

ADB Technology Co., Ltd

Ceramic Chip Inductors / CHL Series

Feature

Monolithic structure
 Closed magnetic circuit avoids crosstalk
 S.M.T. type
 Suitable for flow and reflow soldering
 Shapes and dimensions follow E.I.A. SPEC
 Available in various sizes
 Excellent soldering ability and heat resistance
 High S.R.F. up to 6 GHz and above

Application

Wireless communications, cellular phone, cordless phone, pager, etc.
 Miscellaneous high-frequency circuits. EMI countermeasure in high-frequency circuits.

Product Identification

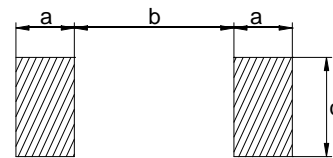
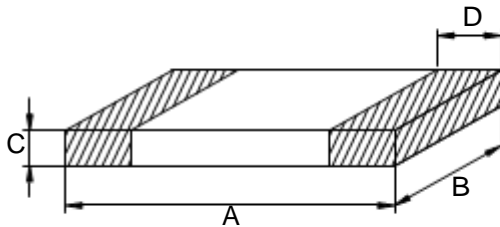
CHL 2012 10N J

1 2 3 4

1. Series name.
2. Dimension.
3. Inductance.
4. Tolerance.
(S=±0.3nH, J=5%, K=10%)



Configurations & Dimensions



PCB Pattern

| Series Name | A | B | C | D | a | b | c |
|-------------|------------|------------|--------------------------|------------|-----------|----------|-----------|
| CHL 0603 | 0.6±0.03 | 0.3±0.03 | 0.3±0.03 | 0.15±0.05 | 0.2(REF) | 0.3(REF) | 0.3(REF) |
| CHL 1005 | 1.0 ± 0.1 | 0.5 ± 0.1 | 0.5 ± 0.1 | 0.25 ± 0.1 | 0.35(REF) | 0.5(REF) | 0.55(REF) |
| CHL 1608 | 1.6 ± 0.15 | 0.8 ± 0.15 | 0.8 ± 0.15 | 0.3 ± 0.2 | 0.4(REF) | 1.0(REF) | 0.85(REF) |
| CHL 2012 | 2.0 ± 0.2 | 1.25 ± 0.2 | 0.85 ± 0.2 1.25 ± 0.2 | 0.5 ± 0.3 | 0.6(REF) | 1.0(REF) | 1.3(REF) |

Unit: mm

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Ceramic Chip Inductors / CHL Series

