## FEATURES

- Metal material for large current and low loss.
- High performance (Isat) realized by metal dust core.
- Low loss realized with low Rdc.
- Closed magnetic circuit design reduces leakage flux.
- Vinyl thermal spray, better surface compactness.
- Operating Temp : -55℃~+125℃(Including self heating)



## APPLICATIONS

- DC/DC converters, Pad, Smart phone,Notebooks, VR, AR.
- Portable gaming devices, Smart wear, Wi-Fi module, LCD displays, HDDs, DVCs, DSCs, etc
- Baseband power supply, Amplifier, Power management, Module power supply, Camera power Management.

## PART NUMBERING

| APH | 252012 | C | 2R2 | M | P | 01 |
|---|---|---|---|---|---|---|
| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |

| ① Series Name | |
|---|---|
| APH | Mini Molded SMD Power Inductors |

| ③ Feature Type |
|---|
| C Type |

| ④ Inductance | |
|---|---|
| Code (example) | Nominal inductance［μH］ |
| R47 | 0.47 |
| 1R0 | 1.0 |
| 100 | 10 |

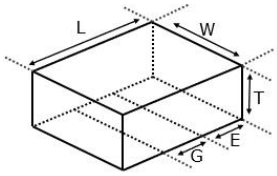
| ⑤ Inductance Tolerance | |
|---|---|
| M | ±20% |

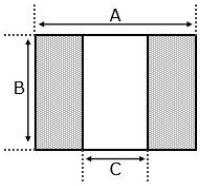
| ⑥ Coating Color Code | |
|---|---|
| P | Black |
| X | Gray |

| ⑦ Design Code |
|---|
| 01.02.03.-- |

| ② External Dimensions [LxWxT mm] | | | |
|---|---|---|---|
| 100505 | 1.0x0.5x0.5 | 201610 | 2.0x1.6x1.0 |
| 100506 | 1.0x0.5x0.6 | 201612 | 2.0x1.6x1.2 |
| 100565 | 1.0x0.5x0.65 | 252055 | 2.5x2x0.55 |
| 100765 | 1.0x0.7x0.65 | 252075 | 2.5x2x0.75 |
| 100708 | 1.0x0.7x0.8 | 252008 | 2.5x2x0.8 |
| 121065 | 1.2x1.0x0.65 | 252010 | 2.5x2x1.0 |
| 141265 | 1.4x1.2x0.65 | 252012 | 2.5x2x1.2 |
| 141207 | 1.4x1.2x0.7 | 303010 | 3.0x3.0x1.0 |
| 141208 | 1.4x1.2x0.8 | 303012 | 3.0x3.0x1.2 |
| 160806 | 1.6x0.8x0.6 | 303015 | 3.0x3.0x1.5 |
| 160865 | 1.6x0.8x0.65 | 303018 | 3.0x3.0x1.8 |
| 160808 | 1.6x0.8x0.8 | 303020 | 3.0x3.0x2.0 |
| 201206 | 2.0x1.2x0.6 | 322510 | 3.2x2.5x1.0 |
| 201265 | 2.0x1.2x0.65 | 322512 | 3.2x2.5x1.2 |
| 201208 | 2.0x1.2x0.8 | 322520 | 3.2x2.5x2.0 |
| 201210 | 2.0x1.2x1.0 | 404008 | 4.1x4.1x0.8 |
| 201212 | 2.0x1.2x1.2 | 404010 | 4.1x4.1x1.0 |
| 201655 | 2.0x1.6x0.55 | 404012 | 4.1x4.1x1.2 |
| 201606 | 2.0x1.6x0.6 | 404015 | 4.1x4.1x1.5 |
| 201665 | 2.0x1.6x0.65 | 404020 | 4.1x4.1x2.0 |
| 201607 | 2.0x1.6x0.7 | 404030 | 4.1x4.1x3.0 |
| 201608 | 2.0x1.6x0.8 | | |

## DIMENSIONS & RECOMMENDED LAND PATTERN




Recommended Land Pattern

Unit: mm

| Series | Dimensions | | | | | Recommended Land Pattern | | |
|---|---|---|---|---|---|---|---|---|
| | L | W | T | G | E | A | B | C |
| | | | Max. | Typ. | ±0.2 | Typ. | Typ. | Typ. |
| APH100505 | 1.0±0.15 | 0.5±0.15 | 0.50 | 0.40 | 0.30 | 1.20 | 0.60 | 0.30 |
| APH100506 | 1.0±0.15 | 0.5±0.15 | 0.60 | 0.40 | 0.30 | 1.20 | 0.60 | 0.30 |
| APH100565 | 1.0±0.15 | 0.5±0.15 | 0.65 | 0.40 | 0.30 | 1.20 | 0.60 | 0.30 |
| APH100765 | 1.0±0.1 | 0.7±0.1 | 0.65 | 0.40 | 0.30 | 1.10 | 0.80 | 0.30 |
| APH100708 | 1.0±0.1 | 0.7±0.1 | 0.80 | 0.40 | 0.30 | 1.10 | 0.80 | 0.30 |
| APH121065 | 1.2±0.2 | 1.0±0.2 | 0.65 | 0.40 | 0.40 | 1.30 | 1.10 | 0.30 |
| APH121008 | 1.2±0.2 | 1.0±0.2 | 0.80 | 0.40 | 0.40 | 1.30 | 1.10 | 0.30 |
| APH141265 | 1.4±0.2 | 1.2±0.2 | 0.65 | 0.50 | 0.45 | 1.50 | 1.30 | 0.40 |
| APH141207 | 1.4±0.2 | 1.2±0.2 | 0.70 | 0.50 | 0.45 | 1.50 | 1.30 | 0.40 |
| APH141208 | 1.4±0.2 | 1.2±0.2 | 0.80 | 0.50 | 0.45 | 1.50 | 1.30 | 0.40 |
| APH160806 | 1.6±0.2 | 0.8±0.2 | 0.60 | 0.60 | 0.50 | 1.70 | 0.90 | 0.50 |
| APH160865 | 1.6±0.2 | 0.8±0.2 | 0.65 | 0.60 | 0.50 | 1.70 | 0.90 | 0.50 |
| APH160808 | 1.6±0.2 | 0.8±0.2 | 0.80 | 0.60 | 0.50 | 1.70 | 0.90 | 0.50 |
| APH201206 | 2.0±0.2 | 1.2±0.2 | 0.60 | 0.60 | 0.70 | 2.10 | 1.30 | 0.50 |
| APH201265 | 2.0±0.2 | 1.2±0.2 | 0.65 | 0.60 | 0.70 | 2.10 | 1.30 | 0.50 |
| APH201208 | 2.0±0.2 | 1.2±0.2 | 0.80 | 0.60 | 0.70 | 2.10 | 1.30 | 0.50 |
| APH201210 | 2.0±0.2 | 1.2±0.2 | 1.00 | 0.60 | 0.70 | 2.10 | 1.30 | 0.50 |
| APH201212 | 2.0±0.2 | 1.2±0.2 | 1.20 | 0.60 | 0.70 | 2.10 | 1.30 | 0.50 |
| APH201655 | 2.0±0.2 | 1.6±0.2 | 0.55 | 0.60 | 0.70 | 2.10 | 1.70 | 0.50 |
| APH201606 | 2.0±0.2 | 1.6±0.2 | 0.60 | 0.60 | 0.70 | 2.10 | 1.70 | 0.50 |
| APH201665 | 2.0±0.2 | 1.6±0.2 | 0.65 | 0.60 | 0.70 | 2.10 | 1.70 | 0.50 |
| APH201607 | 2.0±0.2 | 1.6±0.2 | 0.70 | 0.60 | 0.70 | 2.10 | 1.70 | 0.50 |
| APH201608 | 2.0±0.2 | 1.6±0.2 | 0.80 | 0.60 | 0.70 | 2.10 | 1.70 | 0.50 |
| APH201610 | 2.0±0.2 | 1.6±0.2 | 1.00 | 0.60 | 0.70 | 2.10 | 1.70 | 0.50 |
| APH201612 | 2.0±0.2 | 1.6±0.2 | 1.20 | 0.60 | 0.70 | 2.10 | 1.70 | 0.50 |
| APH252055 | 2.5±0.2 | 2.0±0.2 | 0.55 | 0.80 | 0.85 | 2.60 | 2.10 | 0.70 |
| APH252075 | 2.5±0.2 | 2.0±0.2 | 0.75 | 0.80 | 0.85 | 2.60 | 2.10 | 0.70 |
| APH252008 | 2.5±0.2 | 2.0±0.2 | 0.80 | 0.80 | 0.85 | 2.60 | 2.10 | 0.70 |
| APH252010 | 2.5±0.2 | 2.0±0.2 | 1.00 | 0.80 | 0.85 | 2.60 | 2.10 | 0.70 |
| APH252012 | 2.5±0.2 | 2.0±0.2 | 1.20 | 0.80 | 0.85 | 2.60 | 2.10 | 0.70 |
| APH303010 | 3.0±0.1 | 3.0±0.1 | 1.00 | 1.00 | 1.00 | 3.00 | 3.00 | 0.90 |
| APH303012 | 3.0±0.1 | 3.0±0.1 | 1.20 | 1.00 | 1.00 | 3.00 | 3.00 | 0.90 |
| APH303015 | 3.0±0.1 | 3.0±0.1 | 1.50 | 1.00 | 1.00 | 3.00 | 3.00 | 0.90 |
| APH303018 | 3.0±0.1 | 3.0±0.1 | 1.80 | 1.00 | 1.00 | 3.00 | 3.00 | 0.90 |
| APH303020 | 3.0±0.1 | 3.0±0.1 | 2.00 | 1.00 | 1.00 | 3.00 | 3.00 | 0.90 |
| APH322510 | 3.2±0.2 | 2.5±0.2 | 1.00 | 1.10 | 1.05 | 3.20 | 2.50 | 1.00 |
| APH322512 | 3.2±0.2 | 2.5±0.2 | 1.20 | 1.10 | 1.05 | 3.20 | 2.50 | 1.00 |
| APH322520 | 3.2±0.2 | 2.5±0.2 | 2.00 | 1.10 | 1.05 | 3.20 | 2.50 | 1.00 |
| APH404008 | 4.1±0.2 | 4.1±0.2 | 0.80 | 1.40 | 1.35 | 4.10 | 4.10 | 1.30 |
| APH404010 | 4.1±0.2 | 4.1±0.2 | 1.00 | 1.40 | 1.35 | 4.10 | 4.10 | 1.30 |
| APH404012 | 4.1±0.2 | 4.1±0.2 | 1.20 | 1.40 | 1.35 | 4.10 | 4.10 | 1.30 |
| APH404015 | 4.1±0.2 | 4.1±0.2 | 1.50 | 1.40 | 1.35 | 4.10 | 4.10 | 1.30 |
| APH404020 | 4.1±0.2 | 4.1±0.2 | 2.00 | 1.40 | 1.35 | 4.10 | 4.10 | 1.30 |
| APH404030 | 4.1±0.2 | 4.1±0.2 | 3.00 | 1.40 | 1.35 | 4.10 | 4.10 | 1.30 |

