



FEATURES

- RoHS compliant
- Radial format
- -40°C to 85°C operating temperature
- Up to 13A I_{dc}
- 10µH to 22mH
- Low DC resistance
- Fully tinned leads
- PCB mounting hole
- Low temperature dependance
- 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, (1kHz, 0.1V _{AC}) | DC Current ¹ | DC Resistance | Q at f kHz | | SRF | Mechanical Dimensions | | | | | Footprint | |
| | | | | Nom. | | | a | b | c | d | Øe | f | Øg |
| | ±10% µH | Max. A | Max. Ω | Q | f | mm | | | | | | | |
| 1410313C | 10 | 13 | 0.007 | 54 | 50 | 20.7 | 27.0 | 24.4 | 14.0 | 1.30 | 4.5 | 23.9 | 2.6 |
| 1415312C | 15 | 12 | 0.009 | 42 | 50 | 12.7 | 27.0 | 24.4 | 14.0 | 1.30 | 4.5 | 23.9 | 2.6 |
| 1422311C | 22 | 11 | 0.011 | 64 | 100 | 9.3 | 27.0 | 24.4 | 14.0 | 1.30 | 4.5 | 23.9 | 2.6 |
| 1433393C | 33 | 9.3 | 0.015 | 27 | 50 | 9.1 | 27.0 | 24.4 | 14.0 | 1.30 | 4.5 | 23.9 | 2.6 |
| 1447383C | 47 | 8.3 | 0.019 | 40 | 100 | 6.0 | 27.0 | 24.4 | 18.5 | 1.30 | 4.5 | 23.9 | 2.6 |
| 1447385C | 47 | 8.5 | 0.021 | 33 | 100 | 6.7 | 26.8 | 24.4 | 14.0 | 1.20 | 4.5 | 23.8 | 2.4 |
| 1468362C | 68 | 6.2 | 0.032 | 32 | 100 | 5.3 | 26.5 | 24.4 | 14.0 | 1.08 | 4.5 | 23.7 | 2.1 |
| 1468373C | 68 | 7.3 | 0.022 | 45 | 100 | 5.3 | 27.0 | 24.4 | 18.5 | 1.30 | 4.5 | 23.9 | 2.6 |
| 1410454C | 100 | 5.4 | 0.042 | 24 | 100 | 4.6 | 26.4 | 24.4 | 14.0 | 1.02 | 4.5 | 23.6 | 2.0 |
| 1410460C | 100 | 6.0 | 0.033 | 37 | 100 | 3.9 | 26.8 | 24.4 | 18.5 | 1.20 | 4.5 | 23.8 | 2.4 |
| 1410478C | 100 | 7.8 | 0.040 | 34 | 50 | 3.3 | 32.4 | 29.8 | 21.8 | 1.30 | 5.1 | 29.3 | 2.6 |
| 1415440C | 150 | 4.0 | 0.069 | 24 | 50 | 3.4 | 26.2 | 24.4 | 14.0 | 0.90 | 4.5 | 23.5 | 1.8 |
| 1415449C | 150 | 4.9 | 0.051 | 34 | 50 | 2.9 | 26.4 | 24.4 | 18.5 | 1.02 | 4.5 | 23.6 | 2.0 |
| 1415465C | 150 | 6.5 | 0.042 | 46 | 100 | 2.4 | 32.2 | 29.8 | 21.8 | 1.20 | 5.1 | 29.2 | 2.4 |
| 1422435C | 220 | 3.5 | 0.096 | 22 | 50 | 2.8 | 26.1 | 24.4 | 14.0 | 0.85 | 4.5 | 23.5 | 1.7 |
| 1422441C | 220 | 4.1 | 0.073 | 33 | 100 | 2.3 | 26.3 | 24.4 | 18.5 | 0.97 | 4.5 | 23.6 | 1.9 |
| 1422455C | 220 | 5.5 | 0.062 | 30 | 50 | 2.2 | 32.1 | 29.8 | 21.8 | 1.14 | 5.1 | 29.1 | 2.2 |
| 1430430C | 300 | 3.0 | 0.140 | 26 | 50 | 2.6 | 25.9 | 24.4 | 14.0 | 0.75 | 4.5 | 23.4 | 1.5 |
| 1430433C | 300 | 3.3 | 0.100 | 37 | 50 | 2.2 | 26.2 | 24.4 | 18.5 | 0.90 | 4.5 | 23.5 | 1.8 |
| 1430450C | 300 | 5.0 | 0.080 | 28 | 50 | 1.7 | 31.8 | 29.8 | 21.8 | 1.02 | 5.1 | 29.0 | 2.0 |
| 1433428C | 330 | 2.8 | 0.150 | 22 | 50 | 2.5 | 25.9 | 24.4 | 14.0 | 0.76 | 4.5 | 23.4 | 1.5 |
| 1433433C | 330 | 3.3 | 0.107 | 29 | 50 | 2.0 | 26.2 | 24.4 | 18.5 | 0.90 | 4.5 | 23.5 | 1.8 |
| 1433445C | 330 | 4.5 | 0.091 | 25 | 50 | 1.6 | 31.8 | 29.8 | 21.8 | 1.02 | 5.1 | 29.0 | 2.0 |
| 1447423C | 470 | 2.3 | 0.222 | 34 | 50 | 2.0 | 25.7 | 24.4 | 14.0 | 0.67 | 4.5 | 23.3 | 1.3 |
