

FEATURES

- Radial Format
- -40°C to 85°C Operating Temp
- Up to 13A I_{DC}
- 10µH to 22mH
- Low DC Resistance
- Fully Tinned Leads
- PCB Mounting Hole
- Low Temperature Dependence
- MIL-I-23053/5 Class I&II Slewing
- Custom Parts Available

DESCRIPTION

The 1400 Series is suitable for many power supply and other general purpose filtering applications. The use of a non-magnetic screw will ensure mechanical stability.

SELECTION GUIDE

| Order Code | Inductance (±10% at 1kHz) µH | RDC (max.) Ω | IDC (cont.) A | Temp. rise (at IDC) °C | Nominal Q at f kHz | Nominal Self Resonant Frequency MHz | Mechanical Dimensions | | | | Footprint | | | |
|------------|------------------------------------|-----------------|------------------|------------------------------|-----------------------|---|-----------------------|------|------|------|-----------|------|------|-----|
| | | | | | | | a | b | c | d | Øe | f | Øg | |
| 1410313 | 10 | 0.007 | 13 | 20 | 54 | 50 | 20.7 | 27.0 | 24.4 | 14.0 | 1.30 | 4.5* | 23.9 | 2.6 |
| 1415312 | 15 | 0.009 | 12 | 25 | 42 | 50 | 12.7 | 27.0 | 24.4 | 14.0 | 1.30 | 4.5* | 23.9 | 2.6 |
| 1422311 | 22 | 0.011 | 11 | 27 | 64 | 100 | 9.3 | 27.0 | 24.4 | 14.0 | 1.30 | 4.5* | 23.9 | 2.6 |
| 1433393 | 33 | 0.015 | 9.3 | 25 | 27 | 50 | 9.1 | 27.0 | 24.4 | 14.0 | 1.30 | 4.5* | 23.9 | 2.6 |
| 1447383 | 47 | 0.019 | 8.3 | 25 | 40 | 100 | 6.0 | 27.0 | 24.4 | 18.5 | 1.30 | 4.5* | 23.9 | 2.6 |
| 1447385 | 47 | 0.021 | 8.5 | 26 | 33 | 100 | 6.7 | 26.8 | 24.4 | 14.0 | 1.20 | 4.5* | 23.8 | 2.4 |
| 1468362 | 68 | 0.032 | 6.2 | 27 | 32 | 100 | 5.3 | 26.5 | 24.4 | 14.0 | 1.08 | 4.5* | 23.7 | 2.1 |
| 1468373 | 68 | 0.022 | 7.3 | 27 | 45 | 100 | 5.3 | 27.0 | 24.4 | 18.5 | 1.30 | 4.5* | 23.9 | 2.6 |
| 1410454 | 100 | 0.042 | 5.4 | 27 | 24 | 100 | 4.6 | 26.4 | 24.4 | 14.0 | 1.02 | 4.5* | 23.6 | 2.0 |
| 1410460 | 100 | 0.033 | 6.0 | 29 | 37 | 100 | 3.9 | 26.8 | 24.4 | 18.5 | 1.20 | 4.5* | 23.8 | 2.4 |
| 1410478 | 100 | 0.040 | 7.8 | 28 | 34 | 50 | 3.3 | 32.4 | 29.8 | 21.8 | 1.30 | 5.1 | 29.3 | 2.6 |
| 1415440 | 150 | 0.069 | 4.0 | 26 | 24 | 50 | 3.4 | 26.2 | 24.4 | 14.0 | 0.90 | 4.5* | 23.5 | 1.8 |
| 1415449 | 150 | 0.051 | 4.9 | 27 | 34 | 50 | 2.9 | 26.4 | 24.4 | 18.5 | 1.02 | 4.5* | 23.6 | 2.0 |
| 1415465 | 150 | 0.042 | 6.5 | 29 | 46 | 100 | 2.4 | 32.2 | 29.8 | 21.8 | 1.20 | 5.1 | 29.2 | 2.4 |
| 1422435 | 220 | 0.096 | 3.5 | 29 | 22 | 50 | 2.8 | 26.1 | 24.4 | 14.0 | 0.85 | 4.5* | 23.5 | 1.7 |
| 1422441 | 220 | 0.073 | 4.1 | 25 | 33 | 100 | 2.3 | 26.3 | 24.4 | 18.5 | 0.97 | 4.5* | 23.6 | 1.9 |