## ELECTRICAL CHARACTERISTICS

● APH100505 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH100505CR47MP01 | 0.47 | ±20% | 220 | 190 | 1.30 | 1.50 | 1.20 | 1.30 |

● APH100506 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH100506C1R0MP01 | 1 | ±20% | 320 | 280 | 1.05 | 1.15 | 0.80 | 1.00 |
| APH100506C1R0MP02 | 1 | ±20% | 300 | 270 | 1.05 | 1.15 | 0.80 | 1.00 |

● APH100565 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH100565CR47MP01 | 0.47 | ±20% | 175 | 150 | 1.75 | 1.85 | 1.60 | 1.70 |

● APH100765 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH100765C1R5MP03 | 1.5 | ±20% | 500 | 400 | 0.90 | 1.10 | 0.30 | 0.40 |
| APH100765C2R6MX03 | 2.6 | ±20% | 900 | 750 | 0.80 | 1.00 | 0.40 | 0.55 |

● APH100708 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH100708C2R2MP03 | 2.2 | ±20% | 480 | 425 | 1.05 | 1.15 | 0.90 | 1.00 |
| APH100708C4R7MP03 | 4.7 | ±20% | 1080 | 900 | 0.4 | 0.45 | 0.45 | 0.65 |

## ELECTRICAL CHARACTERISTICS

### APH1210 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH121065C2R2MP01 | 2.2 | ±20% | 340 | 280 | 1.20 | 1.30 | 0.90 | 1.00 |
| APH121008C4R7MP01 | 4.7 | ±20% | 680 | 600 | 0.90 | 1.00 | 0.60 | 0.70 |

### APH141265 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH141265CR10MP01 | 0.1 | ±20% | 16.5 | 13.5 | 6.50 | 7.00 | 6.00 | 6.50 |
| APH141265CR15MP01 | 0.15 | ±20% | 19.5 | 16 | 5.50 | 6.00 | 5.40 | 5.90 |
| APH141265CR24MP01 | 0.24 | ±20% | 27 | 23 | 5.00 | 5.50 | 6.00 | 6.50 |
| APH141265CR33MP01 | 0.33 | ±20% | 32 | 26 | 4.00 | 4.40 | 4.20 | 4.40 |
| APH141265CR33MX01 | 0.33 | ±20% | 32 | 26 | 4.00 | 4.40 | 4.20 | 4.40 |
| APH141265CR47MP01 | 0.47 | ±20% | 45 | 37 | 3.00 | 3.40 | 2.70 | 3.00 |
| APH141265CR47MX01 | 0.47 | ±20% | 45 | 37 | 3.00 | 3.40 | 2.70 | 3.00 |
| APH141265CR47MX03 | 0.47 | ±20% | 38 | 35 | 3.60 | 4.00 | 3.20 | 3.50 |

### APH141207 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH141207CR24MP01 | 0.24 | ±20% | 28 | 22 | 4.30 | 4.60 | 3.60 | 4.00 |
| APH141207CR47MP01 | 0.47 | ±20% | 38 | 34 | 3.50 | 3.80 | 3.30 | 3.80 |

### APH141208 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH141208CR10MP01 | 0.1 | ±20% | 14 | 11.5 | 8.00 | 8.50 | 7.50 | 8.00 |
| APH141208CR24MP01 | 0.24 | ±20% | 27 | 22 | 5.70 | 6.00 | 3.70 | 4.10 |
| APH141208CR24MP02 | 0.24 | ±20% | 24 | 21 | 6.50 | 7.20 | 6.00 | 6.60 |
| APH141208CR33MP01 | 0.33 | ±20% | 28 | 23 | 5.00 | 5.30 | 3.50 | 4.00 |
| APH141208CR33MX01 | 0.33 | ±20% | 28 | 23 | 5.00 | 5.30 | 3.50 | 4.00 |
| APH141208CR47MP01 | 0.47 | ±20% | 35 | 29 | 4.20 | 4.60 | 3.30 | 3.80 |
| APH141208CR47MX01 | 0.47 | ±20% | 35 | 29 | 4.20 | 4.60 | 3.30 | 3.80 |

## ELECTRICAL CHARACTERISTICS

● APH141208 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH141208CR47MP02 | 0.47 | ±20% | 32 | 29 | 4.20 | 4.60 | 3.30 | 3.80 |
| APH141208CR68MP01 | 0.68 | ±20% | 57 | 51 | 3.20 | 3.50 | 3.00 | 3.50 |
| APH141208C1R0MP01 | 1 | ±20% | 77 | 65 | 2.50 | 3.00 | 2.50 | 3.00 |
| APH141208C2R2MP01 | 2.2 | ±20% | 225 | 200 | 1.70 | 1.90 | 1.80 | 2.00 |
| APH141208C3R3MP01 | 3.3 | ±20% | 345 | 300 | 1.40 | 1.60 | 1.30 | 1.50 |
| APH141208C4R7MP01 | 4.7 | ±20% | 530 | 465 | 1.20 | 1.30 | 1.00 | 1.10 |

● APH160806 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH160806CR10MX01 | 0.1 | ±20% | 20 | 16.5 | 6.00 | 6.50 | 6.00 | 6.50 |

