

# 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)
2.2	± 0.3nH, 0.2nH	250	50	1000	6000	0.06	600
2.7	± 0.3nH, 0.2nH	250	35	1000	6000	0.08	600
3.9	± 0.3nH, 0.2nH	250	60	1000	6000	0.06	600
4.7	± 0.3nH, 0.2nH	250	60	1000	5800	0.06	600
5.6	± 5%, 2%	250	60	1000	5800	0.08	600
6.8	± 5%, 2%	250	60	1000	5500	0.06	600
8.2	± 5%, 2%	250	60	1000	5500	0.06	600
10	± 5%, 2%	250	60	500	4800	0.08	600
12	± 5%, 2%	250	60	500	4100	0.08	600
15	± 5%, 2%	250	60	500	3600	0.08	600
18	± 5%, 2%	250	60	500	3400	0.08	600
22	± 5%, 2%	250	60	500	3300	0.10	600
27	± 5%, 2%	250	60	500	2600	0.12	600
33	± 5%, 2%	250	60	500	2400	0.15	500
39	± 5%, 2%	250	60	500	2100	0.18	500
47	± 5%, 2%	200	60	500	1700	0.15	500
56	± 5%, 2%	200	60	500	1600	0.25	500
68	± 5%, 2%	200	60	500	1450	0.27	500
82	± 5%, 2%	150	60	500	1350	0.32	500
100	± 5%, 2%	150	60	500	1200	0.43	500
120	± 5%, 2%	150	50	250	1100	0.48	500
150	± 5%, 2%	100	50	250	950	0.67	400
180	± 5%, 2%	100	50	250	900	0.85	350
220	± 5%, 2%	100	50	250	860	1.10	300
270	± 5%, 2%	100	45	250	850	1.46	250
330	± 5%, 2%	100	45	250	800	1.65	200
390	± 5%, 2%	100	45	250	780	2.20	170
470	± 5%, 2%	25	45	100	750	0.99	330
560	± 5%, 2%	25	45	100	730	1.08	300
680	± 5%, 2%	25	35	100	650	1.20	280
820	± 5%, 2%	25	35	100	550	2.21	150
1000	± 5%, 2%	25	35	50	480	2.50	120
1200	± 5%, 2%	7.96	15	7.96	220	0.85	400
1500	± 5%, 2%	7.96	15	7.96	200	1.00	350
1800	± 5%, 2%	7.96	15	7.96	120	1.05	350
2200	± 5%, 2%	7.96	15	7.96	100	1.15	320
2700	± 5%, 2%	7.96	15	7.96	100	1.25	320
3300	± 5%, 2%	7.96	15	7.96	70	1.45	300
3900	± 5%, 2%	7.96	15	7.96	60	1.60	270
4700	± 5%, 2%	7.96	15	7.96	50	1.75	270
5600	± 5%, 2%	7.96	15	7.96	45	1.95	230
6800	± 5%, 2%	7.96	15	7.96	45	2.15	230
8200	± 5%, 2%	7.96	15	7.96	40	2.95	150
10,000	± 5%, 2%	7.96	10	7.96	40	3.15	150

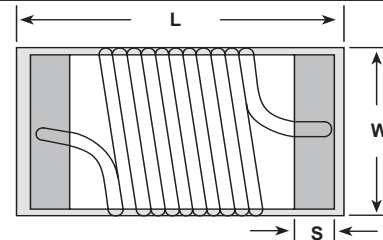
### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 2.2nH to 10,000nH.  
**Inductance Tolerance:** 0.3nH for 2.2 - 4.7nH  
 ± 5% for 5.6nH to 10,000nH.  
**Temperature Range:** - 40°C to 125°C.  
**Core Material:** Ceramic for 2.2nH to 390nH  
 Ferrite for 470nH to 10,000nH.

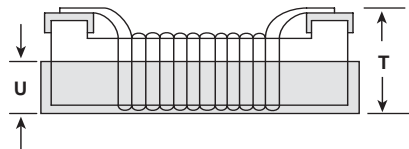
### TEST EQUIPMENT

- Inductance and Q measured on HP4286A (2.2nH - 390nH) and HP4285A (470nH - 10,000nH).
- SRF measured on HP8753E.
- DCR measured on HP4338B.