| 1422455 | 220 | 0.062 | 5.5 | 27 | 30 | 50 | 2.2 | 32.1 | 29.8 | 21.8 | 1.14 | 5.1 | 29.1 | 2.2 |
| 1430430 | 300 | 0.140 | 3.0 | 23 | 26 | 50 | 2.6 | 25.9 | 24.4 | 14.0 | 0.75 | 4.5* | 23.4 | 1.5 |
| 1430433 | 300 | 0.100 | 3.5 | 25 | 37 | 50 | 2.2 | 26.2 | 24.4 | 18.5 | 0.90 | 4.5* | 23.5 | 1.8 |
| 1430450 | 300 | 0.080 | 5.0 | 29 | 28 | 50 | 1.7 | 31.8 | 29.8 | 21.8 | 1.02 | 5.1 | 29.0 | 2.0 |
| 1433428 | 330 | 0.150 | 2.8 | 24 | 22 | 50 | 2.5 | 25.9 | 24.4 | 14.0 | 0.76 | 4.5* | 23.4 | 1.5 |
| 1433433 | 330 | 0.107 | 3.3 | 25 | 29 | 50 | 2.0 | 26.2 | 24.4 | 18.5 | 0.90 | 4.5* | 23.5 | 1.8 |
| 1433445 | 330 | 0.091 | 4.5 | 29 | 25 | 50 | 1.6 | 31.8 | 29.8 | 21.8 | 1.02 | 5.1 | 29.0 | 2.0 |
| 1447423 | 470 | 0.222 | 2.3 | 28 | 34 | 50 | 2.0 | 25.7 | 24.4 | 14.0 | 0.67 | 4.5* | 23.3 | 1.3 |
| 1447427 | 470 | 0.149 | 2.7 | 24 | 25 | 50 | 1.6 | 26.1 | 24.4 | 18.5 | 0.85 | 4.5* | 23.5 | 1.7 |
| 1447440 | 470 | 0.125 | 4.0 | 29 | 24 | 50 | 1.4 | 31.7 | 29.8 | 21.8 | 0.97 | 5.1 | 29.0 | 1.9 |
| 1468420 | 680 | 0.276 | 2.0 | 25 | 23 | 50 | 1.6 | 25.7 | 24.4 | 14.0 | 0.67 | 4.5* | 23.3 | 1.3 |
| 1468422 | 680 | 0.226 | 2.2 | 28 | 28 | 50 | 1.3 | 25.9 | 24.4 | 18.5 | 0.75 | 4.5* | 23.4 | 1.5 |
| 1468431 | 680 | 0.173 | 3.1 | 27 | 60 | 10 | 1.0 | 31.6 | 29.8 | 21.8 | 0.90 | 5.1 | 28.9 | 1.8 |
| 1410516 | 1.0mH | 0.419 | 1.6 | 24 | 30 | 50 | 1.4 | 25.6 | 24.4 | 14.0 | 0.60 | 4.5* | 23.2 | 1.2 |
| 1410517 | 1.0mH | 0.336 | 1.7 | 26 | 35 | 50 | 1.2 | 25.7 | 24.4 | 18.5 | 0.67 | 4.5* | 23.3 | 1.3 |
| 1410524 | 1.0mH | 0.277 | 2.4 | 28 | 33 | 50 | 1.0 | 31.4 | 29.8 | 21.8 | 0.79 | 5.1 | 28.8 | 1.5 |
| 1415513 | 1.5mH | 0.630 | 1.3 | 27 | 34 | 50 | 1.0 | 25.5 | 24.4 | 14.0 | 0.54 | 4.5* | 23.1 | 1.0 |
| 1415514 | 1.5mH | 0.518 | 1.4 | 26 | 47 | 50 | 0.8 | 25.6 | 24.4 | 18.5 | 0.60 | 4.5* | 23.2 | 1.2 |
| 1415517 | 1.5mH | 0.374 | 1.7 | 26 | 28 | 50 | 0.7 | 31.3 | 29.8 | 21.8 | 0.75 | 5.1 | 28.8 | 1.5 |
| 1422509 | 2.2mH | 0.916 | 0.9 | 25 | 43 | 50 | 0.9 | 25.3 | 24.4 | 14.0 | 0.48 | 4.5* | 23.1 | 0.9 |
| 1422512 | 2.2mH | 0.649 | 1.2 | 25 | 33 | 50 | 0.7 | 25.6 | 24.4 | 18.5 | 0.60 | 4.5* | 23.2 | 1.2 |
| 1422514 | 2.2mH | 0.622 | 1.4 | 27 | 33 | 50 | 0.6 | 31.1 | 29.8 | 21.8 | 0.67 | 5.1 | 28.7 | 1.3 |
| 1433507 | 3.3mH | 1.428 | 0.7 | 22 | 45 | 50 | 0.8 | 25.2 | 24.4 | 14.0 | 0.43 | 4.5* | 23.0 | 0.8 |
| 1433510 | 3.3mH | 1.992 | 1.0 | 26 | 20 | 50 | 0.7 | 25.5 | 24.4 | 18.5 | 0.54 | 4.5* | 23.1 | 1.0 |
| 1433512 | 3.3mH | 0.861 | 1.2 | 26 | 20 | 50 | 0.5 | 31.0 | 29.8 | 21.8 | 0.60 | 5.1 | 28.6 | 1.2 |

