



## FEATURES

- Radial Format
- -40°C to 85°C Operating Temp
- Up to 13A I<sub>DC</sub>
- 10μH to 47mH
- 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) | RDC (max.) | IDC (cont.) | Temp rise<br>(at IDC) | Nominal Q<br>at f kHz |     | Nominal Self<br>Resonant Frequency | Mechanical Dimensions |      |      |      |      | Footprint |     |
|------------|------------------------------|------------|-------------|-----------------------|-----------------------|-----|------------------------------------|-----------------------|------|------|------|------|-----------|-----|
|            | μH                           | W          | A           | °C                    | Q                     | f   | mHz                                | a                     | b    | c    | d    | Øe   | f         | Øg  |
| 14 103 13  | 10                           | 0.007      | 13          | 20                    | 54                    | 50  | 20.7                               | 27.0                  | 24.4 | 14.0 | 1.30 | 4.5* | 23.9      | 2.6 |
| 14 153 12  | 15                           | 0.009      | 12          | 25                    | 42                    | 50  | 12.7                               | 27.0                  | 24.4 | 14.0 | 1.30 | 4.5* | 23.9      | 2.6 |
| 14 223 11  | 22                           | 0.011      | 11          | 27                    | 64                    | 100 | 9.3                                | 27.0                  | 24.4 | 14.0 | 1.30 | 4.5* | 23.9      | 2.6 |
| 14 333 93  | 33                           | 0.015      | 9.3         | 25                    | 27                    | 50  | 9.1                                | 27.0                  | 24.4 | 14.0 | 1.30 | 4.5* | 23.9      | 2.6 |
| 14 473 85  | 47                           | 0.021      | 8.5         | 26                    | 33                    | 100 | 6.7                                | 26.8                  | 24.4 | 14.0 | 1.20 | 4.5* | 23.8      | 2.4 |
| 14 683 62  | 68                           | 0.032      | 6.2         | 27                    | 32                    | 100 | 5.3                                | 26.5                  | 24.4 | 14.0 | 1.08 | 4.5* | 23.7      | 2.1 |
| 14 683 73  | 68                           | 0.022      | 7.3         | 27                    | 45                    | 100 | 5.3                                | 27.0                  | 24.4 | 18.5 | 1.30 | 4.5* | 23.9      | 2.6 |
| 14 104 54  | 100                          | 0.042      | 5.4         | 27                    | 24                    | 100 | 4.6                                | 26.4                  | 24.4 | 14.0 | 1.02 | 4.5* | 23.6      | 2.0 |
| 14 104 78  | 100                          | 0.040      | 7.8         | 28                    | 34                    | 50  | 3.3                                | 32.4                  | 29.8 | 21.8 | 1.30 | 5.1  | 29.3      | 2.6 |
| 14 154 40  | 150                          | 0.069      | 4.0         | 26                    | 24                    | 50  | 3.4                                | 26.2                  | 24.4 | 14.0 | 0.90 | 4.5* | 23.5      | 1.8 |
| 14 154 49  | 150                          | 0.051      | 4.9         | 27                    | 34                    | 50  | 2.9                                | 26.4                  | 24.4 | 18.5 | 1.02 | 4.5* | 23.6      | 2.0 |
| 14 224 35  | 220                          | 0.096      | 3.5         | 29                    | 22                    | 50  | 2.8                                | 26.1                  | 24.4 | 14.0 | 0.85 | 4.5* | 23.5      | 1.7 |
| 14 224 41  | 220                          | 0.073      | 4.1         | 25                    | 33                    | 100 | 2.3                                | 26.3                  | 24.4 | 18.5 | 0.97 | 4.5* | 23.6      | 1.9 |
| 14 224 55  | 220                          | 0.062      | 5.5         | 27                    | 30                    | 50  | 2.2                                | 32.1                  | 29.8 | 21.8 | 1.14 | 5.1  | 29.1      | 2.2 |
| 14 304 30  | 300                          | 0.140      | 3.0         | 23                    | 26                    | 50  | 2.6                                | 25.9                  | 24.4 | 14.0 | 0.75 | 4.5* | 23.4      | 1.5 |
| 14 304 33  | 300                          | 0.100      | 3.5         | 25                    | 37                    | 50  | 2.2                                | 26.2                  | 24.4 | 18.5 | 0.90 | 4.5* | 23.5      | 1.8 |
| 14 334 28  | 330                          | 0.150      | 2.8         | 24                    | 22                    | 50  | 2.5                                | 25.9                  | 24.4 | 14.0 | 0.76 | 4.5* | 23.4      | 1.5 |
