

Wirewound, Surface Mount Inductors



RoHS
COMPLIANT
HALOGEN
FREE

STANDARD ELECTRICAL SPECIFICATIONS						
IND. (nH)	TOL.	TEST FREQ. (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) ⁽¹⁾
		L & Q				
1.0	0.3 nH, 0.2 nH	250	13	6000	0.045	1360
1.9	0.3 nH, 0.2 nH	250	16	6000	0.070	1040
2.0	0.3 nH, 0.2 nH	250	16	6000	0.070	1040
2.2	0.3 nH, 0.2 nH	250	18	6000	0.070	960
2.4	0.3 nH, 0.2 nH	250	16	6000	0.068	790
2.7	0.3 nH, 0.2 nH	250	16	6000	0.120	640
3.3	0.3 nH, 0.2 nH	250	20	6000	0.066	840
3.6	0.3 nH, 0.2 nH	250	20	6000	0.066	840
3.9	10 %, 5 %	250	20	6000	0.066	840
4.3	10 %, 5 %	250	18	6000	0.091	700
4.7	10 %, 5 %	250	15	4775	0.130	640
5.1	10 %, 5 %	250	23	5800	0.083	800
5.6	10 %, 5 %	250	23	5800	0.083	760
6.2	10 %, 5 %	250	23	5800	0.083	760
6.8	10 %, 5 %	250	20	4800	0.083	680
7.5	10 %, 5 %	250	25	5800	0.104	680
8.2	10 %, 5 %	250	25	4400	0.104	680
8.7	10 %, 5 %	250	18	4100	0.200	480
9.0	10 %, 5 %	250	25	4160	0.104	680
9.5	10 %, 5 %	250	18	4000	0.200	680
10	5 %, 2 %	250	23	3900	0.195	480
11	5 %, 2 %	250	26	3680	0.120	640
12	5 %, 2 %	250	26	3600	0.120	640
13	5 %, 2 %	250	24	3450	0.210	560
15	5 %, 2 %	250	26	3280	0.172	560
16	5 %, 2 %	250	24	3100	0.220	560
18	5 %, 2 %	250	25	3100	0.230	420
19	5 %, 2 %	250	26	3040	0.202	480
20	5 %, 2 %	250	25	3000	0.250	420
22	5 %, 2 %	250	25	2800	0.300	400
23	5 %, 2 %	250	26	2720	0.214	400
24	5 %, 2 %	250	25	2700	0.298	400
27	5 %, 2 %	250	26	2480	0.300	400
30	5 %, 2 %	250	25	2350	0.300	400
33	5 %, 2 %	250	24	2350	0.350	400
36	5 %, 2 %	250	26	2320	0.403	320
39	5 %, 2 %	250	25	2100	0.550	320
40	5 %, 2 %	250	26	2240	0.438	320
43	5 %, 2 %	250	25	2030	0.810	100
47	5 %, 2 %	200	26	2100	0.830	150
51	5 %	200	25	1750	0.820	100
56	5 %	200	22	1760	0.970	100
68	5 %	200	22	1620	1.120	100
82	5 %	150	20	1500	1.250	100
100	5 %	150	20	1300	2.520	100
120	5 %	150	20	1100	2.660	100

Note
⁽¹⁾ Value obtained when current flows and temperature has risen 15 °C

FEATURES

- Excellent solderability and resistance to soldering heat
- Suitable for reflow soldering
- High reliability and easy surface mount assembly
- Wide range of inductance values available
- Tape and reel packaging for automatic handling, 10 000/reel EIA 481
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

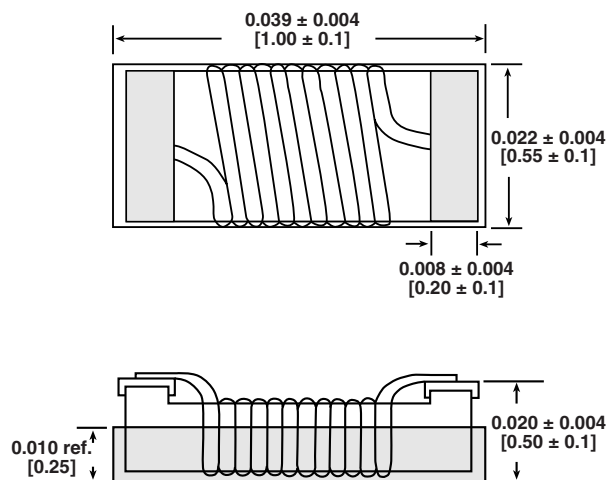
ELECTRICAL SPECIFICATIONS
Inductance Range: 1 nH to 47 nH