### DIMENSIONS in inches [millimeters]



L	W	S
0.079 ± 0.008 [2.00 ± 0.2]	0.050 ± 0.008 [1.25 ± 0.2]	0.016 ± 0.008 [0.40 ± 0.2]

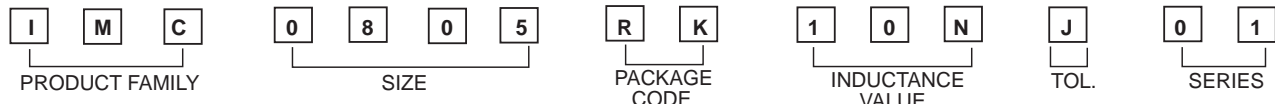


U	T
0.2 [0.5]	0.048 ± 0.008 [1.20 ± 0.2]

### DESCRIPTION

IMC-0805-01	10nH	± 5%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

### SAP PART NUMBERING GUIDELINES (INTERNAL)

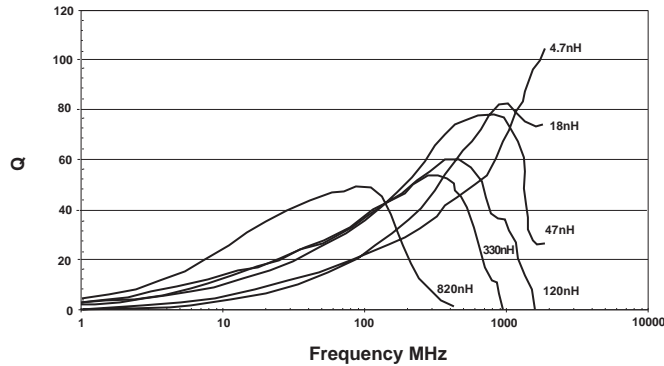


See the end of this data book for conversion tables

**PERFORMANCE GRAPHS**

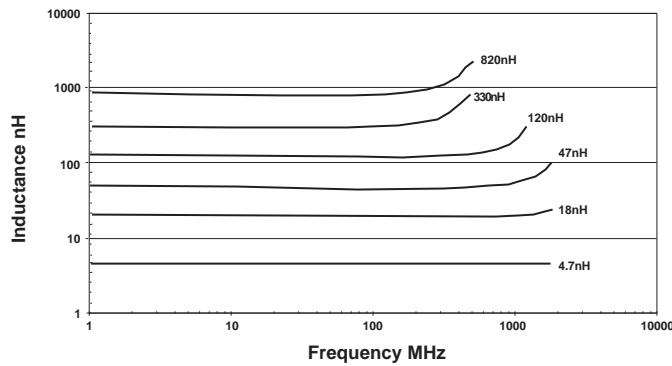
IMC-0805-01

**Q vs Frequency**



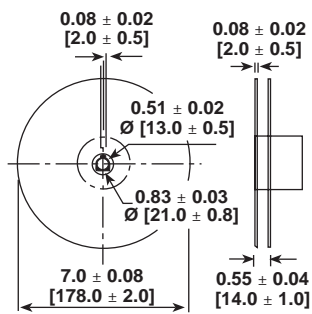
IMC-0805-01

**Inductance vs Frequency**

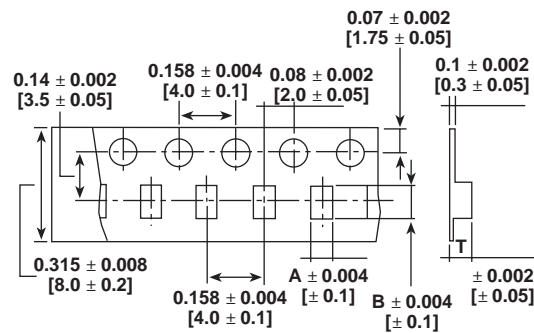


**TAPE AND REEL SPECIFICATIONS in inches [millimeters]**

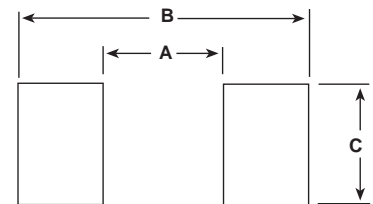
**REEL DIMENSIONS**



**TAPE DIMENSIONS**



**RECOMMENDED PATTERN**



MODEL	UNITS PER REEL	MODEL	A	B	T	MODEL	A	B	C
IMC-0805-01	2000	IMC-0805-01	0.055 [1.4]	0.091 [2.3]	0.055 [1.4]	IMC-0805-01	0.047 [1.20]	0.102 [2.6]	0.047 [1.20]