| 14 334 45  | 330                          | 0.091      | 4.5         | 29                    | 25                    | 50  | 1.6                                | 31.8                  | 29.8 | 21.8 | 1.02 | 5.1  | 29.0      | 2.0 |
| 14 474 23  | 470                          | 0.222      | 2.3         | 28                    | 34                    | 50  | 2.0                                | 25.7                  | 24.4 | 14.0 | 0.67 | 4.5* | 23.3      | 1.3 |
| 14 474 40  | 470                          | 0.125      | 4.0         | 29                    | 24                    | 50  | 1.4                                | 31.7                  | 29.8 | 21.8 | 0.97 | 5.1  | 29.0      | 1.9 |
| 14 684 22  | 680                          | 0.226      | 2.2         | 28                    | 28                    | 50  | 1.3                                | 25.9                  | 24.4 | 18.5 | 0.75 | 4.5* | 23.4      | 1.5 |
| 14 684 40  | 680                          | 0.128      | 4.0         | 27                    | 42                    | 50  | 1.1                                | 31.8                  | 29.8 | 26.5 | 1.02 | 5.1  | 29.0      | 2.0 |
| 14 105 16  | 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 |
| 14 105 24  | 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 |
| 14 105 40  | 1.0mH                        | 0.180      | 4.0         | 30                    | 49                    | 10  | 0.8                                | 38.8                  | 36.8 | 27.1 | 1.02 | 6.3  | 36.0      | 2.0 |
| 14 155 13  | 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 |
| 14 155 25  | 1.5mH                        | 0.304      | 2.5         | 28                    | 32                    | 50  | 0.7                                | 31.5                  | 29.8 | 26.5 | 0.85 | 5.1  | 28.9      | 1.7 |
| 14 225 12  | 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 |
| 14 225 27  | 2.2mH                        | 0.317      | 2.7         | 28                    | 21                    | 100 | 0.6                                | 38.6                  | 36.8 | 27.1 | 0.92 | 6.3  | 35.9      | 1.8 |
| 14 335 12  | 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 |
| 14 335 21  | 3.3mH                        | 0.550      | 2.1         | 29                    | 22                    | 50  | 0.4                                | 38.5                  | 36.8 | 27.1 | 0.85 | 6.3  | 35.9      | 1.7 |
| 14 475 18  | 4.7mH                        | 0.750      | 1.8         | 29                    | 54                    | 10  | 0.3                                | 38.3                  | 36.8 | 27.1 | 0.75 | 6.3  | 35.8      | 1.5 |
| 14 685 05  | 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 |
| 14 685 12  | 6.8mH                        | 1.278      | 1.2         | 28                    | 20                    | 50  | 0.3                                | 31.0                  | 29.8 | 26.5 | 0.60 | 5.1  | 28.6      | 1.2 |
| 14 685 14  | 6.8mH                        | 0.943      | 1.4         | 26                    | 17                    | 50  | 0.3                                | 38.3                  | 36.8 | 27.1 | 0.75 | 6.3  | 35.8      | 1.5 |
| 14 106 06  | 10mH                         | 2.294      | 0.6         | 25                    | 48                    | 50  | 0.2                                | 30.9                  | 29.8 | 21.8 | 0.54 | 5.1  | 28.5      | 1.0 |
| 14 106 10  | 10mH                         | 1.950      | 1.0         | 28                    | 35                    | 50  | 0.2                                | 30.9                  | 29.8 | 26.5 | 0.54 | 5.1  | 28.5      | 1.0 |
| 14 156 04  | 15mH                         | 4.912      | 0.4         | 25                    | 61                    | 10  | 0.2                                | 25.1                  | 24.4 | 18.5 | 0.34 | 4.5* | 22.9      | 0.6 |
| 14 156 07  | 15mH                         | 2.960      | 0.7         | 27                    | 50                    | 10  | 0.1                                | 30.7                  | 29.8 | 26.5 | 0.48 | 5.1  | 28.5      | 0.8 |
| 14 156 10  | 15mH                         | 2.186      | 1.0         | 29                    | 55                    | 10  | 0.1                                | 38.0                  | 36.8 | 27.1 | 0.60 | 6.3  | 35.6      | 1.2 |
| 14 226 08  | 22mH                         | 3.500      | 0.8         | 29                    | 21                    | 50  | 0.1                                | 37.9                  | 36.8 | 27.1 | 0.54 | 6.3  | 35.5      | 1.0 |
| 14 336 06  | 33mH                         | 4.838      | 0.6         | 24                    | 25                    | 50  | 0.1                                | 37.7                  | 36.8 | 27.1 | 0.48 | 6.3  | 35.5      | 0.9 |

