

Wirewound, Surface Mount, Molded Inductors



| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | |
|------------------------------------|--------|------------------|--------|----------------|--------------|--------------------------------------|
| IND. (μH) | TOL. | TEST FREQ. (MHz) | Q MIN. | SRF MIN. (MHz) | DCR MAX. (Ω) | RATED DC CURRENT (mA) ⁽¹⁾ |
| | | L & Q | | | | |
| 0.010 | ± 20 % | 50.0 | 50 | 1000 | 0.20 | 450 |
| 0.012 | ± 20 % | 50.0 | 50 | 1000 | 0.20 | 450 |
| 0.018 | ± 20 % | 50.0 | 50 | 1000 | 0.20 | 450 |
| 0.022 | ± 20 % | 50.0 | 50 | 1000 | 0.20 | 450 |
| 0.027 | ± 20 % | 50.0 | 50 | 1000 | 0.20 | 450 |
| 0.033 | ± 20 % | 50.0 | 50 | 1000 | 0.30 | 450 |
| 0.039 | ± 20 % | 50.0 | 50 | 1000 | 0.30 | 450 |
| 0.047 | ± 20 % | 50.0 | 50 | 1000 | 0.30 | 450 |
| 0.056 | ± 20 % | 50.0 | 40 | 900 | 0.35 | 450 |
| 0.068 | ± 20 % | 50.0 | 40 | 800 | 0.35 | 450 |
| 0.082 | ± 20 % | 50.0 | 40 | 700 | 0.40 | 450 |
| 0.10 | ± 20 % | 25.2 | 30 | 650 | 0.32 | 450 |
| 0.12 | ± 20 % | 25.2 | 30 | 600 | 0.30 | 450 |
| 0.15 | ± 20 % | 25.2 | 30 | 500 | 0.30 | 450 |
| 0.18 | ± 20 % | 25.2 | 30 | 400 | 0.35 | 450 |
| 0.22 | ± 20 % | 25.2 | 30 | 350 | 0.40 | 450 |
| 0.27 | ± 20 % | 25.2 | 30 | 300 | 0.45 | 450 |
| 0.33 | ± 20 % | 25.2 | 30 | 250 | 0.55 | 430 |
| 0.39 | ± 20 % | 25.2 | 30 | 220 | 0.70 | 380 |
| 0.47 | ± 10 % | 25.2 | 30 | 190 | 0.80 | 355 |
| 0.56 | ± 10 % | 25.2 | 30 | 170 | 1.20 | 285 |
| 0.68 | ± 10 % | 25.2 | 30 | 150 | 1.40 | 270 |
| 0.82 | ± 10 % | 25.2 | 30 | 140 | 1.60 | 250 |
| 1.0 | ± 10 % | 7.96 | 50 | 100 | 0.50 | 450 |
| 1.2 | ± 10 % | 7.96 | 50 | 80.0 | 0.55 | 430 |
| 1.5 | ± 10 % | 7.96 | 50 | 70.0 | 0.60 | 410 |
| 1.8 | ± 10 % | 7.96 | 50 | 60.0 | 0.65 | 390 |
| 2.2 | ± 10 % | 7.96 | 50 | 55.0 | 0.70 | 380 |
| 2.7 | ± 10 % | 7.96 | 50 | 50.0 | 0.75 | 370 |
| 3.3 | ± 10 % | 7.96 | 50 | 45.0 | 0.80 | 355 |
| 3.9 | ± 10 % | 7.96 | 50 | 40.0 | 0.90 | 330 |
| 4.7 | ± 10 % | 7.96 | 50 | 35.0 | 1.00 | 315 |
| 5.6 | ± 10 % | 7.96 | 50 | 33.0 | 1.10 | 300 |
| 6.8 | ± 10 % | 7.96 | 50 | 27.0 | 1.20 | 285 |
| 8.2 | ± 10 % | 7.96 | 50 | 25.0 | 1.40 | 270 |
| 10.0 | ± 10 % | 2.52 | 50 | 20.0 | 1.60 | 250 |
| 12.0 | ± 10 % | 2.52 | 50 | 18.0 | 2.00 | 225 |
| 15.0 | ± 10 % | 2.52 | 50 | 17.0 | 2.50 | 200 |
| 18.0 | ± 10 % | 2.52 | 50 | 15.0 | 2.80 | 190 |
| 22.0 | ± 10 % | 2.52 | 50 | 13.0 | 3.20 | 180 |
| 27.0 | ± 10 % | 2.52 | 50 | 12.0 | 3.60 | 170 |
| 33.0 | ± 10 % | 2.52 | 50 | 11.0 | 4.00 | 160 |
| 39.0 | ± 10 % | 2.52 | 50 | 11.0 | 4.50 | 150 |
| 47.0 | ± 10 % | 2.52 | 50 | 10.0 | 5.00 | 140 |
| 56.0 | ± 10 % | 2.52 | 50 | 9.0 | 5.50 | 135 |
| 68.0 | ± 10 % | 2.52 | 50 | 9.0 | 6.00 | 130 |
| 82.0 | ± 10 % | 2.52 | 50 | 8.0 | 7.00 | 120 |
| 100.0 | ± 10 % | 0.79 | 40 | 8.0 | 8.00 | 110 |
| 120.0 | ± 10 % | 0.79 | 40 | 6.0 | 8.00 | 110 |
| 150.0 | ± 10 % | 0.79 | 40 | 5.0 | 9.00 | 105 |
| 180.0 | ± 10 % | 0.79 | 40 | 5.0 | 9.50 | 102 |
| 220.0 | ± 10 % | 0.79 | 40 | 4.0 | 10.0 | 100 |
| 270.0 | ± 10 % | 0.79 | 40 | 4.0 | 12.0 | 92 |
| 330.0 | ± 10 % | 0.79 | 40 | 3.5 | 14.0 | 85 |
| 390.0 | ± 10 % | 0.79 | 40 | 3.0 | 16.0 | 80 |
| 470.0 | ± 10 % | 0.79 | 40 | 3.0 | 26.0 | 62 |
| 560.0 | ± 10 % | 0.79 | 30 | 3.0 | 30.0 | 50 |
| 680.0 | ± 10 % | 0.79 | 30 | 3.0 | 30.0 | 50 |
| 820.0 | ± 10 % | 0.79 | 30 | 2.5 | 35.0 | 30 |
| 1000.0 | ± 10 % | 0.25 | 30 | 2.5 | 40.0 | 30 |

