



High Frequency, Surface Mount, Laser Spiral, Coated Inductors



FEATURES

- Very small in size.
- High self-resonant frequency values.
- High Q values relative to size at higher frequencies.
- Coated coil provides protection and moisture resistance.
- Compatible with vapor phase and infrared reflow soldering.
- Tape and reel packaging for automatic handling, 3000/reel, EIA-481.
- L and Q value not affected by mounting orientation.

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0nH to 220nH.

Inductance Tolerance: ± 0.3nH for 1.0 - 3.3nH.
± 5% for 3.9nH to 220nH.

Operating Temperature: - 40°C to + 100°C

Core Material: Ceramic.

TEST EQUIPMENT

- Inductance and Q measured on HP4291B.
- SRF measured on HP8753E.
- DCR measured on HP4338B.

STANDARD ELECTRICAL SPECIFICATIONS							
INDUCTANCE (nH)	TOLERANCE	TEST FREQ. L (MHz)	Q MINIMUM	TEST FREQ. Q (MHz)	SELF-RESONANT FREQ. MIN. (MHz)	DCR MAXIMUM (Ohms)	RATED DC CURRENT* (mA)
1.0	± 0.3nH, 0.2nH	100	30	1000	6000	0.06	500
1.2	± 0.3nH, 0.2nH	100	30	1000	6000	0.06	500
1.5	± 0.3nH, 0.2nH	100	30	1000	6000	0.07	500
1.8	± 0.3nH, 0.2nH	100	30	1000	6000	0.08	500
2.2	± 0.3nH, 0.2nH	100	30	1000	6000	0.09	500
2.7	± 0.3nH, 0.2nH	100	30	1000	6000	0.10	500
3.3	± 0.3nH, 0.2nH	100	30	1000	5500	0.12	500
3.9	± 5%	100	30	1000	5500	0.15	450
4.7	± 5%	100	30	1000	4800	0.17	450
5.6	± 5%	100	30	1000	4600	0.18	430
6.8	± 5%	100	30	1000	3550	0.20	430
8.2	± 5%	100	30	1000	3500	0.28	400
10	± 5%, 2%	100	30	500	2800	0.32	400
12	± 5%, 2%	100	30	500	2800	0.35	400
15	± 5%, 2%	100	30	500	2500	0.41	350
18	± 5%, 2%	100	30	500	2300	0.45	350
22	± 5%, 2%	100	30	500	2000	0.50	300
27	± 5%, 2%	100	30	500	2000	0.55	300
33	± 5%, 2%	100	30	500	1800	0.60	300
39	± 5%, 2%	100	30	500	1800	0.80	300
47	± 5%, 2%	100	30	500	1800	0.95	250
56	± 5%, 2%	100	30	500	1800	1.20	250
68	± 5%, 2%	100	30	500	1500	1.30	250
82	± 5%, 2%	100	30	500	1500	1.50	250
100	± 5%, 2%	100	26	500	1300	1.80	200
120	± 5%, 2%	100	26	500	1200	3.00	130
150	± 5%, 2%	100	26	500	1100	4.50	100
180	± 5%, 2%	100	20	500	1000	6.5	80
220	± 5%, 2%	100	20	500	900	7.5	70

*Value obtained when current flows and the temperature has risen 15°C

DIMENSIONS in inches [millimeters]		Recommended Pad Layout	

DESCRIPTION		
IMC-0603 MODEL	10nH INDUCTANCE VALUE	± 5% INDUCTANCE TOLERANCE

SAP PART NUMBERING GUIDELINES (INTERNAL)												
I	M	C	0	6	0	3	R	K	1	0	N	J
PRODUCT FAMILY			SIZE			PACKAGE CODE		INDUCTANCE VALUE			TOL.	

See the end of this data book for conversion tables