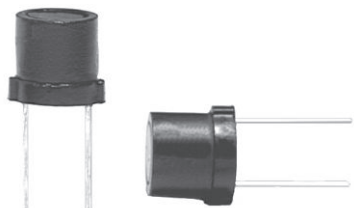


Inductors, Subminiature, Shielded, Radial Leaded



ELECTRICAL SPECIFICATIONS

Inductance tolerance: $\pm 10\%$

Dielectric strength: 840 V_{RMS} at sea level

Working voltage: 300 V_{DC}

Q and SRF values: minimum not less than 80 % of specified value

Maximum current: based on temperature rise not to exceed 35 °C at +90 °C ambient

MECHANICAL SPECIFICATIONS

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

Terminal pull: 3 pounds

FEATURES

- Classification is grade 1, class B
- Subminiature shielded
- Custom values up to 100 000 μ H are available upon request
- Printed board mounting facilitated by 0.200" [5.08 mm] grid spacing
- Radial lead fixed inductor
- High Q values
- Unitized epoxy-molded construction
- Shielded construction to allow maximum density packaging
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT

DENSITY SPECIFICATIONS

Weight: 1.5 g maximum

Shielding: 3 % coupling maximum when two units are tested side by side

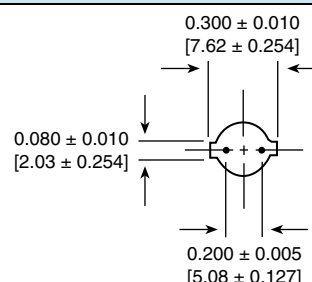
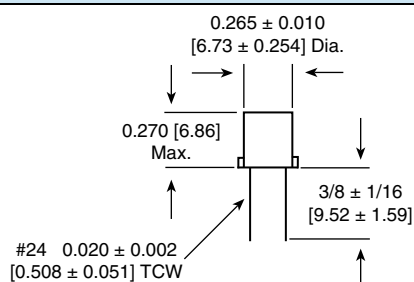
ENVIRONMENTAL SPECIFICATIONS

Moisture: per MIL-STD-202, method 106

Vibration: low frequency, 10 Hz to 55 Hz at 0.06" [1.52 mm] maximum total excursion at rate of 1 linear sweep per minute for 2 h repeated for each of three mutually perpendicular planes

Shock: 100 g, 6 ms, body mounted

DIMENSIONS in inches [millimeters]



STANDARD ELECTRICAL SPECIFICATIONS

| MODEL | IND. (μ H) | TOL. (%) | Q NOM. | TEST FREQ. (MHz) | SRF NOM. (MHz) | DCR MAX. (Ω) | RATED DC CURRENT (mA) | INCREMENTAL CURRENT (mA) ⁽¹⁾ |
|-------|--------------------|-------------|-----------|------------------------|-------------------|-----------------------------|-----------------------------|---|
| PC | 0.10 | ± 10 | 70 | 25 | > 250 | 0.030 | 2500 | 2500 |
| PC | 0.12 | ± 10 | 70 | 25 | > 250 | 0.030 | 2500 | 2500 |
| PC | 0.15 | ± 10 | 70 | 25 | > 250 | 0.030 | 2500 | 2500 |
| PC | 0.18 | ± 10 | 70 | 25 | > 250 | 0.035 | 2400 | 2400 |
| PC | 0.22 | ± 10 | 70 | 25 | > 250 | 0.038 | 2300 | 2300 |
| PC | 0.27 | ± 10 | 80 | 25 | > 250 | 0.040 | 2200 | 2200 |
| PC | 0.33 | ± 10 | 80 | 25 | > 250 | 0.040 | 2200 | 2200 |
| PC | 0.39 | ± 10 | 80 | 25 | 250 | 0.045 | 2100 | 2100 |
| PC | 0.47 | ± 10 | 80 | 25 | 230 | 0.045 | 2100 | 2100 |

Note

(1) Incremental current: The DC current required to cause a 5 % reduction in the nominal inductance value.

