Tight Inductance Tolerance Chip Coil for High Frequency Application Small Size and Tight Inductance Tolerance (±0.2nH or ±2%)

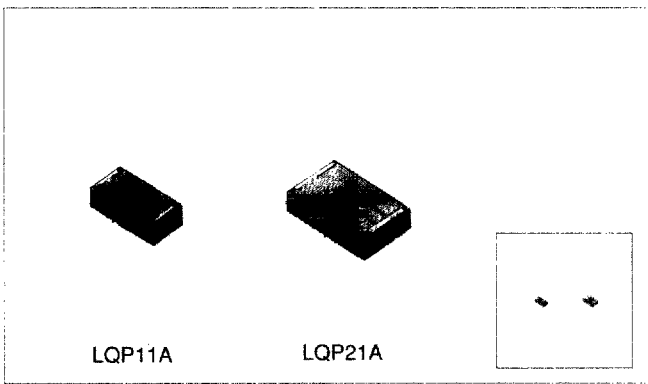
The LQP11A/LQP21A series consists of chip coils with a tight inductance tolerance (±0.2nH or ±2%) achieved even in low inductance region.

■FEATURES

1. Tight inductance tolerance (±0.2nH, ±2%) realized by thin-film technology enables assemble with no tuning.
2. High self resonant frequency due to low stray capacitance and close inductance distribution provide stable inductance in high frequency circuit such as telecommunication equipment.
3. Small size of 0603(LQP11A), 0805(LQP21A) is suitable for small handy equipment, especially for card size equipment.
4. The external electrodes with nickel barrier structure provide excellent solder heat resistance.

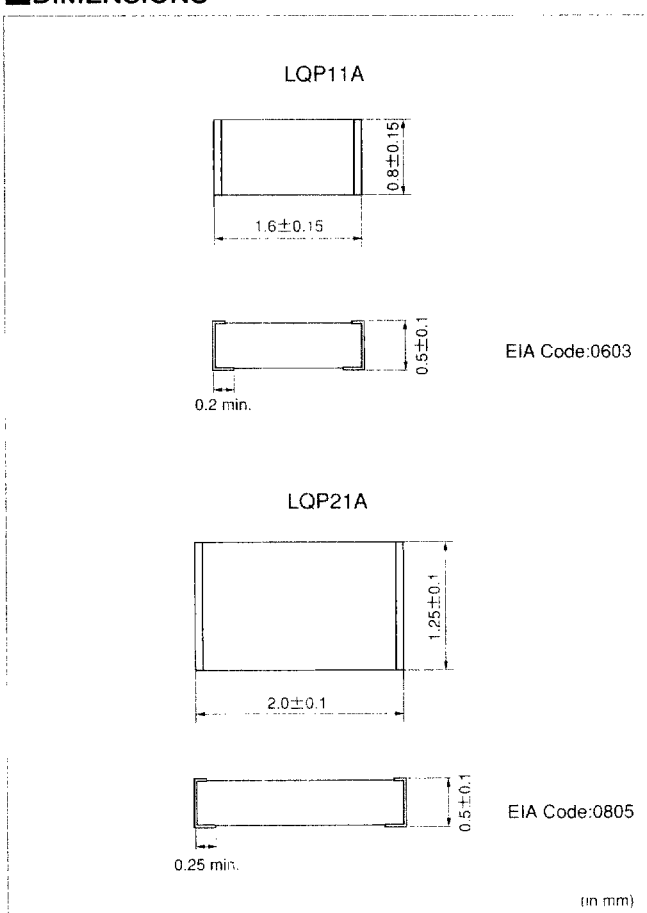
■APPLICATIONS

- High frequency circuit of telecommunication equipment, such as DECT, PHS, PCS, PCN, GSM



The appearance of coil pattern depends on the part number.

■DIMENSIONS



Use plastic tweezers when treating with tweezers.

