meter YHP4191A, measuring tap 16193A.

※2: Measured with Network Analyzer HP8753C.

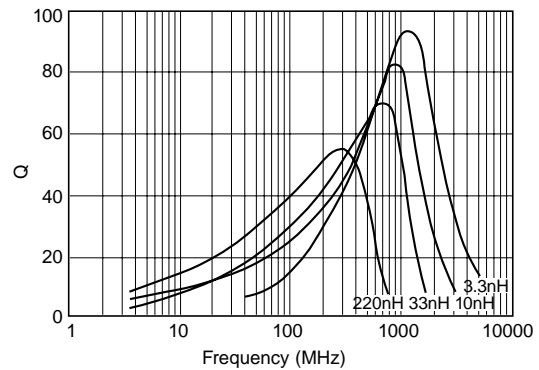
★Available as standard through authorized Murata Electronics Distributors.

TYPICAL ELECTRICAL CHARACTERISTICS

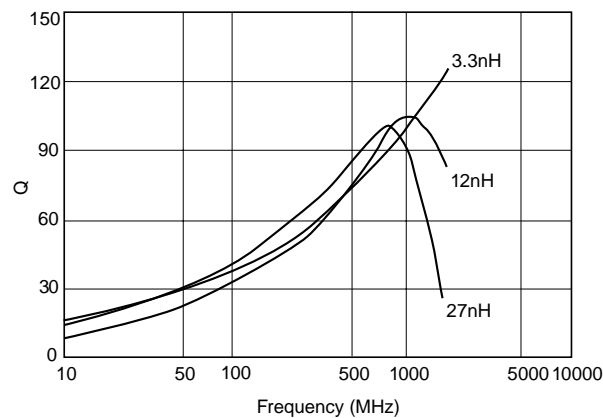
Q-FREQUENCY CHARACTERISTICS
LQN21A□□□□04



Q-FREQUENCY CHARACTERISTICS
LQN21A (Tight Inductance Tolerance)



LQN21A□□□□44



INDUCTANCE-FREQUENCY CHARACTERISTICS
LQN21A□□□□44

