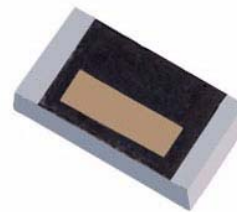


- Features:**
- A photo lithographic single layer ceramic chip
 - Provides high SRF, excellent Q, superior temperature stability
 - SRF controlled within 10%
 - Stable inductance in high frequency circuits
 - Highly stable design for critical needs
 - Tight tolerances of $\pm 1\%$ down to $\pm 0.1\text{nH}$ available
 - For inductance values outside those listed in the datasheet, contact factory
 - Find frequency curves, environmental and packaging specifications in relevant supplemental documents

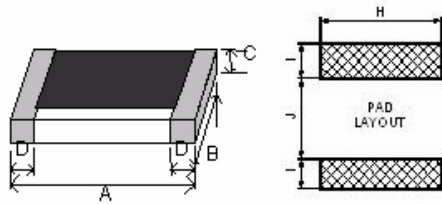


- Applications:**
- Cellular phones
 - Pagers
 - GPS receiver
 - Bluetooth module
 - VCO and TCXO circuits
 - RF transceiver modules
 - Wireless LAN
 - Communication appliances

- Inductance and Current Ranges:**
- AL01 1 – 10 nH 300 – 80 mA
 - AL02 0.2 – 33 nH 800 – 75 mA
 - AL02 1 – 100 nH 800 – 100 mA

How to Order

SEI Type		Dimensions		Tolerance		Packaging	Inductance	
AL		02		G		T	10N	
Type	Description	Code	EIA	Code	Tolerance		Code	Inductance
AL	Thin Film	01	0201	B	$\pm 0.1\text{ nH}$		0N2	0.2 nH
		02	0402	C	$\pm 0.2\text{ nH}$		1N0	1 nH
		03	0603	S	$\pm 0.3\text{ nH}$		10N	10 nH
				F	$\pm 1\%$		20N8	20.8 nH
				G	$\pm 2\%$		R10	100 nH
				H	$\pm 3\%$			
				J	$\pm 5\%$			



Mechanical Specifications - Standard

Type / Code	A	B	C	D	H	I	J	Units
AL01	0.024 ± 0.002 0.60 ± 0.05	0.012 ± 0.002 0.30 ± 0.05	0.009 ± 0.002 0.23 ± 0.05	0.006 ± 0.002 0.15 ± 0.05	0.02 0.5	0.016 0.4	0.008 0.2	inches mm
AL02	0.039 ± 0.002 1.00 ± 0.05	0.020 ± 0.002 0.50 ± 0.05	0.013 ± 0.002 0.32 ± 0.05	0.008 ± 0.004 0.20 ± 0.10	0.026 0.66	0.02 0.5	0.018 0.46	inches mm
AL03	0.063 ± 0.004 1.60 ± 0.10	0.032 ± 0.004 0.80 ± 0.10	0.018 ± 0.004 0.45 ± 0.10	0.012 ± 0.008 0.30 ± 0.20	0.04 1.02	0.025 0.64	0.025 0.64	inches mm