● APH160865 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH160865CR22MX01 | 0.22 | ±20% | 43 | 35 | 4.50 | 5.00 | 3.50 | 4.00 |
| APH160865CR47MX01 | 0.47 | ±20% | 82 | 66 | 3.00 | 3.30 | 2.00 | 2.30 |
| APH160865CR47MX02 | 0.47 | ±20% | 78 | 65 | 3.20 | 3.50 | 2.50 | 3.00 |
| APH160865C1R0MX01 | 1 | ±20% | 200 | 180 | 2.00 | 2.40 | 1.50 | 1.80 |
| APH160865C1R0MX02 | 1 | ±20% | 160 | 140 | 2.00 | 2.20 | 1.80 | 2.20 |
| APH160865C2R2MP01 | 2.2 | ±20% | 430 | 390 | 1.30 | 1.60 | 1.10 | 1.30 |

● APH160808 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH160808CR18MP01 | 0.18 | ±20% | 21 | 17 | 5.50 | 6.00 | 5.20 | 5.80 |
| APH160808CR22MP01 | 0.22 | ±20% | 40 | 33 | 5.00 | 5.50 | 3.00 | 3.40 |
| APH160808CR24MP01 | 0.24 | ±20% | 41 | 34 | 4.80 | 5.30 | 2.90 | 3.30 |
| APH160808CR24MP02 | 0.24 | ±20% | 26 | 22 | 4.40 | 4.90 | 3.50 | 3.90 |
| APH160808CR24MP03 | 0.24 | ±20% | 24 | 20 | 4.80 | 5.30 | 5.00 | 5.50 |

## ELECTRICAL CHARACTERISTICS

● APH160808 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH160808CR33MP01 | 0.33 | ±20% | 35 | 30 | 4.40 | 4.70 | 4.30 | 4.70 |
| APH160808CR47MP01 | 0.47 | ±20% | 100 | 80 | 3.70 | 4.10 | 2.30 | 2.60 |
| APH160808CR47MP02 | 0.47 | ±20% | 43 | 36 | 3.50 | 4.00 | 4.00 | 4.20 |
| APH160808CR56MP01 | 0.56 | ±20% | 110 | 85 | 3.50 | 4.00 | 1.90 | 2.20 |
| APH160808CR56MP02 | 0.56 | ±20% | 63 | 51 | 2.70 | 3.00 | 2.20 | 2.50 |
| APH160808CR68MP01 | 0.68 | ±20% | 130 | 110 | 3.00 | 3.30 | 1.90 | 2.10 |
| APH160808C1R0MP01 | 1 | ±20% | 200 | 180 | 2.60 | 3.00 | 1.80 | 2.10 |
| APH160808C1R0MX02 | 1 | ±20% | 115 | 105 | 2.10 | 2.30 | 1.80 | 2.10 |
| APH160808C1R0MX03 | 1 | ±20% | 115 | 105 | 2.20 | 2.50 | 1.80 | 2.10 |
| APH160808C1R5MP01 | 1.5 | ±20% | 285 | 240 | 2.00 | 2.40 | 1.40 | 1.70 |
| APH160808C2R2MP01 | 2.2 | ±20% | 260 | 220 | 1.30 | 1.50 | 1.20 | 1.40 |
| APH160808C2R2MX01 | 2.2 | ±20% | 260 | 220 | 1.30 | 1.50 | 1.20 | 1.40 |
| APH160808C3R3MP01 | 3.3 | ±20% | 600 | 500 | 1.20 | 1.40 | 0.90 | 1.00 |
| APH160808C4R7MP01 | 4.7 | ±20% | 700 | 585 | 1.00 | 1.20 | 0.80 | 1.00 |
| APH160808C100MP01 | 10 | ±20% | 1600 | 1450 | 0.70 | 0.80 | 0.45 | 0.50 |

● APH201206 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201206CR11MX01 | 0.11 | ±20% | 15 | 12.5 | 4.80 | 5.20 | 7.00 | 7.50 |
| APH201206CR47MP01 | 0.47 | ±20% | 47 | 39 | 3.20 | 3.50 | 3.10 | 3.40 |

● APH201265 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201265CR15MP01 | 0.15 | ±20% | 14 | 12 | 6.00 | 6.50 | 5.50 | 6.00 |
| APH201265CR24MP01 | 0.24 | ±20% | 20 | 17 | 4.80 | 5.10 | 4.50 | 4.80 |
| APH201265CR33MP01 | 0.33 | ±20% | 35 | 30 | 4.30 | 4.60 | 4.00 | 4.30 |
| APH201265CR47MP01 | 0.47 | ±20% | 44 | 37 | 3.80 | 4.10 | 3.50 | 3.80 |
| APH201265CR47MP03 | 0.47 | ±20% | 44 | 37 | 4.00 | 4.20 | 3.50 | 3.80 |
| APH201265CR68MP01 | 0.68 | ±20% | 60 | 50 | 3.20 | 3.50 | 3.00 | 3.30 |
| APH201265C1R0MP01 | 1 | ±20% | 86 | 78 | 2.50 | 2.80 | 2.30 | 2.60 |

## ELECTRICAL CHARACTERISTICS

● APH201265 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201265C1R5MP01 | 1.5 | ±20% | 135 | 115 | 2.00 | 2.30 | 1.80 | 2.10 |
| APH201265C2R2MP01 | 2.2 | ±20% | 230 | 215 | 1.50 | 1.80 | 1.40 | 1.70 |
| APH201265C2R2MP02 | 2.2 | ±20% | 210 | 175 | 1.30 | 1.40 | 1.30 | 1.40 |
| APH201265C2R2MP03 | 2.2 | ±20% | 200 | 175 | 1.60 | 1.90 | 1.50 | 1.80 |
| APH201265C4R7MP01 | 4.7 | ±20% | 530 | 470 | 1.00 | 1.20 | 0.90 | 1.10 |

● APH201208 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201208CR11MP01 | 0.11 | ±20% | 12 | 10 | 9.00 | 9.50 | 6.50 | 7.00 |
| APH201208CR15MP01 | 0.15 | ±20% | 13 | 11 | 7.00 | 7.50 | 6.30 | 6.80 |
| APH201208CR24MP01 | 0.24 | ±20% | 23 | 18 | 6.00 | 6.50 | 5.90 | 6.50 |
| APH201208CR24MX01 | 0.24 | ±20% | 23 | 18 | 6.00 | 6.50 | 5.90 | 6.50 |
| APH201208CR24MX03 | 0.24 | ±20% | 20 | 17 | 6.60 | 7.00 | 5.90 | 6.50 |
| APH201208CR24MP03 | 0.24 | ±20% | 18 | 16 | 7.00 | 7.20 | 6.50 | 7.00 |
| APH201208CR33MP01 | 0.33 | ±20% | 45 | 33 | 4.80 | 5.20 | 4.00 | 4.30 |
| APH201208CR33MP02 | 0.33 | ±20% | 24 | 20 | 5.40 | 6.00 | 5.20 | 5.80 |
| APH201208CR47MP01 | 0.47 | ±20% | 50 | 34 | 4.60 | 5.00 | 3.30 | 3.50 |
| APH201208CR47MX01 | 0.47 | ±20% | 50 | 34 | 4.60 | 5.00 | 3.30 | 3.50 |
| APH201208CR47MP02 | 0.47 | ±20% | 28 | 24 | 4.80 | 5.20 | 4.50 | 4.70 |
| APH201208CR68MP01 | 0.68 | ±20% | 60 | 50 | 3.70 | 4.20 | 3.30 | 3.70 |
| APH201208C1R0MP01 | 1 | ±20% | 70 | 55 | 3.50 | 4.00 | 2.90 | 3.30 |
| APH201208C1R0MP02 | 1 | ±20% | 55 | 48 | 2.80 | 3.20 | 2.80 | 3.20 |
| APH201208C1R0MX02 | 1 | ±20% | 55 | 48 | 2.80 | 3.20 | 2.80 | 3.20 |
| APH201208C1R5MP01 | 1.5 | ±20% | 135 | 118 | 2.50 | 3.00 | 1.90 | 2.20 |
| APH201208C2R2MP01 | 2.2 | ±20% | 185 | 160 | 2.30 | 2.60 | 1.80 | 2.20 |
| APH201208C2R2MP03 | 2.2 | ±20% | 156 | 130 | 2.00 | 2.20 | 1.60 | 1.80 |
| APH201208C3R3MP01 | 3.3 | ±20% | 300 | 253 | 1.60 | 1.90 | 1.50 | 1.80 |
| APH201208C4R7MP01 | 4.7 | ±20% | 325 | 285 | 1.40 | 1.60 | 1.50 | 1.70 |
| APH201208C6R8MP01 | 6.8 | ±20% | 530 | 460 | 1.10 | 1.30 | 1.00 | 1.10 |
| APH201208C100MP01 | 10 | ±20% | 800 | 700 | 0.80 | 0.90 | 0.70 | 0.80 |

## ELECTRICAL CHARACTERISTICS

● APH201210 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201210CR10MP01 | 0.1 | ±20% | 13 | 8 | 8.00 | 8.50 | 7.00 | 7.50 |
| APH201210CR11MP01 | 0.11 | ±20% | 8.5 | 7 | 12.00 | 14.10 | 9.50 | 10.00 |
| APH201210CR22MP01 | 0.22 | ±20% | 22 | 16 | 6.80 | 7.30 | 6.50 | 7.10 |
| APH201210CR24MP01 | 0.24 | ±20% | 23 | 17 | 6.70 | 7.20 | 6.40 | 7.00 |
| APH201210CR24MX02 | 0.24 | ±20% | 17 | 13 | 6.70 | 7.20 | 6.40 | 7.00 |
| APH201210CR24MX03 | 0.24 | ±20% | 14 | 11.5 | 6.70 | 7.30 | 8.00 | 9.00 |
| APH201210CR33MP01 | 0.33 | ±20% | 32 | 24 | 6.00 | 6.50 | 5.00 | 5.50 |
| APH201210CR33MX03 | 0.33 | ±20% | 16 | 14 | 6.30 | 6.70 | 5.20 | 5.70 |
| APH201210CR47MP01 | 0.47 | ±20% | 36 | 29 | 5.00 | 5.50 | 4.30 | 4.70 |
| APH201210CR47MX03 | 0.47 | ±20% | 26 | 22 | 5.50 | 6.00 | 4.50 | 5.00 |
| APH201210CR47MP02 | 0.47 | ±20% | 20 | 18 | 5.50 | 6.00 | 6.50 | 7.00 |
| APH201210CR56MP01 | 0.56 | ±20% | 31 | 26 | 4.80 | 5.20 | 4.70 | 5.30 |
| APH201210CR68MP01 | 0.68 | ±20% | 43 | 37 | 4.50 | 5.00 | 4.00 | 4.30 |
| APH201210C1R0MP01 | 1 | ±20% | 63 | 55 | 3.50 | 4.00 | 3.50 | 3.90 |
| APH201210C1R0MP02 | 1 | ±20% | 55 | 50 | 3.50 | 4.00 | 3.50 | 4.00 |
| APH201210C1R0MP03 | 1 | ±20% | 55 | 50 | 3.60 | 4.00 | 3.50 | 4.00 |
| APH201210C1R2MP01 | 1.2 | ±20% | 75 | 65 | 3.00 | 3.30 | 2.90 | 3.20 |
| APH201210C1R5MP01 | 1.5 | ±20% | 85 | 76 | 2.70 | 3.20 | 2.60 | 3.10 |
| APH201210C2R2MP01 | 2.2 | ±20% | 150 | 135 | 2.40 | 2.70 | 1.70 | 2.00 |
| APH201210C2R2MP02 | 2.2 | ±20% | 145 | 125 | 2.40 | 2.70 | 2.00 | 2.20 |
| APH201210C3R3MP01 | 3.3 | ±20% | 260 | 210 | 1.80 | 2.20 | 1.50 | 1.80 |
| APH201210C4R7MP01 | 4.7 | ±20% | 300 | 275 | 1.60 | 1.80 | 1.40 | 1.60 |
| APH201210C6R8MP01 | 6.8 | ±20% | 520 | 440 | 1.20 | 1.45 | 1.30 | 1.50 |
| APH201210C100MP01 | 10 | ±20% | 660 | 600 | 1.00 | 1.20 | 1.00 | 1.10 |

● APH201212 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201212CR11MP01 | 0.11 | ±20% | 6.2 | 5.5 | 11.00 | 12.00 | 11.00 | 12.00 |
| APH201212CR11MP02 | 0.11 | ±20% | 5.8 | 5 | 11.00 | 12.00 | 11.00 | 12.00 |
| APH201212CR24MP01 | 0.24 | ±20% | 16 | 13 | 8.50 | 9.00 | 7.00 | 7.50 |
| APH201212CR24MP02 | 0.24 | ±20% | 15 | 13 | 8.50 | 9.00 | 7.20 | 7.70 |
| APH201212CR33MP01 | 0.33 | ±20% | 20.5 | 17 | 6.00 | 6.50 | 5.80 | 6.30 |
| APH201212CR47MP01 | 0.47 | ±20% | 23.5 | 20 | 5.00 | 5.50 | 5.50 | 6.00 |
| APH201212CR47MP02 | 0.47 | ±20% | 22 | 20 | 5.00 | 5.50 | 5.70 | 6.20 |

## ELECTRICAL CHARACTERISTICS

● APH201212 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201212C1R0MP01 | 1 | ±20% | 48 | 40 | 3.60 | 4.00 | 3.50 | 3.90 |
| APH201212C1R5MP01 | 1.5 | ±20% | 80 | 70 | 3.00 | 3.30 | 2.70 | 3.00 |
| APH201212C2R2MP01 | 2.2 | ±20% | 130 | 115 | 2.40 | 2.80 | 2.30 | 2.50 |
| APH201212C3R3MP01 | 3.3 | ±20% | 210 | 180 | 1.80 | 2.00 | 1.60 | 1.80 |
| APH201212C6R8MP01 | 6.8 | ±20% | 440 | 370 | 1.30 | 1.50 | 1.30 | 1.40 |
| APH201212C100MP01 | 10 | ±20% | 500 | 440 | 1.20 | 1.40 | 1.10 | 1.20 |
| APH201212C100MP02 | 10 | ±20% | 468 | 400 | 1.20 | 1.40 | 1.10 | 1.20 |

● APH201655 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201655CR33MP01 | 0.33 | ±20% | 41 | 34 | 3.50 | 4.00 | 3.50 | 4.00 |
| APH201655CR47MP01 | 0.47 | ±20% | 53 | 44 | 3.00 | 3.50 | 3.00 | 3.50 |

● APH201606 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201606C2R2MP01 | 2.2 | ±20% | 180 | 155 | 1.70 | 1.90 | 1.60 | 1.80 |
| APH201606C4R7MP01 | 4.7 | ±20% | 425 | 370 | 1.20 | 1.40 | 1.10 | 1.30 |

● APH201665 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201665CR47MP01 | 0.47 | ±20% | 40 | 33 | 4.00 | 4.40 | 4.50 | 5.00 |
| APH201665CR68MP01 | 0.68 | ±20% | 50 | 42 | 3.10 | 3.40 | 3.50 | 4.00 |
| APH201665C1R0MP01 | 1 | ±20% | 70 | 58 | 2.70 | 3.00 | 3.00 | 3.50 |
| APH201665C2R2MP01 | 2.2 | ±20% | 170 | 145 | 2.00 | 2.20 | 2.60 | 2.80 |

## ELECTRICAL CHARACTERISTICS

### APH201607 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201607C2R2MP01 | 2.2 | ±20% | 175 | 150 | 2.00 | 2.30 | 1.80 | 2.10 |

