

## High Frequency, Surface Mount Inductors



STANDARD ELECTRICAL SPECIFICATIONS							
IND. (nH)	TOL.	TEST FREQ. (MHz)		Q MIN.	SRF MIN. (MHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (mA)
		L	Q				
3.3	0.3 nH	100	1000	50	6000	0.06	1000
6.8	5%	100	1000	50	5500	0.06	1000
8.2	5%	100	1000	50	5500	0.06	1000
10	5%	100	1000	50	4300	0.08	1000
12	5%	100	500	60	3600	0.08	1000
15	5%	100	500	60	2700	0.08	1000
18	5%	100	350	60	2700	0.10	1000
22	5%	100	350	60	2500	0.10	1000
27	5%	100	350	60	1800	0.10	1000
33	5%	100	350	60	1700	0.10	1000
39	5%	100	350	60	1500	0.10	1000
47	5%	100	350	60	1500	0.10	1000
56	5%	100	350	60	1350	0.12	1000
68	5%	100	350	60	1300	0.15	1000
82	5%	100	350	60	1100	0.18	1000
100	5%	100	350	60	1100	0.18	1000
120	5%	25	100	45	950	0.20	800
150	5%	25	100	45	880	0.22	800
180	5%	25	100	45	800	0.33	800
220	5%	25	100	45	730	0.45	800
270	5%	25	100	45	650	0.75	600
330	5%	25	100	45	570	0.90	500
390	5%	25	100	45	530	1.06	470
470	5%	25	100	45	480	1.17	420
560	5%	25	100	45	430	1.50	310
680	5%	25	100	45	380	2.06	230
750	5%	25	100	45	360	2.20	200
820	5%	25	100	45	350	2.30	180
910	5%	25	100	45	330	3.18	150
1000	5%	25	50	35	310	3.30	120
1200	5%	7.96	7.96	20	280	1.30	230
1500	5%	7.96	7.96	20	250	1.65	220
1800	5%	7.96	7.96	20	200	2.20	210
2200	5%	7.96	7.96	20	160	2.35	200
2700	5%	7.96	7.96	20	130	2.60	195
3300	5%	7.96	7.96	20	80	2.85	185
3900	5%	7.96	7.96	20	50	4.00	180
4700	5%	7.96	7.96	20	45	4.30	175
5600	5%	7.96	7.96	20	42	2.60	170
6800	5%	7.96	7.96	20	39	2.80	165
8200	5%	7.96	7.96	20	36	3.05	160
10 000	5%	2.52	2.52	15	33	3.50	150
12 000	5%	2.52	2.52	15	30	3.60	140
15 000	5%	2.52	2.52	15	26	4.00	130
18 000	5%	2.52	2.52	15	24	4.50	120
22 000	5%	2.52	2.52	15	22	4.80	110
27 000	5%	2.52	2.52	15	21	5.30	95
33 000	5%	2.52	2.52	15	20	6.10	85
39 000	5%	2.52	2.52	15	18	8.30	60
47 000	5%	2.52	2.52	15	17	12.00	45

### FEATURES

- High self-resonant frequency values
- High Q values at higher frequencies
- Wirewound construction
- Compatible with vapor phase and infrared reflow soldering
- Tape and reel packaging for automatic handling, 2000/reel
- Compliant to RoHS directive 2002/95/EC


**RoHS**  
COMPLIANT

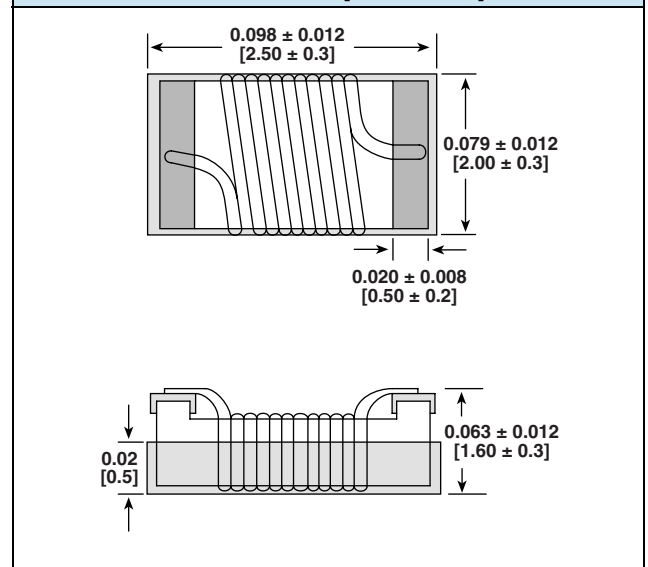
### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 3.3 nH to 47 000 nH  
**Inductance and Tolerance:** 0.3 nH for 3.3 nH  
 $\pm 5\%$  for 6.8 nH to 47 000 nH  
**Operating Temperature:** - 40 °C to + 125 °C  
**Core Material:** Ceramic from 3.3 nH to 1000 nH  
 Ferrite from 1200 nH to 47 000 nH