Electrical Characteristics – AL01

Part Number	L (nH)	Q Factor /Min	Test Freq (MHz)	Tolerance (% or nH)	SRF (GHz)	DCR (Ω) Max	I DC (mA) Max
AL01-T1N0	1.0	8	500	0.1nH, 0.2nH	9	0.30	300
AL01-T1N1	1.1	8	500	0.1nH, 0.2nH	9	0.35	300
AL01-T1N2	1.2	8	500	0.1nH, 0.2nH	9	0.35	300
AL01-T1N3	1.3	8	500	0.1nH, 0.2nH	9	0.45	250
AL01-T1N4	1.4	8	500	0.1nH, 0.2nH	9	0.45	250
AL01-T1N5	1.5	8	500	0.1nH, 0.2nH	9	0.45	250
AL01-T1N6	1.6	8	500	0.1nH, 0.2nH	9	0.55	200
AL01-T1N7	1.7	8	500	0.1nH, 0.2nH	9	0.55	200
AL01-T1N8	1.8	8	500	0.1nH, 0.2nH	9	0.55	200
AL01-T1N9	1.9	8	500	0.1nH, 0.2nH	9	0.55	200
AL01-T2N0	2.0	8	500	0.1nH, 0.2nH	8	0.70	200
AL01-T2N1	2.1	8	500	0.1nH, 0.2nH	8	0.70	200
AL01-T2N2	2.2	8	500	0.1nH, 0.2nH	8	0.70	200
AL01-T2N3	2.3	8	500	0.1nH, 0.2nH	8	0.80	150
AL01-T2N4	2.4	8	500	0.1nH, 0.2nH	8	0.80	150
AL01-T2N5	2.5	8	500	0.1nH, 0.2nH	8	0.80	150
AL01-T2N6	2.6	8	500	0.1nH, 0.2nH	8	0.80	150
AL01-T2N7	2.7	8	500	0.1nH, 0.2nH	8	0.80	150
AL01-T2N8	2.8	8	500	0.1nH, 0.2nH	6	1.00	150
AL01-T2N9	2.9	8	500	0.1nH, 0.2nH	6	1.00	150
AL01-T3N0	3.0	8	500	0.1nH, 0.2nH	6	1.00	150
AL01-T3N1	3.1	8	500	0.1nH, 0.2nH	6	1.00	150
AL01-T3N2	3.2	8	500	0.1nH, 0.2nH	6	1.00	150
AL01-T3N3	3.3	8	500	0.1nH, 0.2nH	6	1.00	150
AL01-T3N4	3.4	8	500	0.1nH, 0.2nH	6	1.20	150
AL01-T3N5	3.5	8	500	0.1nH, 0.2nH	6	1.20	150
AL01-T3N6	3.6	8	500	0.1nH, 0.2nH	6	1.20	150
AL01-T3N7	3.7	8	500	0.1nH, 0.2nH	6	1.20	150
AL01-T3N9	3.9	8	500	0.1nH, 0.2nH	6	1.20	150
AL01-T4N7	4.7	8	500	0.1nH, 0.2nH	6	1.40	130
AL01-T5N6	5.6	8	500	2%, 5%	4	1.80	130
AL01-T6N8	6.8	8	500	2%, 5%	4	2.30	110
AL01-T8N2	8.2	8	500	2%, 5%	3	3.00	110
AL01-T10N	10.0	8	500	2%, 5%	2	3.50	80

Electrical Characteristics – AL02

Part Number	L (nH)	Q Factor /Min	Test Freq (MHz)	Tolerance (% or nH)	SRF (GHz)	DCR (Ω) Max	I DC (mA) Max
AL02-T0N2	0.2	13	500	0.1nH, 0.2nH, 0.3nH	14.0	0.10	800
AL02-T0N4	0.4	13	500	0.1nH, 0.2nH, 0.3nH	14.0	0.10	800
AL02-T0N8	0.8	13	500	0.1nH, 0.2nH, 0.3nH	14.0	0.15	700
AL02-T1N0	1.0	13	500	0.1nH, 0.2nH, 0.3nH	12.0	0.15	700
AL02-T1N1	1.1	13	500	0.1nH, 0.2nH, 0.3nH	12.0	0.15	700
AL02-T1N2	1.2	13	500	0.1nH, 0.2nH, 0.3nH	12.0	0.15	700
AL02-T1N3	1.3	13	500	0.1nH, 0.2nH, 0.3nH	10.0	0.25	700
AL02-T1N4	1.4	13	500	0.1nH, 0.2nH, 0.3nH	10.0	0.25	700
AL02-T1N5	1.5	13	500	0.1nH, 0.2nH, 0.3nH	10.0	0.25	700
AL02-T1N6	1.6	13	500	0.1nH, 0.2nH, 0.3nH	10.0	0.25	560
AL02-T1N7	1.7	13	500	0.1nH, 0.2nH, 0.3nH	10.0	0.25	560
AL02-T1N8	1.8	13	500	0.1nH, 0.2nH, 0.3nH	10.0	0.25	560
AL02-T1N9	1.9	13	500	0.1nH, 0.2nH, 0.3nH	10.0	0.35	560
AL02-T2N0	2.0	13	500	0.1nH, 0.2nH, 0.3nH	8.0	0.35	560
AL02-T2N1	2.1	13	500	0.1nH, 0.2nH, 0.3nH	8.0	0.35	440
AL02-T2N2	2.2	13	500	0.1nH, 0.2nH, 0.3nH	8.0	0.35	440
AL02-T2N3	2.3	13	500	0.1nH, 0.2nH, 0.3nH	8.0	0.35	440
AL02-T2N4	2.4	13	500	0.1nH, 0.2nH, 0.3nH	8.0	0.35	440
AL02-T2N5	2.5	13	500	0.1nH, 0.2nH, 0.3nH	8.0	0.35	440
AL02-T2N6	2.6	13	500	0.1nH, 0.2nH, 0.3nH	8.0	0.35	440
AL02-T2N7	2.7	13	500	0.1nH, 0.2nH, 0.3nH	8.0	0.35	440
AL02-T2N8	2.8	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.45	380
AL02-T2N9	2.9	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.45	380
AL02-T3N0	3.0	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.45	380
AL02-T3N1	3.1	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.45	380
AL02-T3N2	3.2	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.45	380
AL02-T3N3	3.3	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.45	380
AL02-T3N4	3.4	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.55	380
AL02-T3N5	3.5	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.55	380
AL02-T3N6	3.6	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.55	380
AL02-T3N7	3.7	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.55	340
AL02-T3N8	3.8	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.55	340
AL02-T3N9	3.9	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.55	340
AL02-T4N7	4.7	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.65	320
AL02-T5N6	5.6	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.85	280
AL02-T5N9	5.9	13	500	0.1nH, 0.2nH, 0.3nH	6.0	0.85	280
AL02-T6N8	6.8	13	500	0.1nH, 0.2nH, 0.3nH	6.0	1.05	260
AL02-T7N2	7.2	13	500	0.1nH, 0.2nH, 0.3nH	6.0	1.05	260
AL02-T8N0	8.0	13	500	0.1nH, 0.2nH, 0.3nH	5.5	1.25	220
AL02-T8N2	8.2	13	500	0.1nH, 0.2nH, 0.3nH	5.5	1.25	220
AL02-T9N1	9.1	13	500	0.1nH, 0.2nH, 0.3nH	5.5	1.25	220
AL02-T10N	10.0	13	500	1%, 2%, 3%, 5%	4.5	1.35	200
AL02-T12N	12.0	13	500	1%, 2%, 3%, 5%	3.7	1.55	180
AL02-T13N8	13.8	13	500	1%, 2%, 3%, 5%	3.7	1.75	180
AL02-T15N	15.0	13	500	1%, 2%, 3%, 5%	3.3	1.75	130
AL02-T17N	17.0	13	500	1%, 2%, 3%, 5%	3.1	1.95	100
AL02-T18N	18.0	13	500	1%, 2%, 3%, 5%	3.1	2.15	100
AL02-T20N8	20.8	13	500	1%, 2%, 3%, 5%	2.8	2.55	90
AL02-T22N	22.0	13	500	1%, 2%, 3%, 5%	2.8	2.65	90
AL02-T27N	27.0	13	500	1%, 2%, 3%, 5%	2.5	3.25	75
AL02-T33N	33.0	13	500	5%	2.5	4.50	75