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

## TYPICAL CORE CHARACTERISTICS

| Inductance<br>Temperature<br>Coefficient | Resistance<br>Temperature<br>Coefficient | Curie<br>Temperature<br>T <sub>C</sub> | Saturation<br>Flux<br>B <sub>SAT</sub> |
|------------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|
| 215ppm                                   | 4100ppm                                  | 130°C                                  | 240mT                                  |

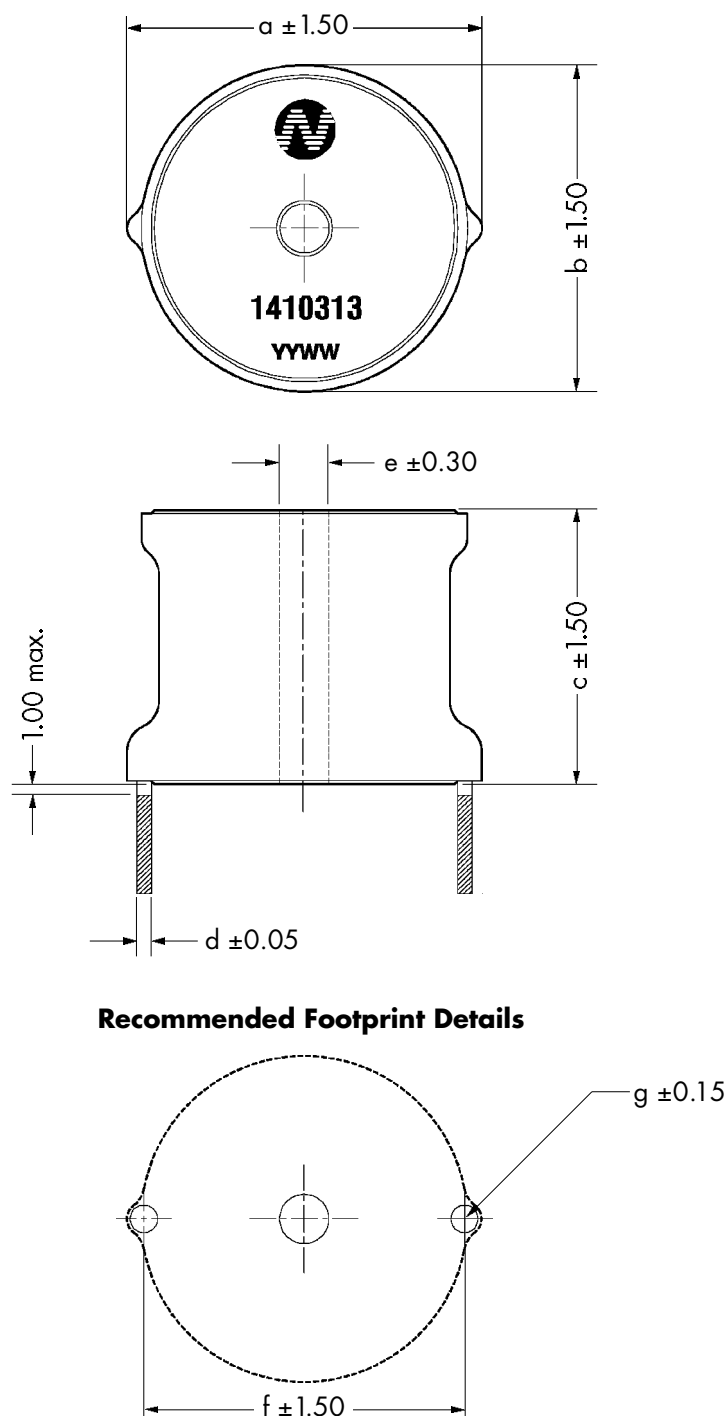
## ABSOLUTE MAXIMUM RATINGS

|                                      |                |
|--------------------------------------|----------------|
| Operating free air temperature range | -40°C to 85°C  |
| Storage temperature range            | -55°C to 125°C |

# 1400 SERIES

## Bobbin Type Inductors

### MECHANICAL DIMENSIONS



All dimensions in mm

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