| 1447427C | 470 | 2.7 | 0.149 | 25 | 50 | 1.6 | 26.1 | 24.4 | 18.5 | 0.85 | 4.5 | 23.5 | 1.7 |
| 1447440C | 470 | 4.0 | 0.125 | 24 | 50 | 1.4 | 31.7 | 29.8 | 21.8 | 0.97 | 5.1 | 29.0 | 1.9 |
| 1468420C | 680 | 2.0 | 0.276 | 23 | 50 | 1.6 | 25.7 | 24.4 | 14.0 | 0.67 | 4.5 | 23.3 | 1.3 |
| 1468422C | 680 | 2.2 | 0.226 | 28 | 50 | 1.3 | 25.9 | 24.4 | 18.5 | 0.75 | 4.5 | 23.4 | 1.5 |
| 1468431C | 680 | 3.1 | 0.173 | 60 | 10 | 1.0 | 31.6 | 29.8 | 21.8 | 0.90 | 5.1 | 28.9 | 1.8 |
| 1410516C | 1.0mH | 1.6 | 0.419 | 30 | 50 | 1.4 | 25.6 | 24.4 | 14.0 | 0.60 | 4.5 | 23.2 | 1.2 |
| 1410517C | 1.0mH | 1.7 | 0.336 | 35 | 50 | 1.2 | 25.7 | 24.4 | 18.5 | 0.67 | 4.5 | 23.3 | 1.3 |
| 1410524C | 1.0mH | 2.4 | 0.277 | 33 | 50 | 1.0 | 31.4 | 29.8 | 21.8 | 0.79 | 5.1 | 28.8 | 1.5 |
| 1415513C | 1.5mH | 1.3 | 0.630 | 34 | 50 | 1.0 | 25.5 | 24.4 | 14.0 | 0.54 | 4.5 | 23.1 | 1.0 |
| 1415514C | 1.5mH | 1.4 | 0.518 | 47 | 50 | 0.8 | 25.6 | 24.4 | 18.5 | 0.60 | 4.5 | 23.2 | 1.2 |
| 1415517C | 1.5mH | 1.7 | 0.374 | 28 | 50 | 0.7 | 31.3 | 29.8 | 21.8 | 0.75 | 5.1 | 28.8 | 1.5 |
| 1422509C | 2.2mH | 0.9 | 0.916 | 43 | 50 | 0.9 | 25.3 | 24.4 | 14.0 | 0.48 | 4.5 | 23.1 | 0.9 |
| 1422512C | 2.2mH | 1.2 | 0.649 | 33 | 50 | 0.7 | 25.6 | 24.4 | 18.5 | 0.60 | 4.5 | 23.2 | 1.2 |
| 1422514C | 2.2mH | 1.4 | 0.622 | 33 | 50 | 0.6 | 31.1 | 29.8 | 21.8 | 0.67 | 5.1 | 28.7 | 1.3 |
| 1433507C | 3.3mH | 0.7 | 1.428 | 45 | 50 | 0.8 | 25.2 | 24.4 | 14.0 | 0.43 | 4.5 | 23.0 | 0.8 |
| 1433510C | 3.3mH | 1.0 | 1.992 | 20 | 50 | 0.7 | 25.5 | 24.4 | 18.5 | 0.54 | 4.5 | 23.1 | 1.0 |
| 1433512C | 3.3mH | 1.2 | 0.861 | 20 | 50 | 0.5 | 31.0 | 29.8 | 21.8 | 0.60 | 5.1 | 28.6 | 1.2 |
| 1447506C | 4.7mH | 0.6 | 2.200 | 60 | 50 | 0.6 | 25.2 | 24.4 | 14.0 | 0.39 | 4.5 | 23.0 | 0.7 |
| 1447508C | 4.7mH | 0.8 | 1.436 | 65 | 50 | 0.5 | 25.3 | 24.4 | 18.5 | 0.48 | 4.5 | 23.1 | 0.9 |
| 1447509C | 4.7mH | 0.9 | 1.250 | 57 | 10 | 0.5 | 30.9 | 29.8 | 21.8 | 0.54 | 5.1 | 28.5 | 1.0 |
| 1468505C | 6.8mH | 0.5 | 2.810 | 50 | 50 | 0.5 | 25.2 | 24.4 | 14.0 | 0.39 | 4.5 | 23.0 | 0.7 |
| 1468507C | 6.8mH | 0.7 | 2.214 | 47 | 50 | 0.4 | 25.2 | 24.4 | 18.5 | 0.43 | 4.5 | 23.0 | 0.8 |
| 1468508C | 6.8mH | 0.8 | 1.884 | 30 | 50 | 0.4 | 30.7 | 29.8 | 21.8 | 0.48 | 5.1 | 28.5 | 0.9 |
| 1410604C | 10mH | 0.4 | 4.340 | 51 | 50 | 0.4 | 25.1 | 24.4 | 14.0 | 0.34 | 4.5 | 22.9 | 0.6 |
| 1410605C | 10mH | 0.5 | 3.394 | 48 | 50 | 0.3 | 25.2 | 24.4 | 18.5 | 0.39 | 4.5 | 23.0 | 0.7 |
| 1410606C | 10mH | 0.6 | 2.294 | 48 | 50 | 0.2 | 30.9 | 29.8 | 21.8 | 0.54 | 5.1 | 28.5 | 1.0 |
| 1415604C | 15mH | 0.4 | 4.912 | 61 | 10 | 0.2 | 25.1 | 24.4 | 18.5 | 0.34 | 4.5 | 22.9 | 0.6 |
| 1415605C | 15mH | 0.5 | 3.740 | 55 | 10 | 0.2 | 30.6 | 29.8 | 21.8 | 0.43 | 5.1 | 28.4 | 0.8 |
| 1422604C | 22mH | 0.4 | 6.962 | 30 | 50 | 0.2 | 30.5 | 29.8 | 21.8 | 0.34 | 5.1 | 28.3 | 0.6 |

