# MULTILYER RF CHIP INDUCTOR
# ACLH TYPE

## PRODUCT IDENTIFICATION

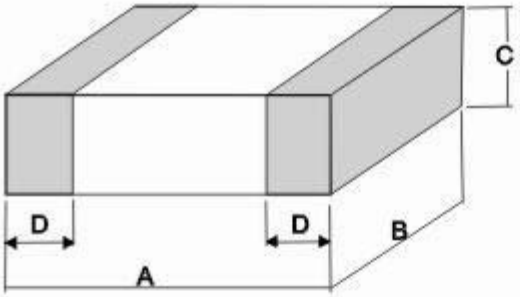
| A | C | L | H | – | 1 | 0 | 0 | 5 | – | 1 | 2 | N | S | – | N | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | | 2 | 3 | | 4 | | | 5 | | 6 | |

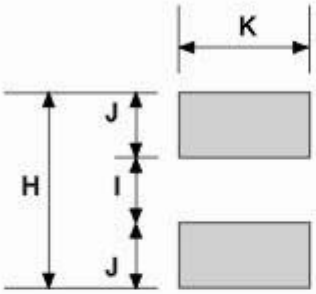
1.PRODUCT SYMBOL
2.OUTSIDE DIA : mm
3.BODY HEIGHT : mm
4.INDUCTANCE : nH
5.TOLERANCE : S±0.3nH , J±5% , K±10%
6.Meet ROHS Regulations of Prohibiped 6 Poisonous Materials

## FEATURE

- Meet SONY SS-00259`s criteria for lead-free product
- Excellent Q factor and SRF characteristics
- Cost effective
- Small size of 1005/1608 is Suitable for small portable equipment
- Supports operating frequence up to 6GHz with nominal Inductance values from 1.0nH to 330nH

## SHAPES & DIMENSION FOR ACLH SERIES (mm)




| Part No. | A | B | C | D | H | I | K |
|---|---|---|---|---|---|---|---|
| ACLH1005 | 1.0±0.1 | 0.5±0.1 | 0.5±0.1 | 0.25±0.1 | 1.2~1.4 | 0.4 | 0.4 |
| ACLH1608 | 1.6±0.15 | 0.8±0.15 | 0.8±0.15 | 0.3±0.2 | 2.4~3.4 | 0.8 | 0.6 |
| ACLH2012 | 2.0±0.2 | 1.25±0.2 | 0.9±0.2 | 0.5±0.3 | 3.0~4.0 | 1.2 | 1.0 |

## ELECTRICAL SPECIFICATION

| Part Number | Inductance (nH) | Tolerance | Q Min. | Q Typical At | | SRF | DC Resistance | IDC |
|---|---|---|---|---|---|---|---|---|
| | At 100MHz | | At 100MHz | 100MHz | 800MHz | (MHz)Typical | (Ω)Max. | (mA)Max. |
| ACLH1005-1N0□ | 1.0 | S | 8 | 9 | 28 | 10000 | 0.10 | 300 |
| ACLH1005-1N2□ | 1.2 | S | 8 | 9 | 28 | 10000 | 0.10 | 300 |
| ACLH1005-1N5□ | 1.5 | S | 8 | 10 | 28 | 9000 | 0.10 | 300 |
| ACLH1005-1N8□ | 1.8 | S | 8 | 10 | 28 | 8700 | 0.10 | 300 |
| ACLH1005-2N2□ | 2.2 | S | 8 | 10 | 29 | 8100 | 0.12 | 300 |
| ACLH1005-2N7□ | 2.7 | S | 8 | 11 | 30 | 7700 | 0.12 | 300 |
| ACLH1005-3N3□ | 3.3 | S/K | 8 | 11 | 30 | 6300 | 0.15 | 300 |
| ACLH1005-3N9□ | 3.9 | S/K | 8 | 11 | 31 | 6100 | 0.15 | 300 |
| ACLH1005-4N7□ | 4.7 | S/K | 8 | 11 | 31 | 5400 | 0.18 | 300 |
| ACLH1005-5N6□ | 5.6 | S/K | 8 | 11 | 31 | 5100 | 0.20 | 300 |
| ACLH1005-6N8□ | 6.8 | J/K | 8 | 11 | 33 | 4550 | 0.25 | 300 |
| ACLH1005-8N2□ | 8.2 | J/K | 8 | 12 | 32 | 4100 | 0.25 | 300 |
| ACLH1005-10N□ | 10 | J/K | 8 | 12 | 32 | 3900 | 0.30 | 300 |
| ACLH1005-12N□ | 12 | J/K | 8 | 12 | 31 | 3000 | 0.30 | 300 |
| ACLH1005-15N□ | 15 | J/K | 8 | 12 | 30 | 2600 | 0.40 | 300 |
| ACLH1005-18N□ | 18 | J/K | 8 | 12 | 29 | 2350 | 0.50 | 300 |
| ACLH1005-22N□ | 22 | J/K | 8 | 12 | 28 | 2000 | 0.60 | 300 |
| ACLH1005-27N□ | 27 | J/K | 8 | 12 | 27 | 1900 | 0.70 | 300 |
| ACLH1005-33N□ | 33 | J/K | 8 | 10 | 25 | 1700 | 1.00 | 200 |
| ACLH1005-39N□ | 39 | J/K | 8 | 10 | 25 | 1600 | 1.20 | 200 |
| ACLH1005-47N□ | 47 | J/K | 8 | 9 | 22 | 1300 | 1.30 | 200 |
| ACLH1005-56N□ | 56 | J/K | 8 | 10 | 21 | 1250 | 2.00 | 200 |
| ACLH1005-68N□ | 68 | J/K | 8 | 10 | 15 | 1000 | 2.20 | 100 |
| ACLH1005-82N□ | 82 | J/K | 8 | 9 | 13 | 900 | 2.50 | 100 |
| ACLH1005-R10□ | 100 | J/K | 8 | 9 | 10 | 850 | 2.50 | 100 |

