

Wirewound, Surface-Mount, Molded, Shielded 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 | 50 | 1000 | 0.10 | 810 |
| 0.012 | ± 20 % | 50 | 50 | 1000 | 0.11 | 750 |
| 0.015 | ± 20 % | 50 | 50 | 1000 | 0.12 | 720 |
| 0.018 | ± 20 % | 50 | 50 | 1000 | 0.13 | 690 |
| 0.022 | ± 20 % | 50 | 45 | 1000 | 0.15 | 640 |
| 0.027 | ± 20 % | 50 | 45 | 1000 | 0.17 | 610 |
| 0.033 | ± 20 % | 50 | 45 | 1000 | 0.18 | 585 |
| 0.039 | ± 20 % | 50 | 40 | 1000 | 0.24 | 530 |
| 0.047 | ± 20 % | 50 | 40 | 1000 | 0.26 | 495 |
| 0.056 | ± 20 % | 50 | 40 | 1000 | 0.28 | 485 |
| 0.068 | ± 20 % | 50 | 40 | 1000 | 0.35 | 475 |
| 0.082 | ± 20 % | 50 | 38 | 900 | 0.45 | 460 |
| 0.10 | ± 20 % | 50 | 36 | 700 | 0.50 | 450 |
| 0.12 | ± 20 % | 25.2 | 40 | 500 | 0.20 | 630 |
| 0.15 | ± 20 % | 25.2 | 40 | 470 | 0.20 | 600 |
| 0.18 | ± 20 % | 25.2 | 40 | 400 | 0.24 | 580 |
| 0.22 | ± 20 % | 25.2 | 40 | 330 | 0.30 | 565 |
| 0.27 | ± 20 % | 25.2 | 40 | 310 | 0.33 | 500 |
| 0.33 | ± 20 % | 25.2 | 40 | 280 | 0.36 | 475 |
| 0.39 | ± 20 % | 25.2 | 40 | 230 | 0.40 | 465 |
| 0.47 | ± 20 % | 25.2 | 40 | 220 | 0.44 | 460 |
| 0.56 | ± 20 % | 25.2 | 40 | 200 | 0.46 | 455 |
| 0.68 | ± 20 % | 25.2 | 40 | 180 | 0.48 | 450 |
| 0.82 | ± 20 % | 25.2 | 40 | 160 | 0.50 | 450 |
| 1.0 | ± 10 % | 7.96 | 30 | 120 | 0.60 | 400 |
| 1.2 | ± 10 % | 7.96 | 30 | 110 | 0.65 | 390 |
| 1.5 | ± 10 % | 7.96 | 30 | 90.0 | 0.75 | 370 |
| 1.8 | ± 10 % | 7.96 | 30 | 85.0 | 0.85 | 350 |
| 2.2 | ± 10 % | 7.96 | 30 | 65.0 | 0.90 | 320 |
| 2.7 | ± 10 % | 7.96 | 30 | 60.0 | 1.00 | 290 |
| 3.3 | ± 10 % | 7.96 | 30 | 60.0 | 1.10 | 270 |
| 3.9 | ± 10 % | 7.96 | 30 | 58.0 | 1.20 | 250 |
| 4.7 | ± 10 % | 7.96 | 30 | 52.0 | 1.25 | 220 |
| 5.6 | ± 10 % | 7.96 | 30 | 50.0 | 1.40 | 210 |
| 6.8 | ± 10 % | 7.96 | 30 | 40.0 | 1.60 | 205 |
| 8.2 | ± 10 % | 7.96 | 30 | 35.0 | 1.65 | 195 |
| 10.0 | ± 10 % | 2.52 | 30 | 30.0 | 2.00 | 185 |
| 12.0 | ± 10 % | 2.52 | 30 | 24.0 | 2.30 | 175 |
| 15.0 | ± 10 % | 2.52 | 30 | 20.0 | 2.50 | 165 |
| 18.0 | ± 10 % | 2.52 | 30 | 17.0 | 2.70 | 155 |
| 22.0 | ± 10 % | 2.52 | 30 | 16.0 | 3.10 | 150 |
| 27.0 | ± 10 % | 2.52 | 30 | 14.5 | 3.30 | 125 |
| 33.0 | ± 10 % | 2.52 | 30 | 14.5 | 5.10 | 115 |
| 39.0 | ± 10 % | 2.52 | 30 | 14.0 | 5.90 | 105 |
| 47.0 | ± 10 % | 2.52 | 30 | 13.0 | 8.00 | 100 |
| 56.0 | ± 10 % | 2.52 | 30 | 11.5 | 10.0 | 95 |
| 68.0 | ± 10 % | 2.52 | 30 | 11.0 | 10.0 | 90 |
| 82.0 | ± 10 % | 2.52 | 30 | 11.0 | 11.0 | 85 |
| 100.0 | ± 10 % | 0.796 | 30 | 6.0 | 12.0 | 80 |

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
- Compatible with vapor phase, infrared, and wave soldering methods
- Shielded construction minimizes coupling to other components
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS COMPLIANT
HALOGEN FREE

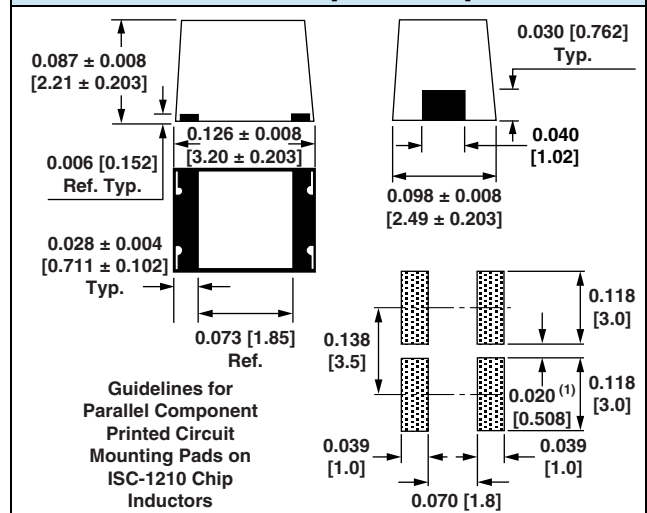
ELECTRICAL SPECIFICATIONS

Inductance range: 0.01 μH to 100 μH
Special tolerances available upon request
Operating temperature: -55 °C to +125 °C
Coilform material: non-magnetic for 0.01 μH to 0.10 μH;; powdered iron for 0.12 μH to 100 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
⁽¹⁾ Recommended minimum spacing between components

PART MARKING

- Vishay Dale
- Inductance code
- Date code

| DESCRIPTION | | | | |
|--------------------|------------------|----------------------|------------------|--------------------------------|
| ISC-1210 | 10 μH | ± 10 % | ER | e3 |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |
| GLOBAL PART NUMBER | | | | |
| I | S | C | 1 | 2 |
| PRODUCT FAMILY | | | SIZE | |
| | | | E | R |
| | | | PACKAGE CODE | |
| | | | 1 | 0 |
| | | | INDUCTANCE VALUE | |
| | | | | K |
| | | | | TOL. |



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