

**FEATURES**

- Radial Format
- -40°C to 85°C Operating Temp
- Up to 13A I<sub>DC</sub>
- 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<br>(±10% at 1kHz)<br>µH | RDC (max.)<br>Ω | IDC (cont.)<br>A | Temp. rise<br>(at IDC)<br>°C | Nominal Q<br>at f kHz | Nominal Self<br>Resonant Frequency<br>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<br>( $\pm 10\%$ at 1kHz) | RDC (max.) | IDC (cont.) | Temp. rise<br>(at IDC) | Nominal Q<br>at f kHz | Nominal Self<br>Resonant Frequency | Mechanical Dimensions |          |      |                    |      | Footprint |      |     |
|------------|-------------------------------------|------------|-------------|------------------------|-----------------------|------------------------------------|-----------------------|----------|------|--------------------|------|-----------|------|-----|
|            |                                     |            |             |                        |                       |                                    | $\mu\text{H}$         | $\Omega$ | 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

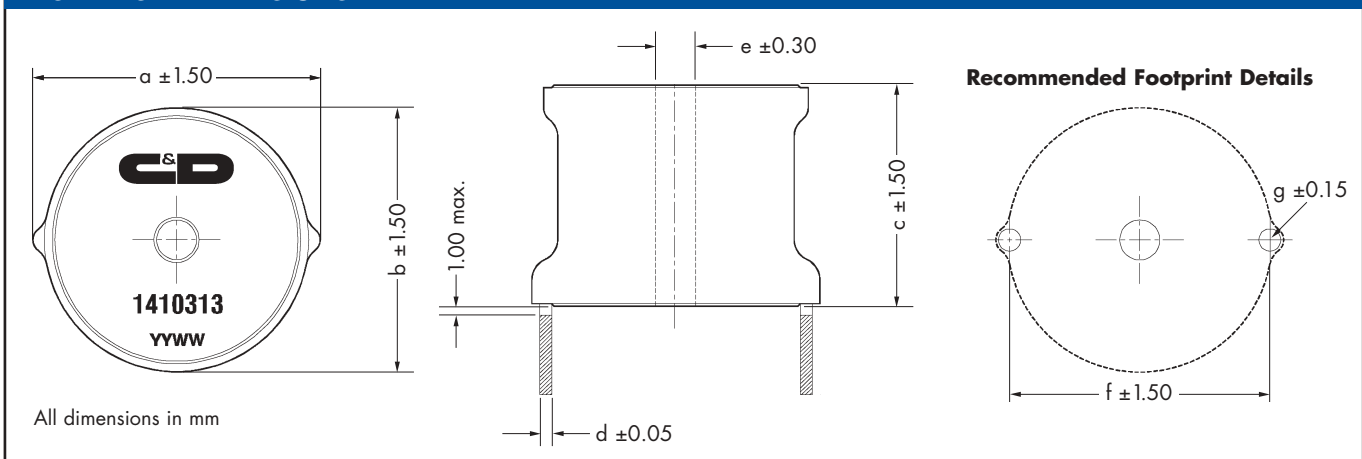
### TYPICAL CORE CHARACTERISTICS

| Inductance<br>Temperature<br>Coefficient | Resistance<br>Temperature<br>Coefficient | Curie<br>Temperature<br>$T_C$ | Saturation<br>Flux<br>$B_{SAT}$ |
|--|--|-------------------------------|---------------------------------|
| 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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**C&D Technologies (NCL) Ltd**  
Tanners Drive, Blakelands North  
Milton Keynes MK14 5BU, England  
Tel: +44 (0)1908 615232  
Fax: +44 (0)1908 617545  
email: [info@cdtechno-ncl.com](mailto:info@cdtechno-ncl.com)

[www.cdpoweronline.com](http://www.cdpoweronline.com)

**C&D Technologies Inc.**  
3400 E Britannia Drive, Tucson,  
Arizona 85706, USA  
Tel: +1 (800) 547-2537  
Fax: +1 (520) 741-4598  
email: [sales@cdtechno.com](mailto:sales@cdtechno.com)

**C&D TECHNOLOGIES**  
Power Solutions