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| Part Number | Inductance (nH) | Tolerance | Q Min.At | | Q Typical At | | | | | SRF | DC Resistance | IDC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | At 100MHz | | 50 MHz | 100 MHz | 50 MHz | 100 MHz | 300 MHz | 500 MHz | 800 MHz | (MHz)Typical | (Ω)Max. | (mA)Max. |
| ACLH1608-1N0S | 1.0 | S | | 8 | | 12 | | | 43 | 10000 | 0.10 | 500 |
| ACLH1608-1N2S | 1.2 | S | | 8 | | 13 | | | 44 | 10000 | 0.10 | 500 |
| ACLH1608-1N5S | 1.5 | S | | 8 | | 13 | | | 45 | 8000 | 0.10 | 500 |
| ACLH1608-1N8S | 1.8 | S | | 8 | | 13 | | | 46 | 8000 | 0.10 | 500 |
| ACLH1608-2N2S | 2.2 | S | | 8 | | 13 | | | 46 | 7200 | 0.10 | 500 |
| ACLH1608-2N7S | 2.7 | S | | 10 | | 13 | | | 46 | 6200 | 0.10 | 500 |
| ACLH1608-3N3□ | 3.3 | S/K | | 10 | | 13 | | | 47 | 5200 | 0.12 | 500 |
| ACLH1608-3N9□ | 3.9 | S/K | | 10 | | 13 | | | 47 | 5000 | 0.14 | 500 |
| ACLH1608-4N7□ | 4.7 | S/K | | 10 | | 13 | | | 41 | 4750 | 0.16 | 500 |
| ACLH1608-5N6□ | 5.6 | S/K | | 10 | | 13 | | | 41 | 4100 | 0.18 | 500 |
| ACLH1608-6N8□ | 6.8 | J/K | | 10 | | 13 | | | 44 | 3750 | 0.22 | 500 |
| ACLH1608-8N2□ | 8.2 | J/K | | 10 | | 13 | | | 44 | 3300 | 0.24 | 500 |
| ACLH1608-10N□ | 10 | J/K | | 12 | | 13 | | | 45 | 3000 | 0.26 | 300 |
| ACLH1608-12N□ | 12 | J/K | | 12 | | 15 | | | 46 | 2600 | 0.28 | 300 |
| ACLH1608-15N□ | 15 | J/K | | 12 | | 15 | | | 48 | 2500 | 0.32 | 300 |
| ACLH1608-18N□ | 18 | J/K | | 12 | | 17 | | | 48 | 2400 | 0.35 | 300 |
| ACLH1608-22N□ | 22 | J/K | | 12 | | 17 | | | 45 | 2000 | 0.40 | 300 |
| ACLH1608-27N□ | 27 | J/K | | 12 | | 18 | | | 43 | 1900 | 0.45 | 300 |
| ACLH1608-33N□ | 33 | J/K | | 12 | | 18 | | | 39 | 1600 | 0.55 | 300 |
| ACLH1608-39N□ | 39 | J/K | | 12 | | 18 | | 37 | | 1400 | 0.60 | 300 |
| ACLH1608-47N□ | 47 | J/K | | 12 | | 18 | | 35 | | 1300 | 0.70 | 300 |
| ACLH1608-56N□ | 56 | J/K | | 12 | | 18 | | 32 | | 1100 | 0.75 | 300 |
| ACLH1608-62N□ | 62 | J/K | | 12 | | 18 | | 32 | | 1050 | 0.85 | 300 |
| ACLH1608-68N□ | 68 | J/K | | 12 | | 18 | | 32 | | 1050 | 0.85 | 300 |
| ACLH1608-82N□ | 82 | J/K | | 12 | | 18 | | 30 | | 900 | 1.00 | 300 |
| ACLH1608-R10□ | 100 | J/K | | 12 | | | | 20 | | 770 | 1.20 | 300 |
| ACLH1608-R12□ | *120 | J/K | 8 | 12 | 14 | | 20 | | | 850 | 2.30 | 250 |
| ACLH1608-R15□ | *150 | J/K | 8 | 12 | 15 | | 16 | | | 550 | 2.40 | 250 |
| ACLH1608-R18□ | *180 | J/K | 8 | 12 | 15 | | 16 | | | 520 | 2.70 | 250 |