¹ Maximum DC current occurs when either the inductance falls to 60% of its nominal value or when its temperature rise reaches 50°C, whichever is sooner.

RoHS COMPLIANCE INFORMATION



This series is compatible with RoHS soldering systems. A peak wave solder temperature of 300°C for 10 seconds is permitted. The pin termination finish on this product series is pure tin dip. All types are backward compatible with Sn/Pb soldering systems.

For further information, please visit www.cd4power.com/rohs

TYPICAL CORE/WIRE CHARACTERISTICS

| Inductance Temperature Coefficient | Resistance Temperature Coefficient | Curie Temperature (T _c) | Saturation Flux (B _{SAT}) |
|------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|
| 215ppm | 3900ppm | 130°C | 240mT |

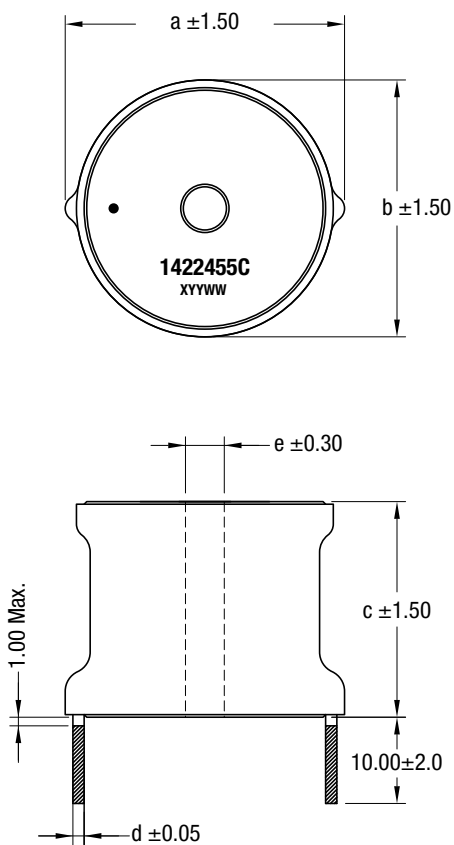
ABSOLUTE MAXIMUM RATINGS

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

All specifications typical at T_A=25°C

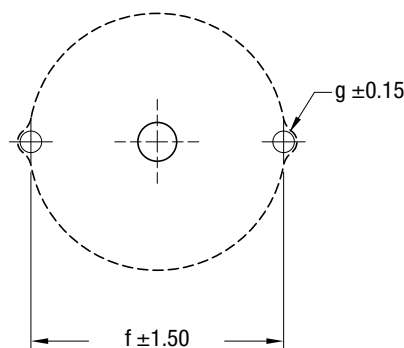
PACKAGE SPECIFICATIONS

MECHANICAL DIMENSIONS



All dimensions in mm.
Package weight: 30-65g Typ.
Marking indicates start of winding.

RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm