



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.

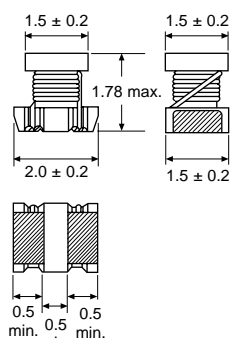
### FEATURES

- 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

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

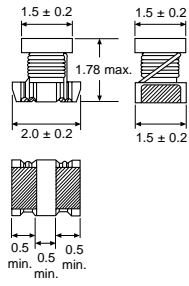
### SPECIFICATIONS

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)																
<b>0805</b> 	*LQN21A3N3D04	3.3	$\pm 0.5\text{nH}$	100	70	10	250	0.05	6000	910												
	*LQN21A6N8D04	6.8				20																
	*LQN21A8N2D04	8.2			30	80					0.11	5400	680									
	*LQN21A10NJ04	10																				
	*LQN21A12NJ04	12				65								0.12	3900	630						
	*LQN21A15NJ04	15																				
	*LQN21A18NJ04	18				70											0.03	3300	1320			
	*LQN21A22NJ04	22																				
	*LQN21A27NJ04	27				65														0.11	3200	680
	*LQN21A33NJ04	33																				
	*LQN21A39NJ04	39	80	0.12	2700	630																
	*LQN21A47NJ04	47																				
	*LQN21A56NJ04	56	70				0.10	2600	690													
	*LQN21A68NJ04	68																				
	*LQN21A82NJ04	82	65							0.09	2100	720										
	*LQN21AR10J04	100																				
	*LQN21AR12J04	120	80										0.17	2300	540							
	*LQN21AR15J04	150																				
	*LQN21AR18J04	180	65													0.15	1900	570				
	*LQN21AR22J04	220																				
	*LQN21AR27K04	270	70	0.09	1700	730																
	*LQN21AR33K04	330																				
	*LQN21AR39K04	390	50				0.23	1600	450													
	*LQN21AR47K04	470																				
	*LQN21A68NJ04	68	70							0.26	1500	430										
	*LQN21A82NJ04	82																				
	*LQN21A82NJ04	82	60										0.23	1200	460							
	*LQN21AR10J04	100																				
	*LQN21AR12J04	120	70													0.42	1100	320				
	*LQN21AR15J04	150																				
	*LQN21AR18J04	180	50	0.38	900	350																
	*LQN21AR22J04	220																				
*LQN21AR27K04	270	45	0.40				750	320														
*LQN21AR33K04	330																					
*LQN21AR39K04	390	30							0.47	350	390											
*LQN21AR47K04	470																					
*LQN21AR18J04	180	35										0.71	700	250								
*LQN21AR22J04	220																					
*LQN21AR27K04	270	15													0.70	500	240					
*LQN21AR33K04	330																					
*LQN21AR39K04	390	50		2.00	550	190																
*LQN21AR47K04	470																					
*LQN21AR10J04	100	15	2.20				500	180														
*LQN21AR12J04	120																					
*LQN21AR15J04	150	10							2.50	400	170											
*LQN21AR18J04	180																					
*LQN21AR22J04	220	50										2.80	350	160								
*LQN21AR27K04	270																					
<b>Tight Tolerance</b>																						
*LQN21A33NG04	33	$\pm 2\%$													100	10	70	10	250	0.15	1900	570
*LQN21A33NG04	39			20																		
*LQN21A33NG04	47			80	0.09	1700											730					
*LQN21A33NG04	56																					
*LQN21A33NG04	68		65	0.23			1600	450														
*LQN21A33NG04	82																					
*LQN21AR10G04	100		30						0.26	1500	430											
*LQN21AR12G04	120																					
*LQN21AR15G04	150		70									0.23	1200	460								
*LQN21AR18G04	180																					
*LQN21AR22G04	220	50	0.42												1100	320						
*LQN21AR27G04	270																					
*LQN21AR33G04	330	65			0.55	900											270					
*LQN21AR39G04	390																					
*LQN21AR47G04	470	80		0.40			750	320														
*LQN21AR56G04	560																					
*LQN21AR68G04	680	10							0.68	350	260											
*LQN21AR82G04	820																					
*LQN21AR100G04	1000	10										0.71	700	250								
*LQN21AR120G04	1200																					
*LQN21AR150G04	1500	10	0.02												500	240						
*LQN21AR180G04	1800																					
*LQN21AR220G04	2200	10			0.02	500											240					
*LQN21AR270G04	2700																					

※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														

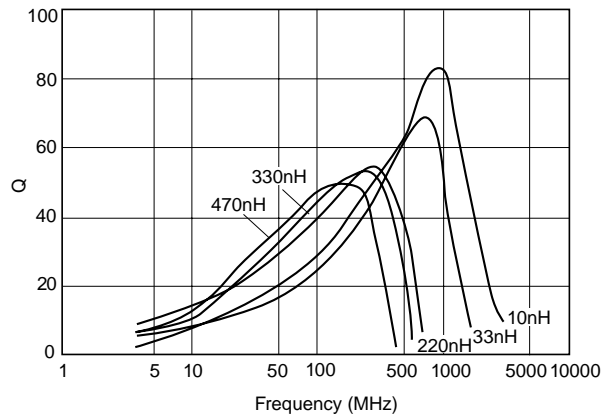
※1: Measured with LCR meter YHP4191A, measuring tap 16193A.

※2: Measured with Network Analyzer HP8753C.

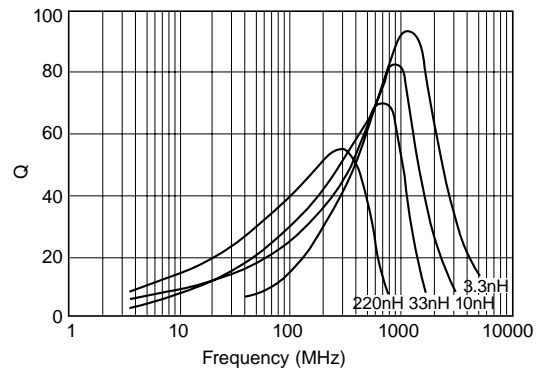
★Available as standard through authorized Murata Electronics Distributors.

### TYPICAL ELECTRICAL CHARACTERISTICS

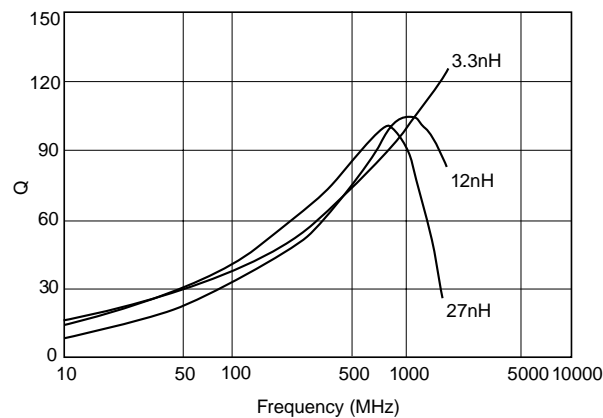
**Q-FREQUENCY CHARACTERISTICS**  
LQN21A□□□□04



**Q-FREQUENCY CHARACTERISTICS**  
LQN21A (Tight Inductance Tolerance)



**LQN21A□□□□44**



**INDUCTANCE-FREQUENCY CHARACTERISTICS**  
LQN21A□□□□44