* The drilled hole for these devices have a 6.10Ø x 2.40 countersink

1400 SERIES

Bobbin Type Inductors

SELECTION GUIDE

| Order Code | Inductance ($\pm 10\%$ at 1kHz) | RDC (max.) | IDC (cont.) | Temp. rise (at IDC) | Nominal Q at f kHz | Nominal Self Resonant Frequency | Mechanical Dimensions | | | | | Footprint | | |
|------------|-------------------------------------|------------|-------------|------------------------|-----------------------|------------------------------------|-----------------------|----------|------|--------------------|------|-----------|------|-----|
| | | | | | | | μH | Ω | A | $^{\circ}\text{C}$ | Q | f | MHz | a |
| 1447506 | 4.7mH | 2.200 | 0.6 | 27 | 60 | 50 | 0.6 | 25.2 | 24.4 | 14.0 | 0.39 | 4.5* | 23.0 | 0.7 |
| 1447508 | 4.7mH | 1.436 | 0.8 | 26 | 65 | 50 | 0.5 | 25.3 | 24.4 | 18.5 | 0.48 | 4.5* | 23.1 | 0.9 |
| 1447509 | 4.7mH | 1.250 | 0.9 | 28 | 57 | 10 | 0.5 | 30.9 | 29.8 | 21.8 | 0.54 | 5.1 | 28.5 | 1.0 |
| 1468505 | 6.8mH | 2.810 | 0.5 | 24 | 50 | 50 | 0.5 | 25.2 | 24.4 | 14.0 | 0.39 | 4.5* | 23.0 | 0.7 |
| 1468507 | 6.8mH | 2.214 | 0.7 | 25 | 47 | 50 | 0.4 | 25.2 | 24.4 | 18.5 | 0.43 | 4.5* | 23.0 | 0.8 |
| 1468508 | 6.8mH | 1.884 | 0.8 | 26 | 30 | 50 | 0.4 | 30.7 | 29.8 | 21.8 | 0.48 | 5.1 | 28.5 | 0.9 |
| 1410604 | 10mH | 4.340 | 0.4 | 22 | 51 | 50 | 0.4 | 25.1 | 24.4 | 14.0 | 0.34 | 4.5* | 22.9 | 0.6 |
| 1410605 | 10mH | 3.394 | 0.5 | 24 | 48 | 50 | 0.3 | 25.2 | 24.4 | 18.5 | 0.39 | 4.5* | 23.0 | 0.7 |
| 1410606 | 10mH | 2.294 | 0.6 | 25 | 48 | 50 | 0.2 | 30.9 | 29.8 | 21.8 | 0.54 | 5.1 | 28.5 | 1.0 |
| 1415604 | 15mH | 4.912 | 0.4 | 25 | 61 | 10 | 0.2 | 25.1 | 24.4 | 18.5 | 0.34 | 4.5* | 22.9 | 0.6 |
| 1415605 | 15mH | 3.740 | 0.5 | 21 | 55 | 10 | 0.2 | 30.6 | 29.8 | 21.8 | 0.43 | 5.1 | 28.4 | 0.8 |
| 1422604 | 22mH | 6.926 | 0.4 | 26 | 30 | 50 | 0.2 | 30.5 | 29.8 | 21.8 | 0.34 | 5.1 | 28.3 | 0.6 |

