

# 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

### TEST EQUIPMENT

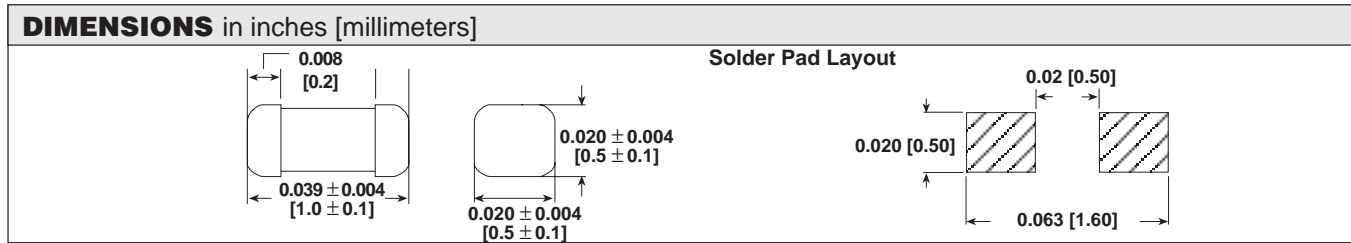
- Inductance and Q measured on HP4291B
- SRF measured on HP8753E
- DCR measured on HP4338B

### ELECTRICAL SPECIFICATIONS

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

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	± 0.3nH, 0.2nH	100	21	800	6000	0.05	400
1.2	± 0.3nH, 0.2nH	100	21	800	6000	0.06	400
1.5	± 0.3nH, 0.2nH	100	21	800	6000	0.07	400
1.8	± 0.3nH, 0.2nH	100	21	800	6000	0.08	400
2.2	± 0.3nH, 0.2nH	100	21	800	6000	0.09	400
2.7	± 0.3nH, 0.2nH	100	21	800	5500	0.10	400
3.3	± 0.3nH, 0.2nH	100	21	800	5500	0.12	400
3.9	± 0.3nH, 0.2nH	100	20	800	5200	0.15	360
4.7	± 0.3nH, 0.2nH	100	20	800	4800	0.17	360
5.6	± 0.3nH, 0.2nH	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



DESCRIPTION		
IMC-0402	10nH	± 5%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

**SAP PART NUMBERING GUIDELINES (INTERNAL)**

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

See the end of this data book for conversion tables