Note

(1) Rated DC current based on the maximum temperature rise, not to exceed 40 °C at +85 °C ambient

FEATURES

- Molded construction provides superior strength and moisture resistance
- Tape and reel packaging for automatic handling, 2000/reel, EIA-481
- Printed marking
- Compatible with vapor phase and infrared reflow soldering
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance range: 0.010 μH to 1000 μH

Special tolerances available upon request

Operating temperature: -55 °C to +125 °C

Coilform material: Non-magnetic for 0.010 μH to 0.82 μH

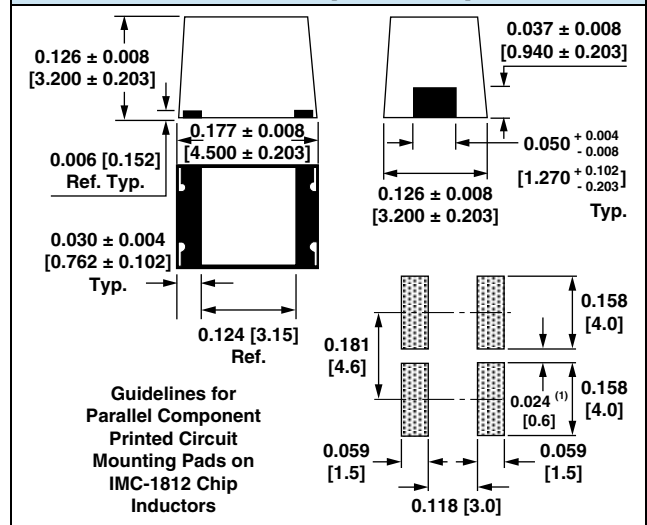
Powdered iron for 1.0 μH to 120 μH

Ferrite for 150 μH to 1000 μH

TEST EQUIPMENT

- H/P 4342A Q meter with Vishay Dale test fixture or equivalent
- H/P 4191A RF impedance analyzer (for SRF measurements)
- Wheatstone bridge

DIMENSIONS in inches [millimeters]



Note

(2) Recommended minimum spacing between components

PART MARKING

- Vishay Dale
- Inductance value
- Date code



| DESCRIPTION | | | | |
|-------------|------------------|----------------------|--------------|--------------------------------|
| IMC-1812 | 10 μ H | $\pm 10 \%$ | ER | e3 |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

| GLOBAL PART NUMBER | | | | | | | | | | | | |
|--------------------|---|---|------|---|---|---|--------------|---|------------------|---|---|------|
| I | M | C | 1 | 8 | 1 | 2 | E | R | 1 | 0 | 0 | K |
| PRODUCT FAMILY | | | SIZE | | | | PACKAGE CODE | | INDUCTANCE VALUE | | | TOL. |



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