

# High Frequency, Surface Mount, Laser Spiral, Coated Inductors



## FEATURES

- Very small 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
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**

STANDARD ELECTRICAL SPECIFICATIONS							
IND. (nH)	TOL.	TEST FREQ. (MHz)		Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) <sup>(1)</sup>
		L	Q				
1.0	0.3 nH, 0.2 nH	100	1000	30	6000	0.06	500
1.2	0.3 nH, 0.2 nH	100	1000	30	6000	0.06	500
1.5	0.3 nH, 0.2 nH	100	1000	30	6000	0.07	500
1.8	0.3 nH, 0.2 nH	100	1000	30	6000	0.08	500
2.2	0.3 nH, 0.2 nH	100	1000	30	6000	0.09	500
2.7	0.3 nH, 0.2 nH	100	1000	30	6000	0.10	500
3.3	0.3 nH, 0.2 nH	100	1000	30	5500	0.12	500
3.9	5 %	100	1000	30	5500	0.15	450
4.7	5 %	100	1000	30	4800	0.17	450
5.6	5 %	100	1000	30	4600	0.19	430
6.8	5 %	100	1000	30	3550	0.20	430
8.2	5 %	100	1000	30	3500	0.28	400
10	5 %, 2 %	100	500	30	2800	0.32	400
12	5 %, 2 %	100	500	30	2800	0.35	400
15	5 %, 2 %	100	500	30	2500	0.41	350
18	5 %, 2 %	100	500	30	2300	0.45	350
22	5 %, 2 %	100	500	30	2000	0.50	300
27	5 %, 2 %	100	500	30	2000	0.55	300
33	5 %, 2 %	100	500	30	1800	0.60	300
39	5 %, 2 %	100	500	30	1800	0.80	300
47	5 %, 2 %	100	500	30	1800	0.95	250
56	5 %, 2 %	100	500	30	1800	1.20	250
68	5 %, 2 %	100	500	30	1500	1.30	250
82	5 %, 2 %	100	500	30	1500	1.50	250
100	5 %, 2 %	100	500	26	1300	1.80	200
120	5 %, 2 %	100	500	26	1200	3.00	130
150	5 %, 2 %	100	500	26	1100	4.50	100
180	5 %, 2 %	100	500	20	1000	6.50	80
220	5 %, 2 %	100	500	20	900	7.50	70

### Note

<sup>(1)</sup> Value obtained when current flows and temperature has risen 15 °C

## ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1.0 nH to 220 nH

**Inductance and Tolerance:** ± 0.3 nH for 1.0 nH to 3.3 nH,  
± 5 % for 3.9 nH to 220 nH

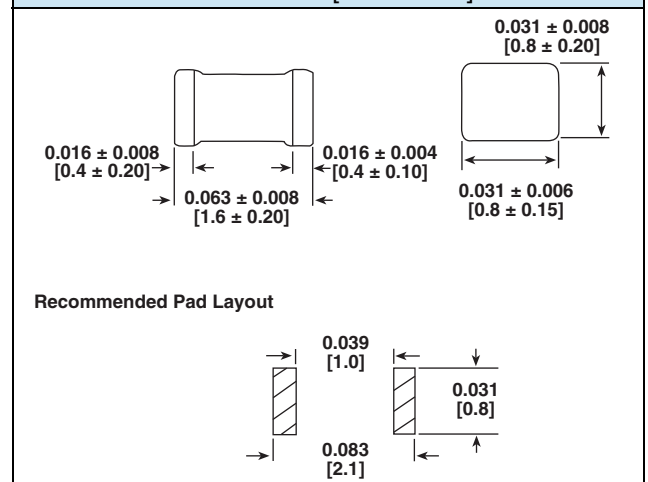
**Operating Temperature:** - 40 °C to + 100 °C

**Core Material:** Ceramic

## TEST EQUIPMENT

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

## DIMENSIONS in inches [millimeters]



## DESCRIPTION

<b>IMC-0603</b>	<b>10 nH</b>	<b>± 5 %</b>	<b>ER</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

## GLOBAL PART NUMBER

<b>I</b>	<b>M</b>	<b>C</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>3</b>	<b>E</b>	<b>R</b>	<b>1</b>	<b>0</b>	<b>N</b>	<b>J</b>
PRODUCT FAMILY			SIZE			PACKAGE CODE		INDUCTANCE VALUE			TOL.	



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