

Inductors

High Frequency, Surface Mount, Laser Spiral, Coated



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 & Q value not effected by mounting orientation.

Core Material: Non-Magnetic.

TEST EQUIPMENT

- Inductance and Q measured on HP4191A.
- SRF measured on HP8753B.

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.5nH to 100nH.

Inductance Tolerance: $\pm 0.3nH$, 1.5nH to 3.3nH. $\pm 5\%$, 3.9nH to 100nH.

Temperature Rating: - 40°C to + 105°C (no load)
- 40°C to + 85°C (at full rated current).

STANDARD ELECTRICAL SPECIFICATIONS

IND. (nH)	TOLERANCE	TEST FREQ. L & Q (MHz)	Q MINIMUM	Q TYPICAL			SELF-RESONANT FREQ. MIN. (MHz)	DCR MAXIMUM (Ohms)	RATED DC CURRENT (mA)
				100 (MHz)	800 (MHz)	1.8 (GHz)			
1.5	$\pm 0.3nH$ (or $\pm 20\%$)	100	8	18	50	75	6000	0.07	500
1.8	$\pm 0.3nH$ (or $\pm 16.7\%$)	100	8	18	48	72	6000	0.08	500
2.2	$\pm 0.3nH$ (or $\pm 13.6\%$)	100	8	15	38	55	6000	0.09	500
2.7	$\pm 0.3nH$ (or $\pm 11.1\%$)	100	8	16	40	60	6000	0.1	500
3.3	$\pm 0.3nH$ (or $\pm 9.1\%$)	100	9	15	42	60	5500	0.12	500
3.9	$\pm 5\%$	100	9	12	42	62	5500	0.15	450
4.7	$\pm 5\%$	100	9	16	45	65	4800	0.17	450
5.6	$\pm 5\%$	100	9	15	38	52	4600	0.18	430
6.8	$\pm 5\%$	100	9	19	50	70	3550	0.2	430
8.2	$\pm 5\%$	100	9	15	38	48	3500	0.28	400
10	$\pm 5\%$	100	10	18	45	58	2800	0.32	400
12	$\pm 5\%$	100	10	17	42	58	2800	0.35	400
15	$\pm 5\%$	100	10	17	40	50	2500	0.41	350
18	$\pm 5\%$	100	10	15	38	40	2300	0.45	350
22	$\pm 5\%$	100	10	16	45	-	2000	0.5	300
27	$\pm 5\%$	100	10	18	45	-	2000	0.55	300
33	$\pm 5\%$	100	10	16	40	-	1800	0.6	300
39	$\pm 5\%$	100	11	17	40	-	1800	0.8	300
47	$\pm 5\%$	100	11	17	45	-	1800	0.95	250
56	$\pm 5\%$	100	12	17	38	-	1800	1.2	250
68	$\pm 5\%$	100	12	18	35	-	1500	1.3	250
82	$\pm 5\%$	100	12	18	35	-	1500	1.5	250
100	$\pm 5\%$	100	12	17	30	-	1300	1.8	200

HOW TO ORDER

IMC-0603 MODEL 10nH INDUCTANCE VALUE $\pm 5\%*$ INDUCTANCE TOLERANCE

*Use tolerance % shown in electrical specifications in lieu of $\pm 0.3nH$ on 1.5 - 3.3nH.

DIMENSIONAL CONFIGURATIONS

[Numbers in brackets indicate millimeters]