※At 50MHz

## ELECTRICAL SPECIFICATION

| Part Number | Inductance (nH) | Tolerance | Q Min.At | | Q Typical At | | | | | SRF | DC Resistance | IDC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | At 100MHz | | 50 MHz | 100 MHz | 50 MHz | 100 MHz | 300 MHz | 500 MHz | 800 MHz | (MHz)Typical | (Ω)Max. | (mA)Max. |
| ACLH2012-1N0□ | 1.0 | S | | 10 | | 13 | | | 40 | >60000 | 0.10 | 300 |
| ACLH2012-1N2□ | 1.2 | S | | 10 | | 13 | | | 40 | >60000 | 0.10 | 300 |
| ACLH2012-1N5□ | 1.5 | S | | 10 | | 13 | | | 40 | >60000 | 0.10 | 300 |
| ACLH2012-1N8□ | 1.8 | S | | 10 | | 13 | | | 45 | >60000 | 0.10 | 300 |
| ACLH2012-2N2□ | 2.2 | S | | 10 | | 13 | | | 48 | >60000 | 0.10 | 300 |
| ACLH2012-2N7□ | 2.7 | S | | 12 | | 13 | | | 48 | >60000 | 0.10 | 300 |
| ACLH2012-3N3□ | 3.3 | S/K | | 12 | | 15 | | | 56 | >60000 | 0.13 | 300 |
| ACLH2012-3N9□ | 3.9 | S/K | | 12 | | 15 | | | 54 | 5400 | 0.15 | 300 |
| ACLH2012-4N7□ | 4.7 | S/K | | 12 | | 15 | | | 50 | 4500 | 0.20 | 300 |
| ACLH2012-5N6□ | 5.6 | S/K | | 12 | | 15 | | | 53 | 4000 | 0.23 | 300 |
| ACLH2012-6N8□ | 6.8 | J/K | | 15 | | 15 | | | 51 | 3650 | 0.25 | 300 |
| ACLH2012-8N2□ | 8.2 | J/K | | 15 | | 15 | | | 53 | 3000 | 0.28 | 300 |
| ACLH2012-10N□ | 10 | J/K | | 15 | | 16 | | | 45 | 2500 | 0.30 | 300 |
| ACLH2012-12N□ | 12 | J/K | | 15 | | 16 | | | 48 | 2450 | 0.35 | 300 |
| ACLH2012-15N□ | 15 | J/K | | 15 | | 17 | | | 48 | 2000 | 0.40 | 300 |
| ACLH2012-18N□ | 18 | J/K | | 15 | | 17 | | | 43 | 1750 | 0.45 | 300 |
| ACLH2012-22N□ | 22 | J/K | | 15 | | 17 | | | 40 | 1700 | 0.50 | 300 |
| ACLH2012-27N□ | 27 | J/K | | 15 | | 18 | | | 38 | 1550 | 0.55 | 300 |
| ACLH2012-33N□ | 33 | J/K | | 15 | | 19 | | | 35 | 1350 | 0.60 | 300 |
| ACLH2012-39N□ | 39 | J/K | | 18 | | 21 | | | 37 | 1300 | 0.65 | 300 |
| ACLH2012-47N□ | 47 | J/K | | 18 | | 21 | | | 38 | 1200 | 0.70 | 300 |
| ACLH2012-56N□ | 56 | J/K | | 18 | | 21 | | | 31 | 1150 | 0.75 | 300 |
| ACLH2012-68N□ | 68 | J/K | | 18 | | 21 | | | 28 | 1000 | 0.80 | 300 |
| ACLH2012-82N□ | 82 | J/K | | 18 | | 22 | | | 16 | 850 | 0.90 | 300 |
| ACLH2012-R10□ | 100 | J/K | | 18 | | 23 | | | | 730 | 1.00 | 300 |
| ACLH2012-R12□ | *120 | J/K | 13 | | 16 | 22 | | | | 650 | 1.20 | 300 |
| ACLH2012-R15□ | *150 | J/K | 13 | | 16 | 22 | | | | 550 | 1.40 | 300 |
| ACLH2012-R18□ | *180 | J/K | 13 | | 16 | 23 | | | | 500 | 1.80 | 300 |
| ACLH2012-R22□ | *220 | J/K | 13 | | 14 | 20 | | | | 450 | 2.00 | 300 |
| ACLH2012-R27□ | *270 | J/K | 12 | | 14 | 20 | | | | 400 | 2.50 | 200 |
| ACLH2012-R33□ | *330 | J/K | 12 | | 14 | 22 | | | | 380 | 3.00 | 200 |

※At 50MHz