### APH201608 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201608CR22MP01 | 0.22 | ±20% | 19 | 14 | 5.60 | 6.10 | 5.90 | 6.60 |
| APH201608CR24MP01 | 0.24 | ±20% | 20 | 14 | 5.50 | 6.00 | 5.80 | 6.50 |
| APH201608CR33MP01 | 0.33 | ±20% | 24 | 18 | 5.30 | 5.80 | 4.80 | 5.50 |
| APH201608CR47MP01 | 0.47 | ±20% | 27 | 24 | 5.00 | 5.50 | 5.20 | 5.50 |
| APH201608CR47MX01 | 0.47 | ±20% | 27 | 24 | 5.00 | 5.50 | 5.20 | 5.50 |
| APH201608CR68MP01 | 0.68 | ±20% | 44 | 39 | 4.20 | 4.60 | 3.50 | 3.80 |
| APH201608C1R0MP01 | 1 | ±20% | 60 | 53 | 3.10 | 3.30 | 3.30 | 3.60 |
| APH201608C1R0MX02 | 1 | ±20% | 52 | 45 | 3.50 | 3.80 | 3.30 | 3.60 |
| APH201608C1R5MP01 | 1.5 | ±20% | 85 | 73 | 2.80 | 3.00 | 2.80 | 3.10 |
| APH201608C2R2MP03 | 2.2 | ±20% | 180 | 150 | 2.20 | 2.40 | 2.10 | 2.30 |
| APH201608C2R2MP01 | 2.2 | ±20% | 140 | 123 | 2.30 | 2.50 | 2.00 | 2.20 |
| APH201608C3R3MP01 | 3.3 | ±20% | 220 | 200 | 1.80 | 2.10 | 1.50 | 1.80 |
| APH201608C4R7MP01 | 4.7 | ±20% | 290 | 260 | 1.50 | 1.70 | 1.40 | 1.60 |
| APH201608C4R7MP03 | 4.7 | ±20% | 325 | 270 | 1.30 | 1.50 | 1.20 | 1.40 |
| APH201608C6R8MP01 | 6.8 | ±20% | 405 | 360 | 1.30 | 1.40 | 1.20 | 1.40 |
| APH201608C100MP03 | 10 | ±20% | 900 | 800 | 0.80 | 0.90 | 0.90 | 1.00 |
| APH201608C100MP01 | 10 | ±20% | 800 | 690 | 0.90 | 1.00 | 0.90 | 1.00 |

### APH201610 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201610CR10MP01 | 0.1 | ±20% | 12 | 7 | 8.40 | 9.00 | 8.00 | 8.50 |
| APH201610CR11MP01 | 0.11 | ±20% | 13 | 7.5 | 8.20 | 8.90 | 7.50 | 8.00 |
| APH201610CR15MP01 | 0.15 | ±20% | 14 | 8 | 8.00 | 8.70 | 7.00 | 7.60 |
| APH201610CR22MP01 | 0.22 | ±20% | 18 | 11 | 7.50 | 8.20 | 6.30 | 6.90 |
| APH201610CR22MP02 | 0.22 | ±20% | 13 | 11 | 7.50 | 8.20 | 6.30 | 6.90 |
| APH201610CR24MP01 | 0.24 | ±20% | 19 | 12 | 7.40 | 8.00 | 6.20 | 6.80 |

## ELECTRICAL CHARACTERISTICS

● APH201610 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201610CR24MP02 | 0.24 | ±20% | 14 | 11 | 7.40 | 8.00 | 6.20 | 6.80 |
| APH201610CR24MP03 | 0.24 | ±20% | 9 | 7.5 | 7.00 | 7.50 | 7.50 | 8.00 |
| APH201610CR33MP01 | 0.33 | ±20% | 22 | 17 | 6.50 | 7.00 | 5.30 | 5.70 |
| APH201610CR33MX01 | 0.33 | ±20% | 22 | 17 | 6.50 | 7.00 | 5.30 | 5.70 |
| APH201610CR33MP03 | 0.33 | ±20% | 13 | 11 | 6.00 | 6.50 | 6.20 | 6.70 |
| APH201610CR33MP13 | 0.33 | ±20% | 22 | 17 | 7.00 | 7.50 | 5.30 | 5.70 |
| APH201610CR47MP01 | 0.47 | ±20% | 25 | 22 | 5.50 | 6.30 | 5.00 | 5.50 |
| APH201610CR47MP03 | 0.47 | ±20% | 25 | 22 | 6.00 | 6.50 | 5.60 | 5.80 |
| APH201610CR47MX01 | 0.47 | ±20% | 25 | 22 | 5.50 | 6.30 | 5.00 | 5.50 |
| APH201610CR47MX02 | 0.47 | ±20% | 22 | 18 | 5.60 | 6.20 | 5.60 | 6.00 |
| APH201610CR47MP13 | 0.47 | ±20% | 23 | 19 | 6.50 | 7.00 | 6.00 | 6.50 |
| APH201610CR47MP12 | 0.47 | ±20% | 17 | 14 | 5.00 | 5.50 | 6.00 | 6.50 |
| APH201610CR56MP01 | 0.56 | ±20% | 23 | 19 | 5.00 | 5.50 | 7.00 | 7.50 |
| APH201610CR68MP01 | 0.68 | ±20% | 32 | 25 | 4.70 | 5.20 | 4.30 | 4.60 |
| APH201610CR68MP03 | 0.68 | ±20% | 32 | 25 | 5.50 | 5.70 | 5.20 | 5.50 |
| APH201610C1R0MP01 | 1 | ±20% | 43 | 35 | 4.20 | 4.60 | 4.10 | 4.50 |
| APH201610C1R0MX01 | 1 | ±20% | 43 | 35 | 4.20 | 4.60 | 4.10 | 4.50 |
| APH201610C1R0MP02 | 1 | ±20% | 36 | 31 | 4.20 | 4.80 | 4.30 | 4.80 |
| APH201610C1R0MX02 | 1 | ±20% | 36 | 31 | 4.20 | 4.80 | 4.30 | 4.80 |
| APH201610C1R0MP03 | 1 | ±20% | 46 | 42 | 4.60 | 4.90 | 3.40 | 4.00 |
| APH201610C1R5MP01 | 1.5 | ±20% | 100 | 80 | 2.90 | 3.20 | 2.30 | 2.60 |
| APH201610C1R5MP02 | 1.5 | ±20% | 70 | 60 | 3.00 | 3.30 | 3.50 | 4.00 |
| APH201610C2R2MP01 | 2.2 | ±20% | 130 | 120 | 2.80 | 3.00 | 2.10 | 2.50 |
| APH201610C2R2MX01 | 2.2 | ±20% | 130 | 120 | 2.80 | 3.00 | 2.10 | 2.50 |
| APH201610C2R2MX02 | 2.2 | ±20% | 115 | 105 | 2.80 | 3.00 | 2.10 | 2.50 |
| APH201610C2R2MP13 | 2.2 | ±20% | 81 | 72 | 2.80 | 3.00 | 3.00 | 3.30 |
| APH201610C2R2MP03 | 2.2 | ±20% | 125 | 115 | 3.00 | 3.30 | 2.20 | 2.50 |
| APH201610C3R3MP01 | 3.3 | ±20% | 170 | 140 | 2.00 | 2.30 | 1.50 | 1.70 |
| APH201610C4R7MP03 | 4.7 | ±20% | 276 | 250 | 1.70 | 1.90 | 1.40 | 1.60 |
| APH201610C4R7MP01 | 4.7 | ±20% | 220 | 190 | 1.80 | 2.00 | 1.40 | 1.60 |
| APH201610C4R7MX01 | 4.7 | ±20% | 220 | 190 | 1.80 | 2.00 | 1.40 | 1.60 |
| APH201610C6R8MP01 | 6.8 | ±20% | 350 | 320 | 1.50 | 1.70 | 1.50 | 1.70 |
| APH201610C100MP01 | 10 | ±20% | 580 | 483 | 1.10 | 1.40 | 0.70 | 1.00 |
| APH201610C150MP01 | 15 | ±20% | 960 | 800 | 0.90 | 1.10 | 0.60 | 0.90 |
| APH201610C220MP01 | 22 | ±20% | 1400 | 1200 | 0.70 | 0.80 | 0.50 | 0.60 |

