



IMC-0805-01

Vishay Dale

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



RoHS COMPLIANT

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	± 0.3 nH, 0.2 nH	250	50	1000	6000	0.06	800
2.7	± 0.3 nH, 0.2 nH	250	35	1000	6000	0.08	800
3.3	± 0.3 nH, 0.2 nH	250	60	1000	6000	0.08	800
3.9	± 0.3 nH, 0.2 nH	250	60	1000	6000	0.06	600
4.7	± 0.3 nH, 0.2 nH	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	0.56	400
180	± 5%, 2%	100	50	250	900	0.78	400
220	± 5%, 2%	100	50	250	860	1.00	400
270	± 5%, 2%	100	45	250	850	1.46	350
330	± 5%, 2%	100	45	250	800	1.65	300
390	± 5%, 2%	100	45	250	780	2.20	210
470	± 5%	25.2	45	100	375	0.95	500
560	± 5%	25.2	45	100	340	1.10	450
680	± 5%	25.2	35	100	188	1.20	400
820	± 5%	25.2	35	100	215	1.50	300
1000	± 5%	25.2	35	50	200	2.13	180
1200	± 5%	7.96	15	7.96	200	2.38	150
1500	± 5%	7.96	15	7.96	200	2.90	130
1800	± 5%	7.96	15	7.96	120	3.00	120
2200	± 5%	7.96	15	7.96	110	3.10	110
2700	± 5%	7.96	15	7.96	100	3.50	100
3300	± 5%	7.96	15	7.96	70	2.30	210
3900	± 5%	7.96	15	7.96	60	2.50	200
4700	± 5%	7.96	15	7.96	50	2.80	180
5600	± 5%	7.96	15	7.96	45	3.00	160
6800	± 5%	7.96	15	7.96	45	3.20	130
8200	± 5%	7.96	15	7.96	40	3.50	120
10 000	± 5%	2.52	10	2.52	40	5.00	80

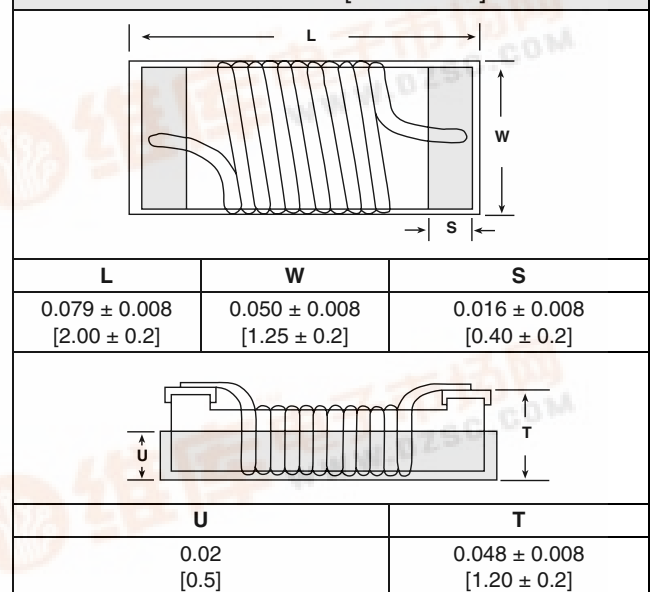
ELECTRICAL SPECIFICATIONS

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

TEST EQUIPMENT

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

DIMENSIONS in inches [millimeters]



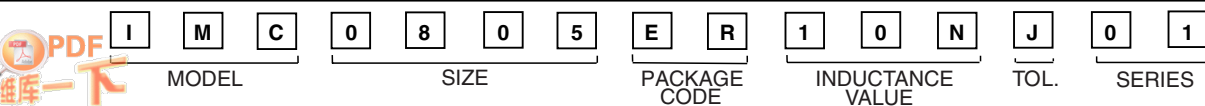
DESCRIPTION

IMC-0805-01 10 nH ± 5% ER e4*

MODEL INDUCTANCE VALUE INDUCTANCE TOLERANCE PACKAGE CODE JEDEC LEAD (Pb)-FREE STANDARD

*NOTE: For parts within 2.2 nH to 390 nH please use e4 for JEDEC lead (Pb)-free standard. For parts within 470 nH to 10 000 nH please use e3 for JEDEC lead (Pb)-free standard.

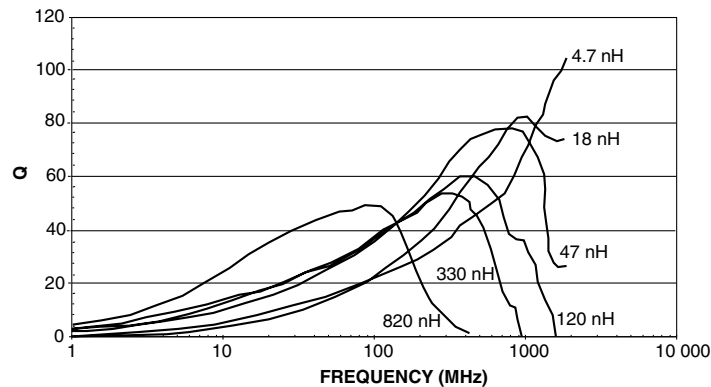
GLOBAL PART NUMBER



PERFORMANCE GRAPHS

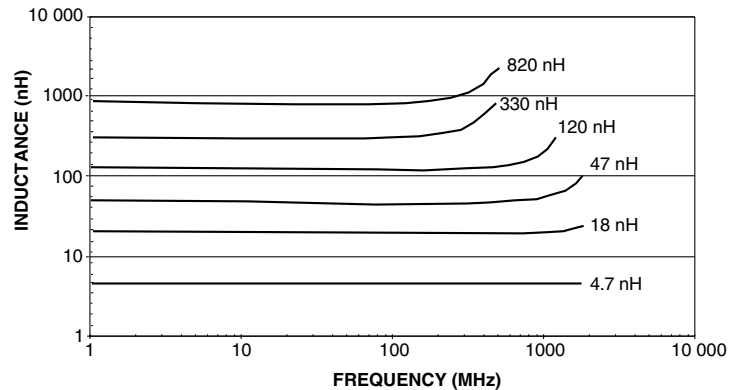
IMC-0805-01

Q VS FREQUENCY



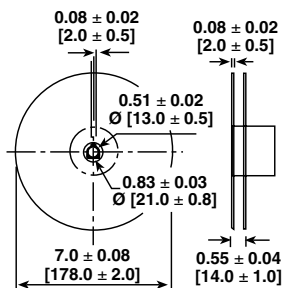
IMC-0805-01

INDUCTANCE VS FREQUENCY

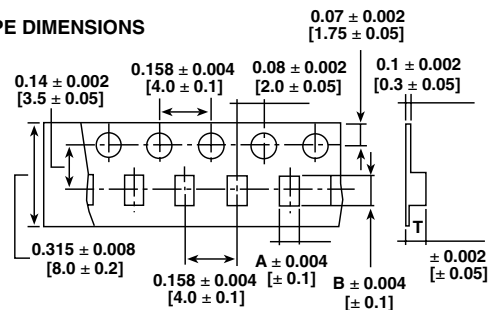


TAPE AND REEL SPECIFICATIONS in inches [millimeters]

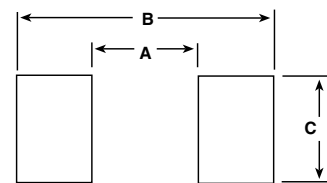
REEL DIMENSIONS



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]



Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.