Electrical Characteristics

| CHL1005 Series | | | | | |
|-----------------------|------------------------------|------------------------|-----------------------------------|--------------------------------------|--------------------------------------|
| Part Number | Inductance (nH) | Q Value Min | Test Frequency (MHz) | DC Resistance Max. (mΩ) | Rated Current Max. (mA) |
| CHL1005-1N0 __ | 1.0 | 8 | 100 | 90 | 300 |
| CHL1005-1N2 __ | 1.2 | 8 | 100 | 90 | 300 |
| CHL1005-1N3 __ | 1.3 | 8 | 100 | 100 | 400 |
| CHL1005-1N5 __ | 1.5 | 8 | 100 | 120 | 300 |
| CHL1005-1N8 __ | 1.8 | 8 | 100 | 120 | 300 |
| CHL1005-2N0 __ | 2.0 | 8 | 100 | 140 | 300 |
| CHL1005-2N2 __ | 2.2 | 8 | 100 | 150 | 400 |
| CHL1005-2N7 __ | 2.7 | 8 | 100 | 140 | 300 |
| CHL1005-3N0 __ | 3.0 | 8 | 100 | 160 | 300 |
| CHL1005-3N3 __ | 3.3 | 8 | 100 | 160 | 300 |
| CHL1005-3N9 __ | 3.9 | 8 | 100 | 190 | 300 |
| CHL1005-4N7 __ | 4.7 | 8 | 100 | 210 | 300 |
| CHL1005-5N1 __ | 5.1 | 8 | 100 | 260 | 300 |
| CHL1005-5N6 __ | 5.6 | 8 | 100 | 230 | 300 |
| CHL1005-6N8 __ | 6.8 | 8 | 100 | 250 | 300 |
| CHL1005-8N2 __ | 8.2 | 8 | 100 | 280 | 300 |
| CHL1005-10N __ | 10 | 8 | 100 | 310 | 300 |
| CHL1005-12N __ | 12 | 8 | 100 | 400 | 300 |
| CHL1005-15N __ | 15 | 8 | 100 | 500 | 300 |
| CHL1005-18N __ | 18 | 8 | 100 | 550 | 300 |
| CHL1005-22N __ | 22 | 8 | 100 | 600 | 300 |
| CHL1005-27N __ | 27 | 8 | 100 | 700 | 300 |
| CHL1005-33N __ | 33 | 8 | 100 | 800 | 300 |
| CHL1005-39N __ | 39 | 8 | 100 | 1000 | 200 |
| CHL1005-47N __ | 47 | 8 | 100 | 1200 | 200 |
| CHL1005-56N __ | 56 | 8 | 100 | 1300 | 200 |
| CHL1005-68N __ | 68 | 8 | 100 | 2000 | 180 |
| CHL1005-82N __ | 82 | 8 | 100 | 2200 | 150 |
| CHL1005-R10 __ | 100 | 8 | 100 | 2500 | 150 |
| CHL1005-R12 __ | 120 | 8 | 100 | 2700 | 150 |
| CHL1005-R27 __ | 270 | 8 | 100 | 4500 | 100 |

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Ceramic Chip Inductors / CHL Series

Electrical Characteristics

| <i>CHL1608 Series</i> | | | | | |
|-----------------------|----------------------|----------------|---------------------------|------------------------------|------------------------------|
| Part Number | Inductance (nH) | Q Value Min | Test Frequency (MHz) | DC Resistance Max. (mΩ) | Rated Current Max. (mA) |
| CHL 1608-1N0 __ | 1.0 | 8 | 100 | 50 | 300 |
| CHL 1608-1N2 __ | 1.2 | 8 | 100 | 50 | 300 |
| CHL 1608-1N5 __ | 1.5 | 8 | 100 | 100 | 300 |
| CHL 1608-1N8 __ | 1.8 | 8 | 100 | 100 | 300 |
| CHL 1608-2N2 __ | 2.2 | 8 | 100 | 100 | 300 |
| CHL 1608-2N7 __ | 2.7 | 10 | 100 | 100 | 300 |
| CHL 1608-3N3 __ | 3.3 | 10 | 100 | 120 | 300 |
| CHL 1608-3N9 __ | 3.9 | 10 | 100 | 140 | 300 |
| CHL 1608-4N7 __ | 4.7 | 10 | 100 | 160 | 300 |
| CHL 1608-5N6 __ | 5.6 | 10 | 100 | 180 | 300 |
| CHL 1608-6N8 __ | 6.8 | 10 | 100 | 220 | 300 |
| CHL 1608-8N2 __ | 8.2 | 10 | 100 | 240 | 300 |
| CHL 1608-10N __ | 10 | 12 | 100 | 260 | 300 |
| CHL 1608-12N __ | 12 | 12 | 100 | 280 | 300 |
| CHL 1608-15N __ | 15 | 12 | 100 | 320 | 300 |
| CHL 1608-18N __ | 18 | 12 | 100 | 350 | 300 |
| CHL 1608-22N __ | 22 | 12 | 100 | 400 | 300 |
| CHL 1608-27N __ | 27 | 12 | 100 | 450 | 300 |
| CHL 1608-33N __ | 33 | 12 | 100 | 550 | 300 |
| CHL 1608-39N __ | 39 | 12 | 100 | 600 | 300 |
| CHL 1608-47N __ | 47 | 12 | 100 | 700 | 300 |
| CHL 1608-56N __ | 56 | 12 | 100 | 750 | 300 |
| CHL 1608-68N __ | 68 | 12 | 100 | 850 | 300 |
| CHL 1608-82N __ | 82 | 12 | 100 | 950 | 300 |
| CHL 1608-R10 __ | 100 | 12 | 100 | 1000 | 300 |
| CHL 1608-R12 __ | 120 | 8 | 50 | 1200 | 300 |
| CHL 1608-R15 __ | 150 | 8 | 50 | 1200 | 300 |
| CHL 1608-R18 __ | 180 | 8 | 50 | 1300 | 300 |
| CHL 1608-R22 __ | 220 | 8 | 50 | 1500 | 300 |
| CHL 1608-R27 __ | 270 | 8 | 50 | 1900 | 150 |
| CHL 1608-R33 __ | 330 | 8 | 50 | 2800 | 150 |
| CHL 1608-R39 __ | 390 | 8 | 50 | 3200 | 150 |
| CHL 1608-R47 __ | 470 | 8 | 50 | 3600 | 150 |

