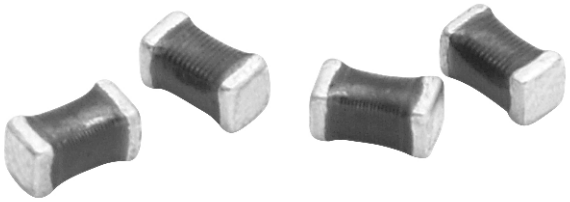
High Frequency, Surface Mount, Laser Spiral, Coated Inductors



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, 10 000/reel, EIA-481
- L and Q value not affected by mounting orientation
- 100 % lead (Pb)-free and RoHS compliant

Pb-free

RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 nH to 100 nH
Inductance and Tolerance: ± 0.3 nH for 1.0 - 5.6 nH
± 5 % for 6.8 nH to 100 nH
Operating Temperature: - 40 °C to + 100 °C
Core Material: Ceramic

TEST EQUIPMENT

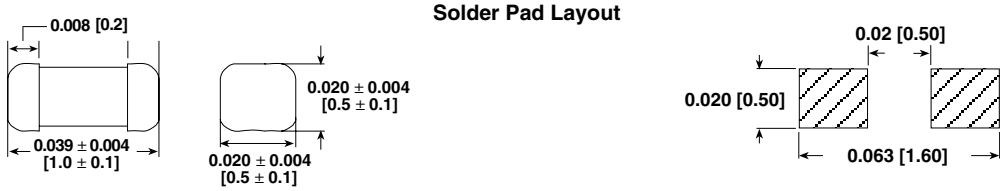
- Inductance and Q measured on HP4291B
- SRF measured on HP8753E
- DCR measured on HP4338B

STANDARD ELECTRICAL SPECIFICATIONS

INDUCTANCE (nH)	TOLERANCE	TEST FREQUENCY L (MHz)	Q TYPICAL	TEST FREQUENCY Q (MHz)	SELF-RESONANT FREQUENCY MINIMUM (MHz)	DCR MAXIMUM (Ohms)	RATED DC* CURRENT (mA)
1.0	± 0.3 nH, 0.2 nH	100	21	800	6000	0.05	400
1.2	± 0.3 nH, 0.2 nH	100	21	800	6000	0.06	400
1.5	± 0.3 nH, 0.2 nH	100	21	800	6000	0.07	400
1.8	± 0.3 nH, 0.2 nH	100	21	800	6000	0.08	400
2.2	± 0.3 nH, 0.2 nH	100	21	800	6000	0.09	400
2.7	± 0.3 nH, 0.2 nH	100	21	800	5500	0.10	400
3.3	± 0.3 nH, 0.2 nH	100	21	800	5500	0.12	400
3.9	± 0.3 nH, 0.2 nH	100	20	800	5200	0.15	360
4.7	± 0.3 nH, 0.2 nH	100	20	800	4800	0.17	360
5.6	± 0.3 nH, 0.2 nH	100	20	800	4600	0.19	340
6.8	± 5 %	100	19	800	4000	0.30	320
8.2	± 5 %	100	19	800	3500	0.35	320
10	± 5 %, 2 %	100	19	800	2800	0.41	320
12	± 5 %, 2 %	100	19	800	2800	0.45	320
15	± 5 %, 2 %	100	19	800	2500	0.60	240
18	± 5 %, 2 %	100	19	800	2200	0.70	240
22	± 5 %, 2 %	100	19	800	2000	0.80	200
27	± 5 %, 2 %	100	19	800	1800	1.20	200
33	± 5 %, 2 %	100	18	800	1800	1.40	170
39	± 5 %, 2 %	100	18	800	1800	1.70	150
47	± 5 %, 2 %	100	17	800	1800	2.10	140
56	± 5 %, 2 %	100	17	800	1500	2.50	130
68	± 5 %, 2 %	100	15	800	1500	4.00	120
82	± 5 %, 2 %	100	15	800	1400	4.50	110
100	± 5 %, 2 %	100	14	800	1200	5.50	90

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

DIMENSIONS in inches [millimeters]



DESCRIPTION

IMC-0402	10 nH	± 5 %	ER	e4
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	M	C	0	4	0	2	E	R	1	0	N	J
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

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