



IMC-0402-01

Vishay Dale

Surface Mount Inductor, Wirewound



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
- Lead (Pb)-free construction

RoHS
COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

IND. (nH)	TOL.	TEST FREQ. L and Q (MHz)	Q MIN	SELF- RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	*RATED DC CURRENT (mA)
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
10.0	± 5 %, 2 %	250	23	3900	0.195	480
11.0	± 5 %, 2 %	250	26	3680	0.120	640
12.0	± 5 %, 2 %	250	26	3600	0.120	640
13.0	± 5 %, 2 %	250	24	3450	0.210	560
15.0	± 5 %, 2 %	250	26	3280	0.172	560
16.0	± 5 %, 2 %	250	24	3100	0.220	560
18.0	± 5 %, 2 %	250	25	3100	0.230	420
19.0	± 5 %, 2 %	250	26	3040	0.202	480
20.0	± 5 %, 2 %	250	25	3000	0.250	420
22.0	± 5 %, 2 %	250	25	2800	0.300	400
23.0	± 5 %, 2 %	250	26	2720	0.214	400
24.0	± 5 %, 2 %	250	25	2480	0.298	400
27.0	± 5 %, 2 %	250	26	2700	0.300	400
30.0	± 5 %, 2 %	250	25	2350	0.300	400
33.0	± 5 %, 2 %	250	24	2350	0.350	400
36.0	± 5 %, 2 %	250	26	2320	0.403	320
39.0	± 5 %, 2 %	250	25	2100	0.550	320
40.0	± 5 %, 2 %	250	26	2240	0.438	320
43.0	± 5 %, 2 %	250	25	2030	0.810	100
47.0	± 5 %, 2 %	200	26	2100	0.830	150
51.0	± 5 %	200	25	1750	0.820	100
56.0	± 5 %	200	22	1760	0.970	100
68.0	± 5 %	200	22	1620	1.120	100
82.0	± 5 %	150	20	1500	1.250	100
100.0	± 5 %	150	20	1300	2.520	100
120.0	± 5 %	150	20	1100	2.660	100

* for a 15 °C rise.

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 HP-4287A RF LCR meter with HP-16193 fixture
- Q is measured in HP-4287A RF LCR meter with HP-16193 fixture
- SRF is measured in HP-8753E RF network analyzer
- DCR is measured in HP-4338B milliohmeter

DIMENSIONS in inches [millimeters]

L	W	S
0.039 ± 0.004 [1.00 ± 0.1]	0.022 ± 0.004 [0.55 ± 0.1]	0.008 ± 0.004 [0.20 ± 0.1]
U		T
0.010 ref. [0.25]		0.020 ± 0.004 [0.5 ± 0.1]

DESCRIPTION

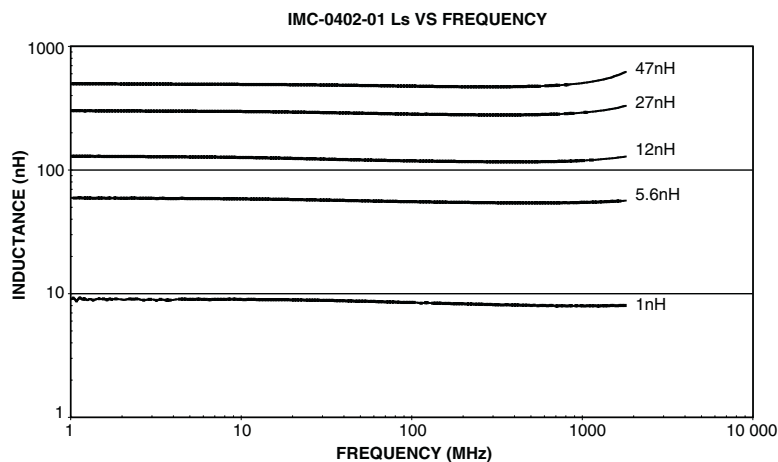
IMC-0402-01 10 nH ± 5 % ER e4
MODEL TOLERANCE VALUE INDUCTANCE TOLERANCE PACKAGE CODE JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

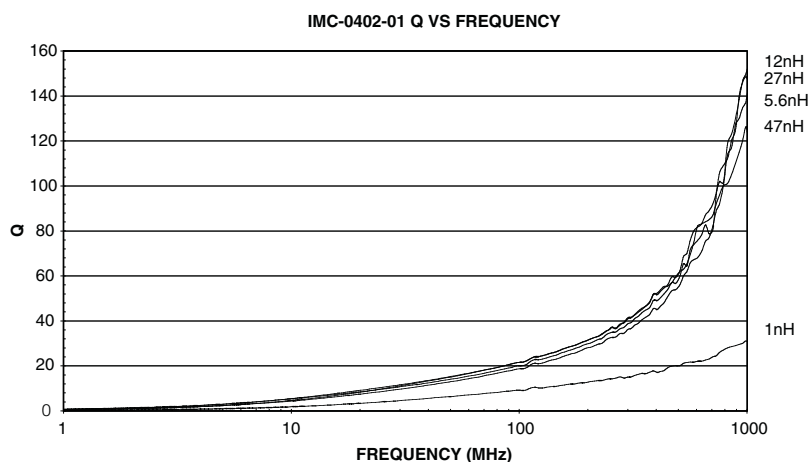
I	M	C	0	4	0	2	E	R	1	0	N	J	0	1
MODEL			SIZE			PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES		

PERFORMANCE GRAPHS

IMC-0402-01

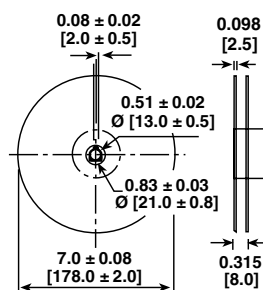


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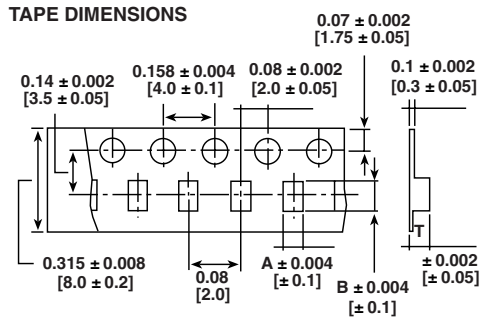


TAPE AND REEL SPECIFICATIONS in inches [millimeters]

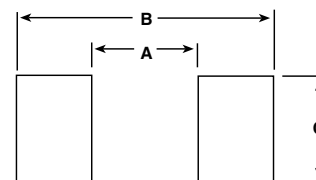
REEL DIMENSIONS



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 [0.7]	0.047 [1.2]	0.028 [0.7]	IMC-0402-01	0.018 [0.45]	0.063 [1.6]	0.256 [0.65]



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