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Electrical Characteristics

| CHL2012 Series | | | | | |
|----------------|----------------------|----------------|---------------------------|------------------------------|------------------------------|
| Part Number | Inductance (nH) | Q Value Min | Test Frequency (MHz) | DC Resistance Max. (mΩ) | Rated Current Max. (mA) |
| CHL 2012-1N5 _ | 1.5 | 10 | 100 | 100 | 300 |
| CHL 2012-1N8 _ | 1.8 | 10 | 100 | 100 | 300 |
| CHL 2012-2N2 _ | 2.2 | 10 | 100 | 100 | 300 |
| CHL 2012-2N7 _ | 2.7 | 12 | 100 | 100 | 300 |
| CHL 2012-3N3 _ | 3.3 | 12 | 100 | 130 | 300 |
| CHL 2012-3N9 _ | 3.9 | 12 | 100 | 150 | 300 |
| CHL 2012-4N7 _ | 4.7 | 12 | 100 | 200 | 300 |
| CHL 2012-5N6 _ | 5.6 | 15 | 100 | 230 | 300 |
| CHL 2012-6N8 _ | 6.8 | 15 | 100 | 250 | 300 |
| CHL 2012-8N2 _ | 8.2 | 15 | 100 | 280 | 300 |
| CHL 2012-10N _ | 10 | 15 | 100 | 300 | 300 |
| CHL 2012-12N _ | 12 | 15 | 100 | 350 | 300 |
| CHL 2012-15N _ | 15 | 15 | 100 | 400 | 300 |
| CHL 2012-18N _ | 18 | 15 | 100 | 450 | 300 |
| CHL 2012-22N _ | 22 | 18 | 100 | 500 | 300 |
| CHL 2012-27N _ | 27 | 18 | 100 | 550 | 300 |
| CHL 2012-33N _ | 33 | 18 | 100 | 600 | 300 |
| CHL 2012-39N _ | 39 | 18 | 100 | 650 | 300 |
| CHL 2012-47N _ | 47 | 18 | 100 | 700 | 300 |
| CHL 2012-56N _ | 56 | 18 | 100 | 750 | 300 |
| CHL 2012-68N _ | 68 | 18 | 100 | 800 | 300 |
| CHL 2012-82N _ | 82 | 18 | 100 | 900 | 300 |
| CHL 2012-R10 _ | 100 | 18 | 100 | 900 | 300 |
| CHL 2012-R12 _ | 120 | 13 | 50 | 950 | 300 |
| CHL 2012-R15 _ | 150 | 13 | 50 | 1000 | 300 |
| CHL 2012-R18 _ | 180 | 13 | 50 | 1100 | 300 |
| CHL 2012-R22 _ | 220 | 12 | 50 | 1200 | 300 |
| CHL 2012-R27 _ | 270 | 12 | 50 | 1300 | 300 |
| CHL 2012-R33 _ | 330 | 12 | 50 | 1400 | 300 |
| CHL 2012-R39 _ | 390 | 10 | 50 | 1300 | 300 |
| CHL 2012-R47 _ | 470 | 10 | 50 | 1500 | 300 |