**STANDARD ELECTRICAL SPECIFICATIONS**

| MODEL | IND. (μ H) | TOL. (%) | Q NOM. | TEST FREQ. (MHz) | SRF NOM. (MHz) | DCR MAX. (Ω) | RATED DC CURRENT (mA) | INCREMENTAL CURRENT (mA) ⁽¹⁾ |
|-------|--------------------|-------------|-----------|------------------------|-------------------|-----------------------------|-----------------------------|---|
| PC | 0.56 | ± 10 | 80 | 25 | 220 | 0.050 | 2000 | 2000 |
| PC | 0.68 | ± 10 | 80 | 25 | 190 | 0.055 | 1900 | 1900 |
| PC | 0.82 | ± 10 | 85 | 25 | 180 | 0.060 | 1800 | 1800 |
| PC | 1.0 | ± 10 | 85 | 25 | 160 | 0.070 | 1700 | 1700 |
| PC | 1.2 | ± 10 | 90 | 7.9 | 170 | 0.085 | 1670 | 1670 |
| PC | 1.5 | ± 10 | 100 | 7.9 | 155 | 0.100 | 1540 | 1540 |
| PC | 1.8 | ± 10 | 115 | 7.9 | 135 | 0.110 | 1470 | 1470 |
| PC | 2.2 | ± 10 | 110 | 7.9 | 120 | 0.120 | 1410 | 1410 |
| PC | 2.7 | ± 10 | 110 | 7.9 | 104 | 0.125 | 1380 | 1380 |
| PC | 3.3 | ± 10 | 90 | 7.9 | 93 | 0.165 | 1200 | 1200 |
| PC | 3.9 | ± 10 | 90 | 7.9 | 87 | 0.180 | 1135 | 1135 |
| PC | 4.7 | ± 10 | 95 | 7.9 | 79 | 0.245 | 985 | 985 |
| PC | 5.6 | ± 10 | 95 | 7.9 | 72 | 0.265 | 950 | 950 |
| PC | 6.8 | ± 10 | 85 | 7.9 | 63 | 0.330 | 853 | 853 |
| PC | 8.2 | ± 10 | 95 | 7.9 | 60 | 0.460 | 720 | 720 |
| PC | 10 | ± 10 | 90 | 7.9 | 54 | 0.640 | 620 | 620 |
| PC | 12 | ± 10 | 120 | 2.5 | 37 | 0.800 | 545 | 545 |
| PC | 15 | ± 10 | 120 | 2.5 | 28.8 | 0.865 | 520 | 520 |
| PC | 18 | ± 10 | 115 | 2.5 | 23.8 | 0.940 | 504 | 504 |
| PC | 22 | ± 10 | 125 | 2.5 | 21.3 | 1.03 | 460 | 460 |
| PC | 27 | ± 10 | 115 | 2.5 | 20.6 | 1.18 | 418 | 418 |
| PC | 33 | ± 10 | 120 | 2.5 | 18.6 | 1.30 | 398 | 398 |
| PC | 39 | ± 10 | 120 | 2.5 | 17.7 | 1.41 | 385 | 385 |
| PC | 47 | ± 10 | 110 | 2.5 | 14.9 | 1.61 | 350 | 350 |
| PC | 56 | ± 10 | 115 | 2.5 | 13.9 | 2.08 | 330 | 333 |
| PC | 68 | ± 10 | 105 | 2.5 | 12.9 | 2.20 | 320 | 330 |
| PC | 82 | ± 10 | 105 | 2.5 | 11.7 | 2.42 | 300 | 320 |
| PC | 100 | ± 10 | 95 | 2.5 | 10.5 | 2.15 | 333 | 300 |
| PC | 120 | ± 10 | 95 | 0.79 | 5.6 | 2.38 | 316 | 190 |
| PC | 150 | ± 10 | 90 | 0.79 | 5.2 | 2.52 | 306 | 175 |
| PC | 180 | ± 10 | 95 | 0.79 | 4.9 | 2.88 | 288 | 150 |
| PC | 220 | ± 10 | 95 | 0.79 | 4.6 | 3.18 | 273 | 125 |
| PC | 270 | ± 10 | 100 | 0.79 | 4.2 | 3.50 | 260 | 120 |
| PC | 330 | ± 10 | 100 | 0.79 | 3.55 | 4.80 | 222 | 110 |
| PC | 390 | ± 10 | 100 | 0.79 | 3.45 | 5.44 | 209 | 105 |
| PC | 470 | ± 10 | 100 | 0.79 | 3.2 | 5.9 | 201 | 100 |
| PC | 560 | ± 10 | 95 | 0.79 | 2.9 | 6.3 | 194 | 90 |
| PC | 680 | ± 10 | 100 | 0.79 | 2.7 | 7.2 | 181 | 80 |
| PC | 820 | ± 10 | 90 | 0.79 | 2.5 | 8.0 | 172 | 70 |
| PC | 1000 | ± 10 | 100 | 0.79 | 2.35 | 12 | 141 | 65 |

Note

⁽¹⁾ Incremental current: The DC current required to cause a 5 % reduction in the nominal inductance value.

MARKING

- Manufacturer data printed

ORDERING INFORMATION

| PC MODEL | 0.10 μ H INDUCTANCE VALUE | 10 % INDUCTANCE TOLERANCE | EB PACKAGE CODE | e2 JEDEC® LEAD (Pb)-FREE STANDARD |
|-------------|-------------------------------------|---------------------------------|-----------------------|---|
|-------------|-------------------------------------|---------------------------------|-----------------------|---|

GLOBAL PART NUMBER

| | | | | | | | | |
|----------|----------|----------|-----------------|----------|---------------------|----------|----------|-------------------------|
| P | C | 9 | E | B | R | 1 | 0 | K |
| MODEL | | | PACKAGE CODE | | INDUCTANCE VALUE | | | INDUCTANCE TOLERANCE |



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