## ELECTRICAL CHARACTERISTICS

### APH201612 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH201612CR10MP01 | 0.1 | ±20% | 6 | 4 | 11.50 | 13.00 | 10.00 | 12.00 |
| APH201612CR11MP01 | 0.11 | ±20% | 5.6 | 4.8 | 11.00 | 12.50 | 14.50 | 15.50 |
| APH201612CR11MP03 | 0.11 | ±20% | 7.5 | 6.3 | 14.00 | 15.00 | 12.00 | 13.00 |
| APH201612CR15MP01 | 0.15 | ±20% | 10 | 7.5 | 10.50 | 12.00 | 9.00 | 10.00 |
| APH201612CR22MP01 | 0.22 | ±20% | 10.5 | 8.5 | 9.20 | 9.70 | 8.80 | 9.30 |
| APH201612CR24MP01 | 0.24 | ±20% | 11 | 9 | 8.70 | 9.20 | 8.60 | 9.10 |
| APH201612CR24MP03 | 0.24 | ±20% | 12.5 | 10 | 10.00 | 10.50 | 10.00 | 11.00 |
| APH201612CR33MP01 | 0.33 | ±20% | 15 | 10 | 7.30 | 7.80 | 7.20 | 7.70 |
| APH201612CR47MP01 | 0.47 | ±20% | 17 | 13 | 6.00 | 6.70 | 6.00 | 6.70 |
| APH201612CR68MP01 | 0.68 | ±20% | 23 | 19 | 5.30 | 6.00 | 5.30 | 6.00 |
| APH201612CR68MP03 | 0.68 | ±20% | 25 | 22 | 5.50 | 6.00 | 5.40 | 6.00 |
| APH201612C1R0MP01 | 1 | ±20% | 36 | 30 | 4.50 | 5.00 | 4.50 | 5.00 |
| APH201612C1R5MP01 | 1.5 | ±20% | 50 | 40 | 3.50 | 4.00 | 3.50 | 4.00 |
| APH201612C2R2MP01 | 2.2 | ±20% | 90 | 77 | 2.70 | 3.10 | 2.90 | 3.30 |
| APH201612C3R3MP01 | 3.3 | ±20% | 165 | 135 | 2.30 | 2.70 | 2.00 | 2.40 |
| APH201612C3R3MP02 | 3.3 | ±20% | 130 | 115 | 2.30 | 2.70 | 2.20 | 2.60 |
| APH201612C4R7MP01 | 4.7 | ±20% | 185 | 160 | 2.00 | 2.20 | 1.80 | 2.00 |
| APH201612C6R8MP01 | 6.8 | ±20% | 300 | 255 | 1.70 | 1.90 | 1.70 | 1.80 |
| APH201612C100MP01 | 10 | ±20% | 460 | 410 | 1.30 | 1.40 | 1.20 | 1.30 |

### APH252055 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH252055CR22MP01 | 0.22 | ±20% | 28 | 23 | 4.50 | 4.80 | 6.00 | 6.50 |
| APH252055CR47MP01 | 0.47 | ±20% | 49 | 42 | 3.20 | 3.50 | 5.20 | 5.50 |

### APH252075 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH252075C2R2MX01 | 2.2 | ±20% | 90 | 78 | 2.40 | 2.60 | 2.00 | 2.30 |

## ELECTRICAL CHARACTERISTICS

● APH252008 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH252008CR47MP01 | 0.47 | ±20% | 27 | 22 | 5.30 | 6.00 | 6.00 | 6.50 |
| APH252008CR68MP01 | 0.68 | ±20% | 32 | 27 | 4.50 | 5.00 | 4.40 | 4.90 |
| APH252008C1R0MP01 | 1 | ±20% | 40 | 34 | 4.00 | 4.50 | 4.00 | 4.30 |
| APH252008C1R5MP01 | 1.5 | ±20% | 75 | 64 | 3.00 | 3.50 | 3.00 | 3.40 |
| APH252008C2R2MP01 | 2.2 | ±20% | 77 | 69 | 2.60 | 3.00 | 2.60 | 3.00 |
| APH252008C3R3MP01 | 3.3 | ±20% | 180 | 150 | 2.10 | 2.50 | 2.10 | 2.50 |
| APH252008C4R7MP01 | 4.7 | ±20% | 215 | 180 | 1.50 | 1.90 | 1.50 | 2.00 |
| APH252008C4R7MP02 | 4.7 | ±20% | 180 | 160 | 1.50 | 1.90 | 1.50 | 2.00 |
| APH252008C6R8MP02 | 6.8 | ±20% | 300 | 260 | 1.20 | 1.40 | 1.10 | 1.30 |
| APH252008C100MP01 | 10 | ±20% | 600 | 500 | 0.90 | 1.10 | 1.20 | 1.40 |
| APH252008C100MP02 | 10 | ±20% | 540 | 490 | 1.10 | 1.30 | 1.30 | 1.40 |

● APH252010 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH252010CR10MP01 | 0.1 | ±20% | 8.5 | 6.5 | 12.50 | 13.50 | 11.00 | 12.00 |
| APH252010CR15MP01 | 0.15 | ±20% | 9 | 7 | 9.50 | 10.50 | 8.50 | 9.50 |
| APH252010CR22MP01 | 0.22 | ±20% | 17 | 12 | 7.90 | 8.60 | 6.50 | 6.80 |
| APH252010CR22MX01 | 0.22 | ±20% | 17 | 12 | 7.90 | 8.60 | 6.50 | 6.80 |
| APH252010CR24MP01 | 0.24 | ±20% | 17.5 | 12 | 7.80 | 8.50 | 6.40 | 6.70 |
| APH252010CR24MP02 | 0.24 | ±20% | 10 | 8.5 | 8.00 | 9.00 | 7.50 | 8.50 |
| APH252010CR33MP01 | 0.33 | ±20% | 19 | 13 | 7.20 | 7.60 | 6.20 | 6.50 |
| APH252010CR33MX01 | 0.33 | ±20% | 19 | 13 | 7.20 | 7.60 | 6.20 | 6.50 |
| APH252010CR47MP01 | 0.47 | ±20% | 22 | 15 | 6.50 | 7.20 | 5.60 | 6.10 |
| APH252010CR47MX01 | 0.47 | ±20% | 22 | 15 | 6.50 | 7.20 | 5.60 | 6.10 |
| APH252010CR47MP02 | 0.47 | ±20% | 15 | 13 | 6.00 | 6.60 | 6.00 | 6.50 |
| APH252010CR68MP01 | 0.68 | ±20% | 27 | 23 | 5.50 | 5.90 | 5.00 | 5.60 |
| APH252010CR82MP01 | 0.82 | ±20% | 29 | 25 | 4.80 | 5.30 | 4.10 | 4.50 |
| APH252010C1R0MP01 | 1 | ±20% | 30 | 25 | 4.80 | 5.40 | 4.10 | 4.70 |
| APH252010C1R0MX01 | 1 | ±20% | 30 | 25 | 4.80 | 5.40 | 4.10 | 4.70 |
| APH252010C1R0MP02 | 1 | ±20% | 28 | 25 | 4.50 | 5.00 | 4.40 | 4.90 |
| APH252010C1R5MP01 | 1.5 | ±20% | 55 | 45 | 3.90 | 4.30 | 3.00 | 3.40 |
| APH252010C1R5MX01 | 1.5 | ±20% | 55 | 45 | 3.90 | 4.30 | 3.00 | 3.40 |
| APH252010C1R8MP01 | 1.8 | ±20% | 60 | 50 | 3.50 | 4.00 | 3.50 | 4.00 |

## ELECTRICAL CHARACTERISTICS

### APH252010 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH252010C2R2MP01 | 2.2 | ±20% | 70 | 62 | 3.00 | 3.30 | 2.10 | 2.40 |
| APH252010C2R2MX01 | 2.2 | ±20% | 70 | 62 | 3.00 | 3.30 | 2.10 | 2.40 |
| APH252010C2R2MP03 | 2.2 | ±20% | 70 | 62 | 3.30 | 3.70 | 2.30 | 2.60 |
| APH252010C2R2MP02 | 2.2 | ±20% | 70 | 62 | 3.10 | 3.40 | 3.20 | 4.00 |
| APH252010C3R3MP01 | 3.3 | ±20% | 100 | 86 | 2.50 | 2.80 | 2.10 | 2.50 |
| APH252010C3R3MX01 | 3.3 | ±20% | 100 | 86 | 2.50 | 2.80 | 2.10 | 2.50 |
| APH252010C4R7MP01 | 4.7 | ±20% | 180 | 160 | 2.00 | 2.60 | 1.60 | 2.00 |
| APH252010C4R7MX01 | 4.7 | ±20% | 180 | 160 | 2.00 | 2.60 | 1.60 | 2.00 |
| APH252010C4R7MP02 | 4.7 | ±20% | 160 | 145 | 2.00 | 2.60 | 1.60 | 2.00 |
| APH252010C4R7MP03 | 4.7 | ±20% | 130 | 120 | 2.00 | 2.20 | 2.80 | 3.00 |
| APH252010C6R8MP01 | 6.8 | ±20% | 320 | 270 | 1.90 | 2.40 | 1.40 | 1.60 |
| APH252010C100MP01 | 10 | ±20% | 560 | 500 | 1.40 | 1.55 | 0.95 | 1.05 |
| APH252010C100MX01 | 10 | ±20% | 560 | 500 | 1.40 | 1.55 | 0.95 | 1.05 |
| APH252010C220MP01 | 22 | ±20% | 1300 | 1100 | 0.90 | 1.10 | 0.60 | 0.85 |
| APH252010C220MX01 | 22 | ±20% | 1300 | 1100 | 0.90 | 1.10 | 0.60 | 0.85 |

