

Wirewound, Surface Mount Inductors



| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | |
|------------------------------------|----------------|------------------|------|----------------|--------------|--------------------------------------|
| IND. (nH) | TOL. | TEST FREQ. (MHz) | Q | SRF MIN. (MHz) | DCR MAX. (Ω) | RATED DC CURRENT (mA) ⁽¹⁾ |
| | | L & Q | MIN. | | | |
| 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

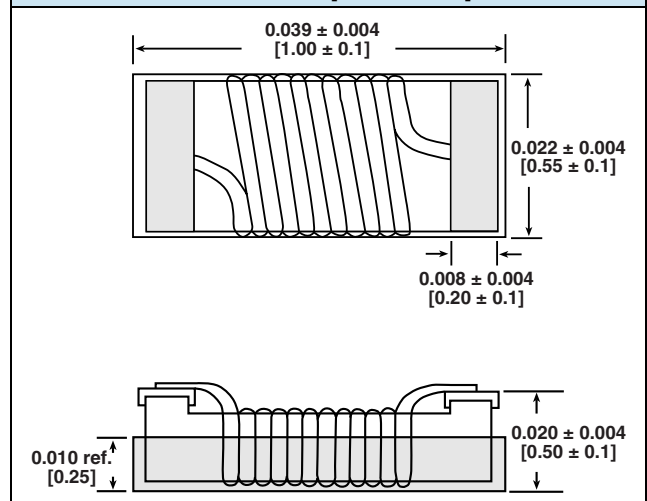

RoHS
 COMPLIANT
 HALOGEN
FREE
ELECTRICAL SPECIFICATIONS
Inductance Range: 1 nH to 47 nH

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

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

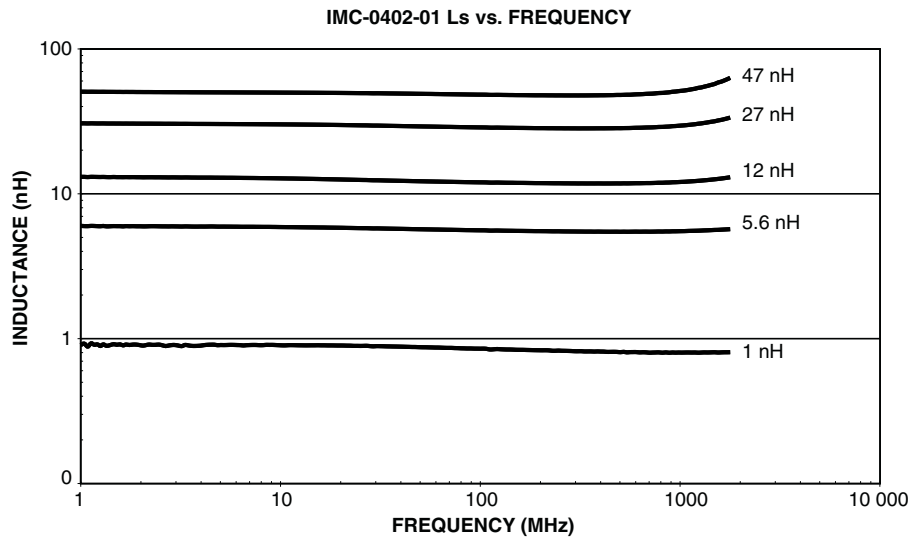
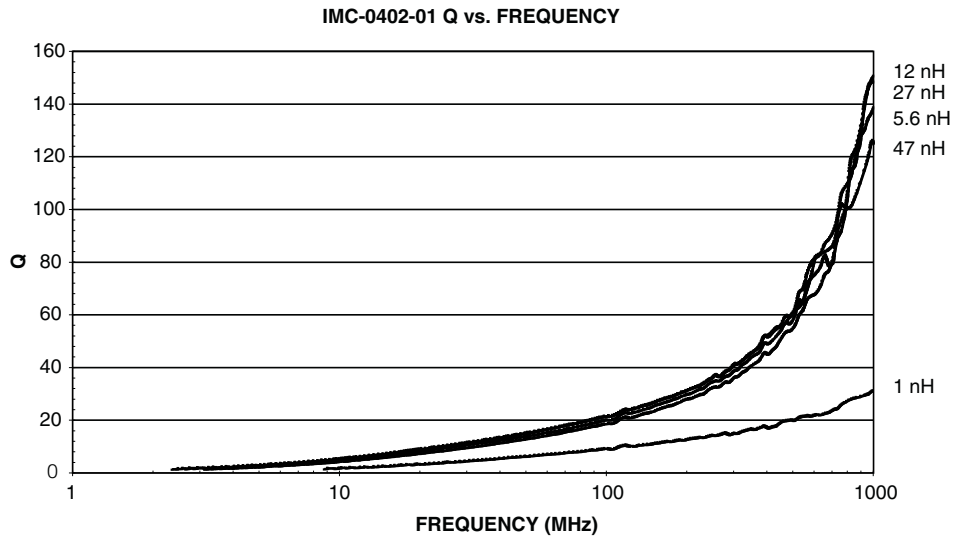
TEST EQUIPMENT

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

| 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] |



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