Electrical Characteristics – AL03

Part Number	L (nH)	Q Factor /Min	Test Freq (MHz)	Tolerance (% or nH)	SRF (GHz)	DCR (Ω) Max	I DC (mA) Max
AL03-T1N0	1.0	15	300	0.1nH, 0.2nH	13.0	0.35	800
AL03-T1N2	1.2	15	300	0.1nH, 0.2nH	13.0	0.35	800
AL03-T1N5	1.5	15	300	0.1nH, 0.2nH	10.0	0.35	800
AL03-T1N8	1.8	15	300	0.1nH, 0.2nH	10.0	0.35	300
AL03-T2N2	2.2	15	300	0.1nH, 0.2nH	8.0	0.35	300
AL03-T2N7	2.7	15	300	0.1nH, 0.2nH	6.0	0.45	300
AL03-T3N3	3.3	15	300	0.1nH, 0.2nH	6.0	0.45	300
AL03-T3N9	3.9	15	300	0.1nH, 0.2nH	6.0	0.45	300
AL03-T4N7	4.7	15	300	0.1nH, 0.2nH	5.0	0.55	300
AL03-T5N6	5.6	15	300	0.1nH, 0.2nH	5.0	0.65	300
AL03-T6N8	6.8	15	300	0.1nH, 0.2nH	5.0	0.75	300
AL03-T8N2	8.2	15	300	0.1nH, 0.2nH	4.0	0.95	300
AL03-T10N	10.0	15	300	1%, 2%, 3%, 5%	4.0	0.95	300
AL03-T12N	12.0	15	300	1%, 2%, 3%, 5%	3.0	1.05	300
AL03-T15N	15.0	15	300	1%, 2%, 3%, 5%	3.0	1.35	300
AL03-T18N	18.0	15	300	1%, 2%, 3%, 5%	2.0	1.65	300
AL03-T22N	22.0	15	300	1%, 2%, 3%, 5%	2.0	1.95	250
AL03-T27N	27.0	15	300	1%, 2%, 3%, 5%	2.0	2.35	250
AL03-T33N	33.0	15	300	1%, 2%, 3%, 5%	1.5	2.75	250
AL03-T39N	39.0	15	300	1%, 2%, 3%, 5%	1.5	3.00	200
AL03-T47N	47.0	15	300	1%, 2%, 3%, 5%	1.5	3.00	200
AL03-T56N	56.0	15	300	1%, 2%, 3%, 5%	1.0	5.00	150
AL03-T68N	68.0	15	300	1%, 2%, 3%, 5%	1.0	5.00	150
AL03-TR10	100.0	15	300	2%, 3%, 5%	1.0	7.50	100