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

Storage Temperature: - 40 °C to + 125 °C

TEST EQUIPMENT

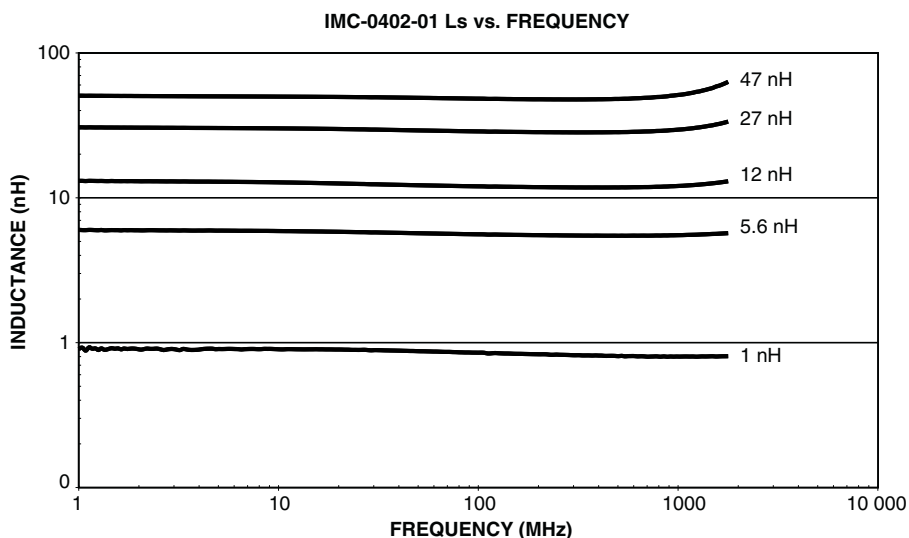
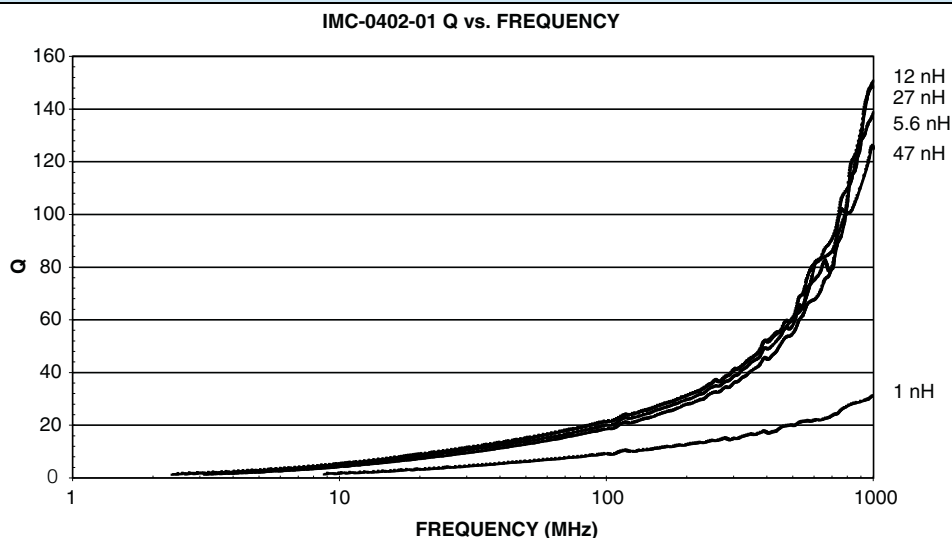
- Inductance is measured in HP4287A RF LCR meter with HP16193 fixture
- Q is measured in HP4287A RF LCR meter with HP16193 fixture
- SRF is measured in HP8753E RF network analyzer
- DCR is measured in HP4338B milliohmmeter

DIMENSIONS in inches [millimeters]

DESCRIPTION

IMC-0402-01	10 nH	± 5 %	ER	e4
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	M	C	0	4	0	2	E	R	1	0	N	J	0	1
PRODUCT FAMILY			SIZE			PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES		

PERFORMANCE GRAPHS (IMC-0402-01)

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-0402-01	10 000	IMC-0402-01	0.028 [0.70]	0.047 [1.20]	0.028 [0.70]	IMC-0402-01	0.018 [0.45]	0.063 [1.60]	0.0256 [0.65]



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

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 in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

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