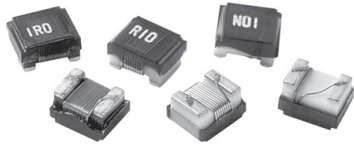


# High Frequency, Surface Mount Inductor



## 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	600
6.8	± 5%	100	50	1000	5500	0.06	600
8.2	± 5%	100	50	1000	5500	0.06	600
10	± 5%	100	50	1000	4300	0.08	600
12	± 5%	100	60	500	3600	0.08	600
15	± 5%	100	60	500	2700	0.08	600
18	± 5%	100	60	350	2700	0.10	600
22	± 5%	100	60	350	2500	0.10	600
27	± 5%	100	60	350	1800	0.10	600
33	± 5%	100	60	350	1700	0.10	600
39	± 5%	100	60	350	1500	0.10	600
47	± 5%	100	60	350	1500	0.10	600
56	± 5%	100	60	350	1350	0.12	600
68	± 5%	100	60	350	1300	0.15	600
82	± 5%	100	60	350	1100	0.18	600
100	± 5%	100	60	350	1100	0.18	500
120	± 5%	25	50	100	950	0.20	500
150	± 5%	25	50	100	880	0.22	500
180	± 5%	25	50	100	800	0.33	500
220	± 5%	25	45	100	730	0.45	500
270	± 5%	25	45	100	650	0.75	500
330	± 5%	25	45	100	570	0.90	500
390	± 5%	25	45	100	530	1.20	400
470	± 5%	25	45	100	480	1.30	400
560	± 5%	25	45	100	430	1.45	300
680	± 5%	25	45	100	380	2.45	200
820	± 5%	25	45	100	350	2.75	150
1000	± 5%	25	35	50	310	3.60	90
1200	± 5%	7.96	30	7.96	230	1.20	230
1500	± 5%	7.96	30	7.96	182	1.30	220
1800	± 5%	7.96	30	7.96	135	1.45	210
2200	± 5%	7.96	30	7.96	105	1.55	200
2700	± 5%	7.96	30	7.96	70	1.70	195
3300	± 5%	7.96	30	7.96	55	1.90	185
3900	± 5%	7.96	30	7.96	48	2.10	180
4700	± 5%	7.96	30	7.96	43	2.30	175
5600	± 5%	7.96	25	7.96	42	2.60	170
6800	± 5%	7.96	25	7.96	39	2.80	165
8200	± 5%	7.96	25	7.96	36	3.05	160
10,000	± 5%	2.52	20	2.52	33	3.50	155
12,000	± 5%	2.52	20	2.52	30	3.80	150
15,000	± 5%	2.52	20	2.52	26	4.40	140
18,000	± 5%	2.52	20	2.52	24	4.80	130
22,000	± 5%	2.52	20	2.52	22	5.50	125

## ELECTRICAL SPECIFICATIONS

Inductance Range: 3.3nH to 22,000nH.

Inductance Tolerance: 0.3nH for 3.3nH.  
± 5% for 6.8nH to 22,000nH.

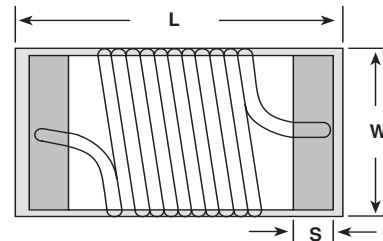
Operating Temperature: - 40°C to 125°C.

Core Material: Ceramic from 3.3nH to 1000nH.  
Ferrite from 1200nH to 22,000nH.

