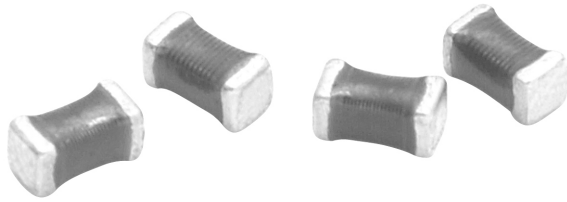


## High Frequency, Surface Mount, Laser Spiral Coated Inductors



### 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
- 100 % lead (Pb)-free and RoHS compliant



**RoHS**  
COMPLIANT

### ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 nH to 220 nH

Inductance Tolerance:  $\pm 0.3$  nH for 1.0 - 3.3 nH  
 $\pm 5\%$  for 3.9 nH to 220 nH

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

Material: Ceramic

### TEST EQUIPMENT

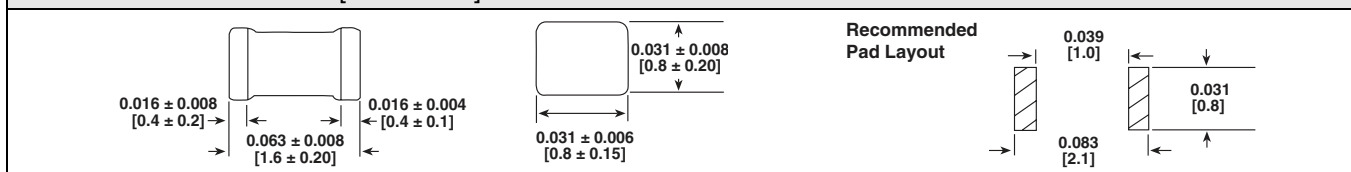
- Inductance and Q measured on HP4291B
- SRF measured on HP8753E
- DCR measured on HP4338B

### 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	$\pm 0.3$ nH, 0.2 nH	100	30	1000	6000	0.06	500
1.2	$\pm 0.3$ nH, 0.2 nH	100	30	1000	6000	0.06	500
1.5	$\pm 0.3$ nH, 0.2 nH	100	30	1000	6000	0.07	500
1.8	$\pm 0.3$ nH, 0.2 nH	100	30	1000	6000	0.08	500
2.2	$\pm 0.3$ nH, 0.2 nH	100	30	1000	6000	0.09	500
2.7	$\pm 0.3$ nH, 0.2 nH	100	30	1000	6000	0.10	500
3.3	$\pm 0.3$ nH, 0.2 nH	100	30	1000	5500	0.12	500
3.9	$\pm 5\%$	100	30	1000	5500	0.15	450
4.7	$\pm 5\%$	100	30	1000	4800	0.17	450
5.6	$\pm 5\%$	100	30	1000	4600	0.18	430
6.8	$\pm 5\%$	100	30	1000	3550	0.20	430
8.2	$\pm 5\%$	100	30	1000	3500	0.28	400
10	$\pm 5\%$ , 2%	100	30	500	2800	0.32	400
12	$\pm 5\%$ , 2%	100	30	500	2800	0.35	400
15	$\pm 5\%$ , 2%	100	30	500	2500	0.41	350
18	$\pm 5\%$ , 2%	100	30	500	2300	0.45	350
22	$\pm 5\%$ , 2%	100	30	500	2000	0.50	300
27	$\pm 5\%$ , 2%	100	30	500	2000	0.55	300
33	$\pm 5\%$ , 2%	100	30	500	1800	0.60	300
39	$\pm 5\%$ , 2%	100	30	500	1800	0.80	300
47	$\pm 5\%$ , 2%	100	30	500	1800	0.95	250
56	$\pm 5\%$ , 2%	100	30	500	1800	1.20	250
68	$\pm 5\%$ , 2%	100	30	500	1500	1.30	250
82	$\pm 5\%$ , 2%	100	30	500	1500	1.50	250
100	$\pm 5\%$ , 2%	100	26	500	1300	1.80	200
120	$\pm 5\%$ , 2%	100	26	500	1200	3.00	130
150	$\pm 5\%$ , 2%	100	26	500	1100	4.50	100
180	$\pm 5\%$ , 2%	100	20	500	1000	6.5	80
220	$\pm 5\%$ , 2%	100	20	500	900	7.5	70

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

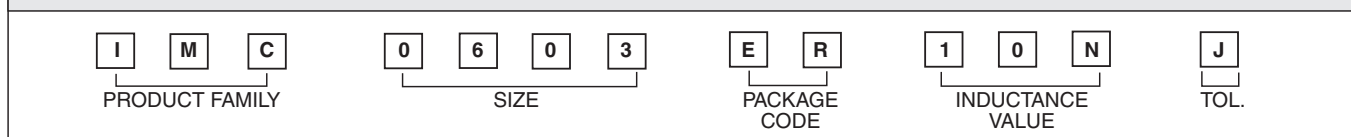
### DIMENSIONS in inches [millimeters]



### DESCRIPTION

IMC-0603	10 nH	$\pm 5\%$	ER	e4
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

### GLOBAL PART NUMBER





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