* The drilled hole for these devices have a $6.10\text{\O} \times 2.40$ countersink

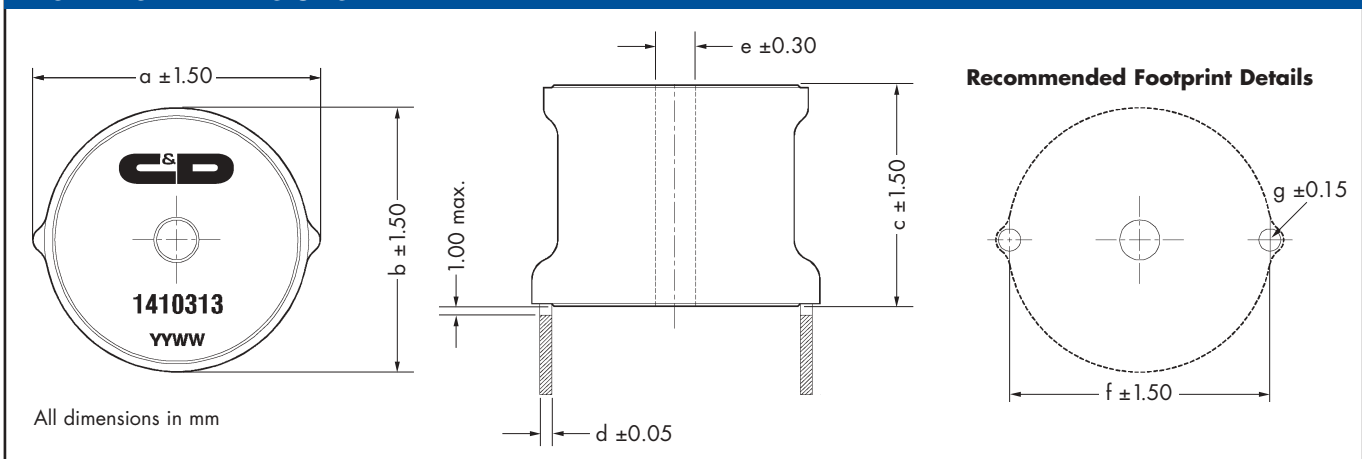
TYPICAL CORE CHARACTERISTICS

| Inductance Temperature Coefficient | Resistance Temperature Coefficient | Curie Temperature T_C | Saturation Flux B_{SAT} |
|--|--|-------------------------------|---------------------------------|
| 215ppm | 4100ppm | 130 $^{\circ}\text{C}$ | 240mT |

ABSOLUTE MAXIMUM RATINGS

| | |
|--------------------------------------|--|
| Operating free air temperature range | -40 $^{\circ}\text{C}$ to 85 $^{\circ}\text{C}$ |
| Storage temperature range | -55 $^{\circ}\text{C}$ to 125 $^{\circ}\text{C}$ |

MECHANICAL DIMENSIONS



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