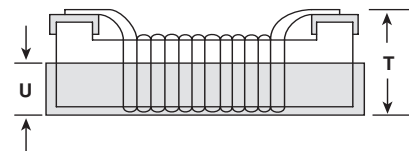
## TEST EQUIPMENT

- 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]

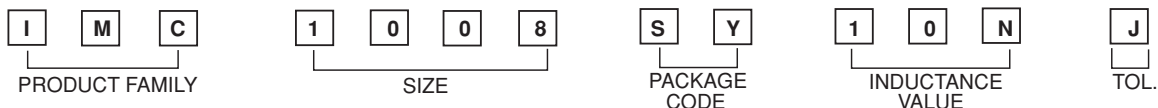


U	T
0.02 [0.5]	0.063 ± 0.008 [1.60 ± 0.2]

## DESCRIPTION

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

## SAP PART NUMBERING GUIDELINES (INTERNAL)



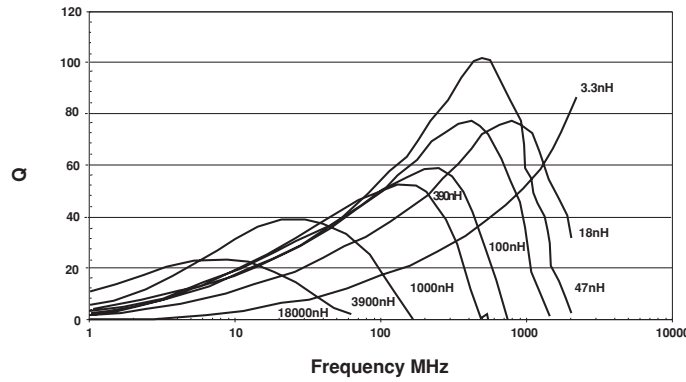
See the end of this data book for conversion tables



**PERFORMANCE GRAPHS**

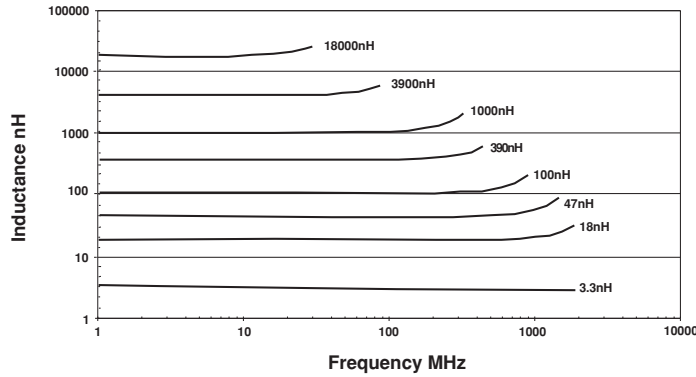
IMC-1008

**Q vs Frequency**



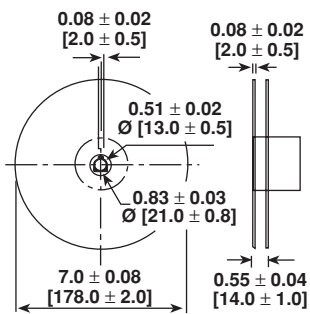
IMC-1008

**Inductance vs Frequency**

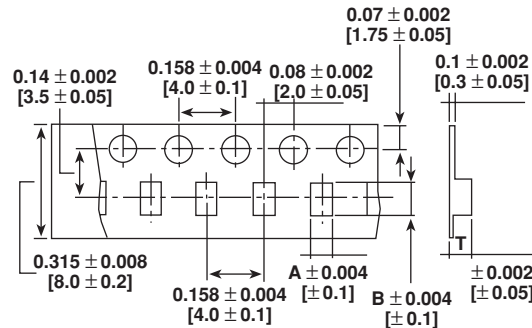


**TAPE AND REEL SPECIFICATIONS** in inches [millimeters]

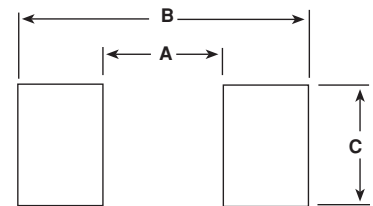
**REEL DIMENSIONS**



**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]