### APH252012 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH252012CR10MP01 | 0.1 | ±20% | 10 | 6 | 12.50 | 13.50 | 10.50 | 12.00 |
| APH252012CR10MP02 | 0.1 | ±20% | 4.8 | 4 | 14.00 | 15.00 | 15.00 | 16.00 |
| APH252012CR11MP01 | 0.11 | ±20% | 5 | 4.2 | 13.00 | 14.00 | 14.00 | 15.00 |
| APH252012CR15MP01 | 0.15 | ±20% | 11 | 7 | 12.00 | 13.00 | 10.00 | 11.50 |
| APH252012CR15MP02 | 0.15 | ±20% | 7 | 5.7 | 12.00 | 13.00 | 10.00 | 11.50 |
| APH252012CR22MP01 | 0.22 | ±20% | 14 | 9 | 9.00 | 9.60 | 7.60 | 8.20 |
| APH252012CR22MP02 | 0.22 | ±20% | 10 | 8 | 10.00 | 12.00 | 8.00 | 11.00 |
| APH252012CR22MP03 | 0.22 | ±20% | 8 | 6 | 10.00 | 11.00 | 9.00 | 9.50 |
| APH252012CR24MP01 | 0.24 | ±20% | 15 | 10 | 8.80 | 9.30 | 7.50 | 8.00 |
| APH252012CR24MX01 | 0.24 | ±20% | 15 | 10 | 8.80 | 9.30 | 7.50 | 8.00 |
| APH252012CR24MP03 | 0.24 | ±20% | 10 | 8.7 | 10.00 | 11.00 | 7.50 | 8.00 |
| APH252012CR24MP02 | 0.24 | ±20% | 8.5 | 6.5 | 9.50 | 10.00 | 9.00 | 9.50 |
| APH252012CR33MP01 | 0.33 | ±20% | 17 | 11 | 7.80 | 8.30 | 6.40 | 6.80 |
| APH252012CR33MP02 | 0.33 | ±20% | 12 | 10 | 8.50 | 9.00 | 8.50 | 9.00 |
| APH252012CR33MP03 | 0.33 | ±20% | 9.5 | 7.5 | 8.50 | 9.00 | 8.50 | 9.00 |
| APH252012CR47MP01 | 0.47 | ±20% | 19 | 13 | 7.00 | 7.50 | 6.00 | 6.50 |

## ELECTRICAL CHARACTERISTICS

● APH252012 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH252012CR47MP02 | 0.47 | ±20% | 13 | 11 | 8.00 | 8.50 | 7.50 | 8.00 |
| APH252012CR47MX02 | 0.47 | ±20% | 13 | 11 | 8.00 | 8.50 | 7.50 | 8.00 |
| APH252012CR56MP01 | 0.56 | ±20% | 19 | 16 | 6.60 | 7.10 | 6.00 | 6.50 |
| APH252012CR68MP01 | 0.68 | ±20% | 23 | 17 | 6.00 | 6.50 | 5.50 | 6.30 |
| APH252012CR68MP02 | 0.68 | ±20% | 18 | 15 | 6.00 | 6.70 | 7.00 | 7.50 |
| APH252012CR82MP01 | 0.82 | ±20% | 24 | 19 | 5.80 | 6.50 | 5.30 | 5.80 |
| APH252012CR82MP02 | 0.82 | ±20% | 23 | 19 | 5.80 | 6.50 | 5.80 | 6.30 |
| APH252012C1R0MP01 | 1 | ±20% | 42 | 35 | 5.00 | 5.60 | 4.80 | 5.30 |
| APH252012C1R0MP02 | 1 | ±20% | 22 | 16 | 6.00 | 6.50 | 5.60 | 6.10 |
| APH252012C1R0MX02 | 1 | ±20% | 22 | 16 | 6.00 | 6.50 | 5.60 | 6.10 |
| APH252012C1R0MP03 | 1 | ±20% | 36 | 30 | 5.00 | 5.60 | 5.00 | 5.50 |
| APH252012C1R2MP01 | 1.2 | ±20% | 45 | 40 | 4.10 | 4.50 | 3.40 | 3.80 |
| APH252012C1R2MP02 | 1.2 | ±20% | 35 | 29 | 4.80 | 5.30 | 5.20 | 5.70 |
| APH252012C1R5MP01 | 1.5 | ±20% | 50 | 44 | 4.10 | 4.50 | 3.20 | 3.70 |
| APH252012C1R5MP13 | 1.5 | ±20% | 53 | 46 | 4.70 | 5.20 | 4.20 | 4.60 |
| APH252012C1R5MX01 | 1.5 | ±20% | 50 | 44 | 4.10 | 4.50 | 3.20 | 3.70 |
| APH252012C1R5MP03 | 1.5 | ±20% | 35 | 31 | 4.20 | 4.50 | 4.10 | 4.50 |
| APH252012C1R5MP02 | 1.5 | ±20% | 32 | 27 | 4.40 | 4.70 | 4.20 | 4.60 |
| APH252012C2R2MP01 | 2.2 | ±20% | 65 | 55 | 3.30 | 3.80 | 2.70 | 3.00 |
| APH252012C2R2MP02 | 2.2 | ±20% | 60 | 52 | 3.70 | 4.10 | 3.50 | 3.90 |
| APH252012C2R2MX01 | 2.2 | ±20% | 65 | 55 | 3.30 | 3.80 | 2.70 | 3.00 |
| APH252012C3R3MP01 | 3.3 | ±20% | 97 | 80 | 2.70 | 3.00 | 2.50 | 2.80 |
| APH252012C4R7MP01 | 4.7 | ±20% | 170 | 150 | 2.10 | 2.40 | 1.90 | 2.20 |
| APH252012C4R7MX01 | 4.7 | ±20% | 170 | 150 | 2.10 | 2.40 | 1.90 | 2.20 |
| APH252012C4R7MP03 | 4.7 | ±20% | 170 | 150 | 2.50 | 2.70 | 2.20 | 2.40 |
| APH252012C6R8MP01 | 6.8 | ±20% | 270 | 245 | 1.70 | 2.00 | 1.60 | 1.80 |
| APH252012C6R8MP03 | 6.8 | ±20% | 270 | 245 | 2.10 | 2.20 | 2.00 | 2.10 |
| APH252012C100MP01 | 10 | ±20% | 400 | 330 | 1.45 | 1.60 | 1.05 | 1.20 |
| APH252012C100MX01 | 10 | ±20% | 400 | 330 | 1.45 | 1.60 | 1.05 | 1.20 |
| APH252012C150MP01 | 15 | ±20% | 565 | 500 | 1.30 | 1.40 | 1.30 | 1.40 |
| APH252012C220MP01 | 22 | ±20% | 800 | 740 | 1.00 | 1.10 | 1.10 | 1.20 |

## ELECTRICAL CHARACTERISTICS

### APH303010 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH303010C1R0MP03 | 1 | ±20% | 35 | 30 | 4.80 | 5.30 | 6.50 | 7.00 |
| APH303010C1R0MP02 | 1 | ±20% | 30 | 25 | 5.60 | 6.00 | 6.50 | 7.00 |
| APH303010C2R2MP03 | 2.2 | ±20% | 66 | 55 | 3.50 | 4.00 | 4.50 | 5.00 |
| APH303010C3R3MP03 | 3.3 | ±20% | 102 | 86 | 2.80 | 3.10 | 3.00 | 3.40 |
| APH303010C4R7MP03 | 4.7 | ±20% | 140 | 120 | 2.30 | 2.70 | 2.80 | 3.20 |
| APH303010C6R8MP03 | 6.8 | ±20% | 270 | 225 | 1.50 | 1.80 | 1.80 | 2.10 |
| APH303010C100MP01 | 10 | ±20% | 360 | 320 | 1.30 | 1.60 | 1.20 | 2.00 |
| APH303010C100MP02 | 10 | ±20% | 275 | 250 | 1.50 | 1.80 | 2.00 | 2.20 |