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| CHL2012 Series | | | | | |
|-----------------------|----------------------|----------------|---------------------------|------------------------------|------------------------------|
| Part Number | Inductance (nH) | Q Value Min | Test Frequency (MHz) | DC Resistance Max. (mΩ) | Rated Current Max. (mA) |
| CHL 0603-1N0 <u>S</u> | 1.0 | 4 | 100 | 110 | 470 |
| CHL 0603-1N2 <u>S</u> | 1.2 | 4 | 100 | 120 | 300 |
| CHL 0603-1N5 <u>S</u> | 1.5 | 4 | 100 | 130 | 300 |
| CHL 0603-1N8 <u>S</u> | 1.8 | 4 | 100 | 160 | 300 |
| CHL 0603-2N0 <u>S</u> | 2.0 | 4 | 100 | 170 | 300 |
| CHL 0603-2N2 <u>S</u> | 2.2 | 4 | 100 | 190 | 300 |
| CHL 0603-2N4 <u>S</u> | 2.4 | 4 | 100 | 200 | 300 |
| CHL 0603-2N7 <u>S</u> | 2.7 | 4 | 100 | 210 | 300 |
| CHL 0603-3N0 <u>S</u> | 3.0 | 4 | 100 | 220 | 300 |
| CHL 0603-3N3 <u>S</u> | 3.3 | 4 | 100 | 230 | 300 |
| CHL 0603-3N6 <u>S</u> | 3.6 | 4 | 100 | 250 | 300 |
| CHL 0603-3N9 <u>S</u> | 3.9 | 4 | 100 | 270 | 300 |
| CHL 0603-4N3 <u>S</u> | 4.3 | 4 | 100 | 300 | 300 |
| CHL 0603-4N7 <u>S</u> | 4.7 | 4 | 100 | 300 | 300 |
| CHL 0603-5N1 <u>S</u> | 5.1 | 4 | 100 | 330 | 300 |
| CHL 0603-5N6 <u>S</u> | 5.6 | 4 | 100 | 360 | 300 |
| CHL 0603-6N2 <u>S</u> | 6.2 | 4 | 100 | 380 | 300 |
| CHL 0603-6N8 <u>J</u> | 6.8 | 4 | 100 | 390 | 300 |
| CHL 0603-7N5 <u>J</u> | 7.5 | 4 | 100 | 410 | 300 |
| CHL 0603-8N2 <u>J</u> | 8.2 | 4 | 100 | 450 | 300 |
| CHL 0603-9N1 <u>J</u> | 9.1 | 4 | 100 | 480 | 300 |
| CHL 0603-10N <u>J</u> | 10 | 4 | 100 | 510 | 300 |
| CHL 0603-12N <u>J</u> | 12 | 4 | 100 | 680 | 300 |
| CHL 0603-15N <u>J</u> | 15 | 4 | 100 | 710 | 300 |
| CHL 0603-18N <u>J</u> | 18 | 4 | 100 | 810 | 300 |
| CHL 0603-22N <u>J</u> | 22 | 4 | 100 | 1000 | 300 |
| CHL 0603-27N <u>J</u> | 27 | 4 | 100 | 1350 | 300 |
| CHL 0603-33N <u>J</u> | 33 | 4 | 100 | 1470 | 300 |
| CHL 0603-39N <u>J</u> | 39 | 4 | 100 | 1720 | 300 |
| CHL 0603-47N <u>J</u> | 47 | 4 | 100 | 1900 | 300 |
| CHL 0603-56N <u>J</u> | 56 | 4 | 100 | 2270 | 300 |
| CHL 0603-68N <u>J</u> | 68 | 4 | 100 | 2660 | 300 |
| CHL 0603-82N <u>J</u> | 82 | 4 | 100 | 3370 | 300 |
| CHL 0603-R10 <u>J</u> | 100 | 4 | 100 | 3740 | 300 |