■SPECIFICATIONS

LQP11A

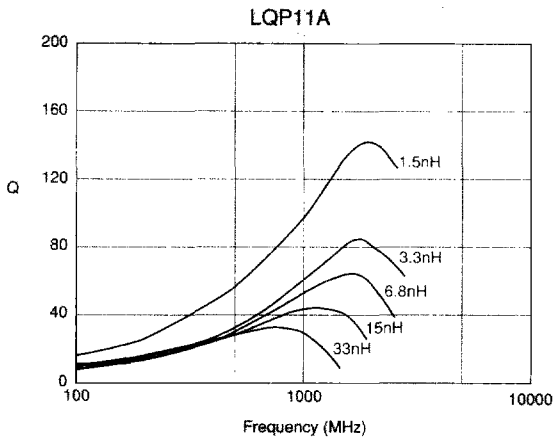
Part Number	Inductance			Q			DC Resistance (Ω max.)	Self-resonant Frequency (MHz min.)	Allowable Current (mA)	Operating Temp. Range
	Nominal Value (nH)	Tolerance	Test Frequency (MHz)	Peak Value (Typ.)	Min. Value	Test Frequency (MHz)				
LQP11A1N3C00	1.3	±0.2nH	500	160	17	500	0.3	6000	300	−40℃ to +85℃
LQP11A1N5C00	1.5			140						
LQP11A1N8C00	1.8			120			0.4		250	
LQP11A2N2C00	2.2			100						
LQP11A2N7C00	2.7			90						
LQP11A3N3C00	3.3			85						
LQP11A3N9C00	3.9			80			0.5	5900	200	
LQP11A4N7C00	4.7			75				5200		
LQP11A5N6C00	5.6			65			0.6	4700		
LQP11A6N8C00	6.8			63			0.7	4300		
LQP11A8N2C00	8.2			57			0.8	3600	150	
LQP11A10NG00	10	±2%		55			1.0	3400		
LQP11A12NG00	12			50				3000		
LQP11A15NG00	15			43			1.3	2700		
LQP11A18NG00	18			39			1.5	2300	100	
LQP11A22NG00	22			38			1.9	2100		
LQP11A27NG00	27			32			2.4	1900		
LQP11A33NG00	33			30			2.8	1700		

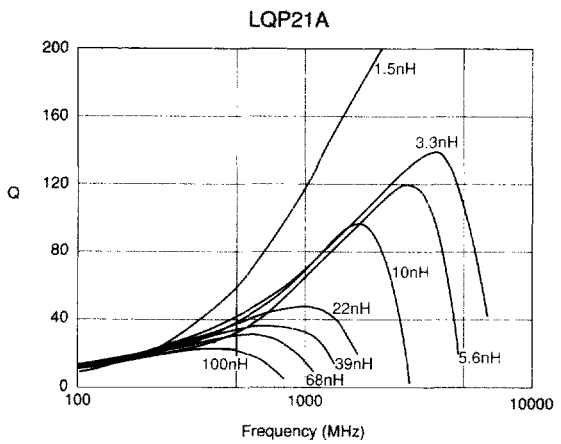
LQP21A

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)	Peak Value (Typ.)	Min. Value	Test Frequency (MHz)				
LQP21A1N5C14	1.5	±0.2nH	300	300	15	300	0.15	6000	550	−40℃ to +85℃
LQP21A1N8C14	1.8			250			0.2		500	
LQP21A2N2C14	2.2			200			0.25		450	
LQP21A2N7C14	2.7			150						
LQP21A3N3C14	3.3			125						
LQP21A3N9C14	3.9			120					400	
LQP21A4N7C14	4.7			115	17		0.3	5400		
LQP21A5N6C14	5.6			110				4500		
LQP21A6N8C14	6.8			100			0.35	4000	350	
LQP21A8N2C14	8.2			95			0.4	3400		
LQP21A10NG14	10	±2%		85				3200		
LQP21A12NG14	12			70			0.45	2900	300	
LQP21A15NG14	15			68			0.55	2500		
LQP21A18NG14	18			60			0.7	2300	250	
LQP21A22NG14	22			42			0.9	1800	200	
LQP21A27NG14	27			40			1.1	1600		
LQP21A33NG14	33			39			1.5	1500	150	
LQP21A39NG14	39			36				1300		
LQP21A47NG14	47			35			1.7	1200		
LQP21A56NG14	56			34			2.9	1100	100	
LQP21A68NG14	68			32			3.7	1000		
LQP21A82NG14	82			31			4.5	900		
LQP21AR10G14	100			24			6.0	700	90	

■TYPICAL ELECTRICAL CHARACTERISTICS

• Q - Frequency Characteristics





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• Inductance - Frequency Characteristics