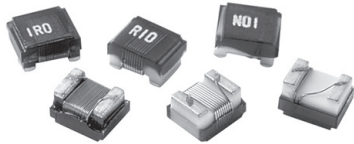


High Frequency, Surface Mount Inductor



FEATURES

- High self-resonant frequency values.
- High Q values at higher frequencies.
- Wirewound construction.
- Tape and reel packaging for automatic handling, 2000/reel.
- Compatible with vapor phase and infrared reflow soldering.

STANDARD ELECTRICAL SPECIFICATIONS

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

ELECTRICAL SPECIFICATIONS

Inductance Range: 3.3nH to 47,000nH.

Inductance Tolerance: 0.3nH for 3.3nH.

± 5% for 6.8nH to 47,000nH.

Operating Temperature: - 40°C to 125°C.

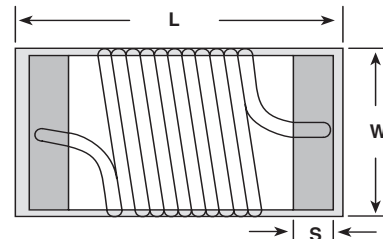
Core Material: Ceramic from 3.3nH to 1000nH.

Ferrite from 1200nH to 47,000nH.

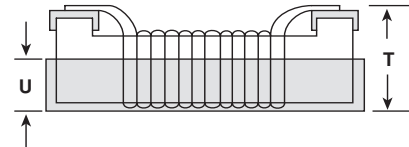
TEST EQUIPMENT

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

DIMENSIONS in inches [millimeters]



L	W	S
0.098 ± 0.008 [2.50 ± 0.2]	0.079 ± 0.008 [2.00 ± 0.2]	0.020 ± 0.008 [0.50 ± 0.2]



U	T
0.02 [0.5]	0.063 ± 0.008 [1.60 ± 0.2]

DESCRIPTION

IMC-1008	10nH	± 5%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

SAP PART NUMBERING GUIDELINES (INTERNAL)

I M C
PRODUCT FAMILY

1 0 0 8
SIZE

S Y
PACKAGE
CODE

1 0 N
INDUCTANCE
VALUE

J
TOL.

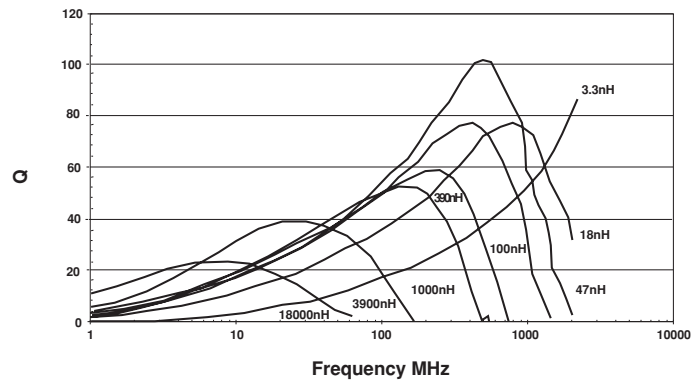
See the end of this data book for conversion tables



PERFORMANCE GRAPHS

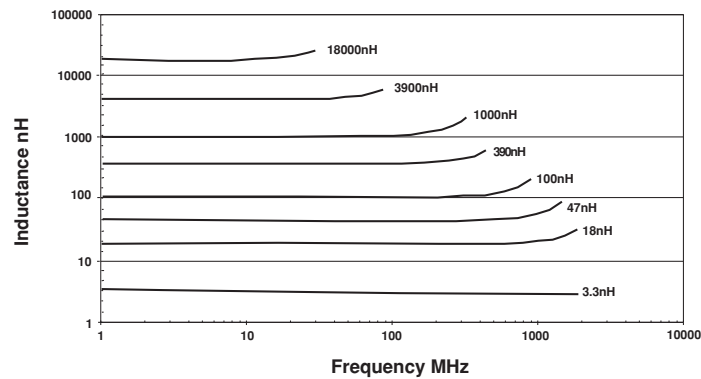
IMC-1008

Q vs Frequency



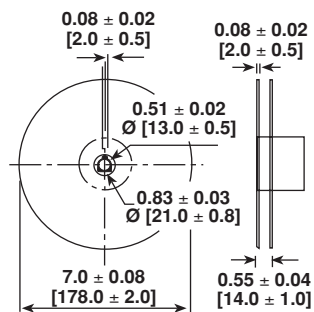
IMC-1008

Inductance vs Frequency

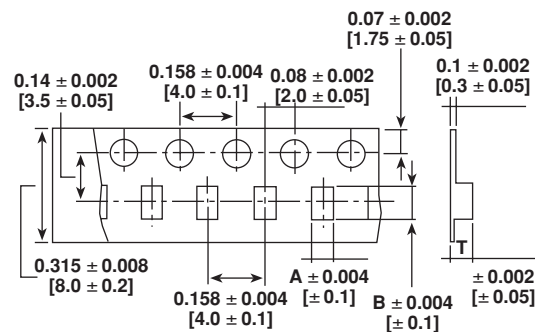


TAPE AND REEL SPECIFICATIONS in inches [millimeters]

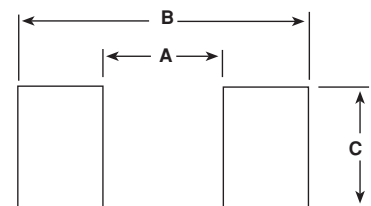
REEL DIMENSIONS



TAPE DIMENSIONS



RECOMMENDED PATTERN



MODEL	UNITS PER REEL	MODEL	A	B	T	MODEL	A	B	C
IMC-1008	2000	IMC-1008	0.087 [2.2]	0.110 [2.80]	0.071 [1.8]	IMC-1008	0.047 [1.20]	0.150 [3.8]	0.100 [2.54]