### TEST EQUIPMENT

- Inductance and Q measured on HP4286A
- SRF measured on HP8753D

### DIMENSIONS in inches [millimeters]

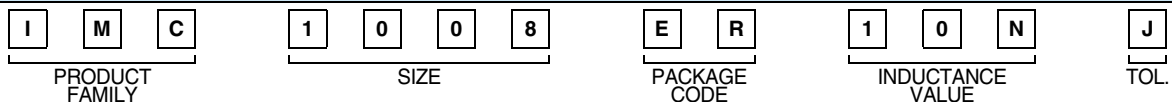


### DESCRIPTION

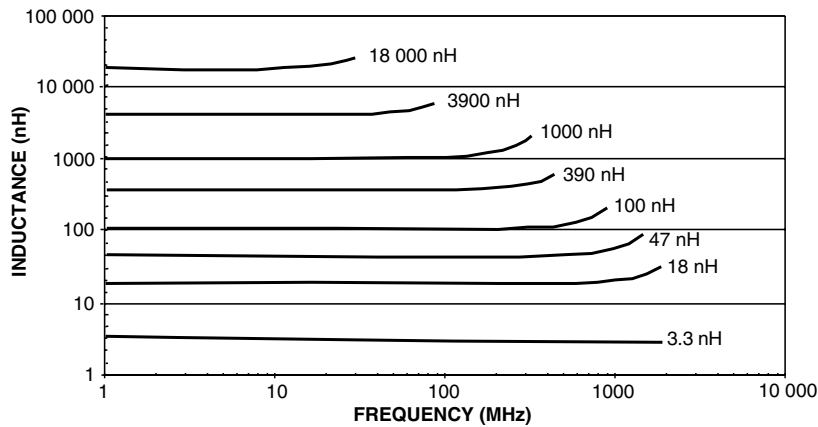
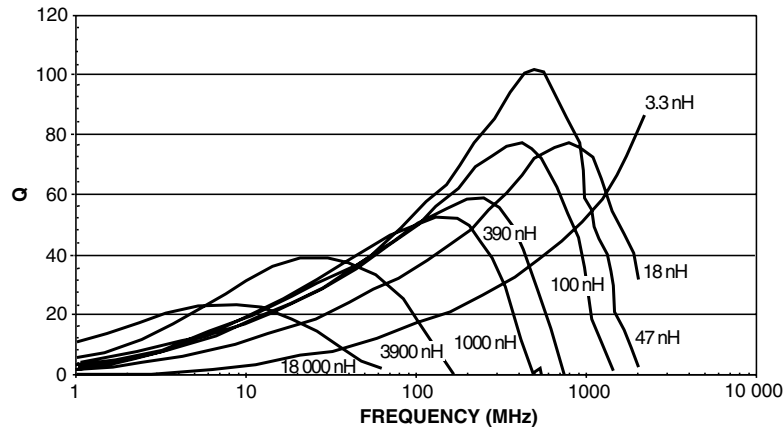
**IMC-1008**      **10 nH**       **$\pm 5\%$**       **ER**      **e4**  
 MODEL      INDUCTANCE VALUE      INDUCTANCE TOLERANCE      PACKAGE CODE      JEDEC LEAD (Pb)-FREE STANDARD

**Note** For parts within 3.3 nH to 910 nH please use e4 for JEDEC lead (Pb)-free standard. For parts within 1000 nH to 47 000 nH please use e3 for JEDEC lead (Pb)-free standard.

### GLOBAL PART NUMBER

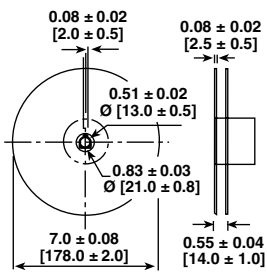


**PERFORMANCE GRAPHS IMC-1008**

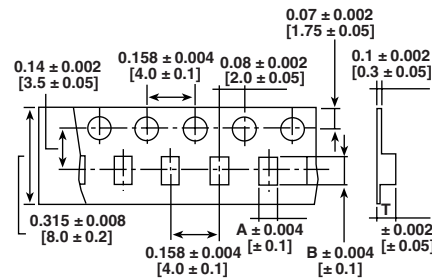


**TAPE AND REEL SPECIFICATIONS in inches [millimeters]**

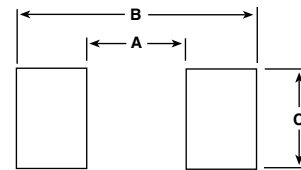
REEL DIMENSIONS



TAPE DIMENSIONS



RECOMMENDED PATTERN



MODEL	UNITS PER REEL	MODEL	A	B	T	MODEL	A	B	C
IMC-1008	2000	IMC-1008	0.087 [2.20]	0.110 [2.80]	0.071 [1.80]	IMC-1008	0.047 [1.20]	0.150 [3.80]	0.100 [2.54]



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