### APH303012 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH303012CR10MP03 | 0.1 | ±20% | 6 | 5 | 18.00 | 20.00 | 17.00 | 18.00 |
| APH303012CR33MP03 | 0.33 | ±20% | 10.5 | 8.5 | 10.00 | 11.00 | 9.00 | 10.00 |
| APH303012CR47MP03 | 0.47 | ±20% | 11 | 9 | 8.00 | 8.50 | 10.00 | 11.00 |
| APH303012CR68MP03 | 0.68 | ±20% | 16 | 14 | 6.50 | 7.00 | 7.00 | 7.50 |
| APH303012C1R0MP03 | 1 | ±20% | 27 | 23 | 5.50 | 6.00 | 5.00 | 5.50 |
| APH303012C1R5MP03 | 1.5 | ±20% | 34 | 29 | 5.00 | 5.50 | 5.50 | 6.00 |
| APH303012C2R2MP03 | 2.2 | ±20% | 50 | 42 | 4.50 | 5.00 | 4.30 | 4.80 |
| APH303012C2R2MP13 | 2.2 | ±20% | 75 | 63 | 5.60 | 6.10 | 3.60 | 4.00 |
| APH303012C3R3MP03 | 3.3 | ±20% | 85 | 72 | 3.50 | 4.00 | 3.30 | 3.80 |
| APH303012C4R7MP03 | 4.7 | ±20% | 120 | 100 | 2.50 | 3.00 | 2.50 | 3.00 |
| APH303012C100MP03 | 10 | ±20% | 220 | 192 | 2.00 | 2.30 | 1.90 | 2.30 |
| APH303012C150MP03 | 15 | ±20% | 380 | 345 | 1.60 | 1.90 | 1.30 | 1.60 |

### APH303015 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH303015CR15MP03 | 0.15 | ±20% | 6 | 5 | 15.00 | 16.00 | 11.00 | 12.00 |
| APH303015CR20MP03 | 0.2 | ±20% | 5.9 | 4.8 | 15.00 | 16.00 | 12.00 | 13.00 |
| APH303015CR22MP03 | 0.22 | ±20% | 6 | 5 | 14.00 | 16.00 | 13.00 | 15.00 |
| APH303015CR33MP03 | 0.33 | ±20% | 8.5 | 6.5 | 11.00 | 12.00 | 13.00 | 14.00 |

## ELECTRICAL CHARACTERISTICS

### APH303015 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH303015CR47MP03 | 0.47 | ±20% | 11 | 9 | 9.00 | 10.00 | 8.00 | 9.00 |
| APH303015CR68MP03 | 0.68 | ±20% | 13.5 | 11 | 8.00 | 8.50 | 7.00 | 7.50 |
| APH303015C1R0MP03 | 1 | ±20% | 22 | 18 | 6.50 | 7.00 | 5.50 | 6.00 |
| APH303015C1R5MP03 | 1.5 | ±20% | 26 | 22 | 5.50 | 6.00 | 7.50 | 8.00 |
| APH303015C2R2MP03 | 2.2 | ±20% | 50 | 42 | 4.50 | 5.00 | 4.00 | 4.50 |
| APH303015C3R3MP03 | 3.3 | ±20% | 68 | 58 | 4.00 | 4.50 | 3.50 | 4.00 |
| APH303015C4R7MP03 | 4.7 | ±20% | 104 | 87 | 3.50 | 4.00 | 3.00 | 3.50 |
| APH303015C6R8MP03 | 6.8 | ±20% | 180 | 160 | 3.00 | 3.50 | 2.00 | 2.50 |
| APH303015C100MP03 | 10 | ±20% | 215 | 185 | 2.50 | 2.80 | 1.50 | 2.00 |
| APH303015C220MP03 | 22 | ±20% | 700 | 580 | 1.20 | 1.60 | 1.00 | 1.20 |

### APH303018 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH303018CR22MP03 | 0.22 | ±20% | 7 | 5.5 | 16.00 | 17.00 | 9.00 | 10.00 |
| APH303018CR47MP03 | 0.47 | ±20% | 10 | 8 | 11.00 | 12.00 | 8.00 | 9.00 |
| APH303018CR68MP03 | 0.68 | ±20% | 14.5 | 12 | 10.00 | 11.00 | 9.00 | 10.00 |
| APH303018C1R0MP03 | 1 | ±20% | 21 | 15 | 6.80 | 7.60 | 5.80 | 6.30 |
| APH303018C1R5MP03 | 1.5 | ±20% | 26 | 20 | 7.00 | 8.00 | 6.40 | 6.80 |
| APH303018C4R7MP03 | 4.7 | ±20% | 87 | 72 | 4.20 | 4.70 | 3.00 | 3.40 |

### APH303020 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH303020CR10MP03 | 0.1 | ±20% | 4.5 | 3.3 | 23.00 | 25.00 | 16.00 | 17.00 |
| APH303020CR15MP03 | 0.15 | ±20% | 5 | 4 | 17.00 | 18.00 | 12.00 | 13.00 |
| APH303020CR22MP03 | 0.22 | ±20% | 6.5 | 5 | 16.00 | 17.50 | 10.00 | 11.00 |
| APH303020CR33MP03 | 0.33 | ±20% | 9 | 7.5 | 15.00 | 17.00 | 9.00 | 10.00 |
| APH303020CR36MP03 | 0.36 | ±20% | 9 | 7.5 | 14.50 | 16.50 | 9.00 | 10.00 |
| APH303020CR47MP03 | 0.47 | ±20% | 11 | 8 | 13.50 | 15.00 | 8.00 | 9.00 |
| APH303020CR50MP03 | 0.5 | ±20% | 12 | 9 | 13.00 | 15.00 | 8.00 | 9.00 |
| APH303020CR50MP02 | 0.5 | ±20% | 8.3 | 7 | 12.00 | 13.50 | 11.50 | 12.50 |

## ELECTRICAL CHARACTERISTICS

### APH303020 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH303020CR68MP03 | 0.68 | ±20% | 16 | 13 | 11.00 | 13.00 | 7.80 | 8.50 |
| APH303020C1R0MP03 | 1 | ±20% | 20 | 14 | 7.30 | 8.00 | 6.00 | 6.50 |
| APH303020C1R2MP03 | 1.2 | ±20% | 21 | 16 | 7.00 | 7.50 | 6.50 | 7.00 |
| APH303020C1R5MP03 | 1.5 | ±20% | 25 | 19 | 6.50 | 7.00 | 5.80 | 6.30 |
| APH303020C2R2MP03 | 2.2 | ±20% | 45 | 37 | 5.50 | 6.00 | 4.30 | 4.70 |
| APH303020C3R3MP03 | 3.3 | ±20% | 63 | 52 | 5.40 | 5.90 | 4.00 | 4.50 |
| APH303020C4R7MP03 | 4.7 | ±20% | 73 | 60 | 4.00 | 4.80 | 3.80 | 4.20 |
| APH303020C6R8MP03 | 6.8 | ±20% | 135 | 107 | 3.80 | 4.50 | 3.00 | 3.20 |
| APH303020C100MP03 | 10 | ±20% | 160 | 135 | 3.30 | 3.80 | 2.20 | 2.50 |
| APH303020C150MP03 | 15 | ±20% | 260 | 235 | 2.20 | 2.60 | 1.50 | 1.80 |

### APH322510 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH322510CR22MP01 | 0.22 | ±20% | 11 | 9 | 8.00 | 8.50 | 8.00 | 8.50 |
| APH322510CR33MP01 | 0.33 | ±20% | 15 | 11 | 7.80 | 8.30 | 7.80 | 8.30 |
| APH322510CR47MP01 | 0.47 | ±20% | 22 | 17 | 7.60 | 8.30 | 5.90 | 6.40 |
| APH322510CR68MP01 | 0.68 | ±20% | 28 | 22 | 7.00 | 7.50 | 5.70 | 6.20 |
| APH322510C1R0MP01 | 1 | ±20% | 30 | 25 | 5.30 | 6.00 | 4.90 | 5.40 |
| APH322510C1R0MP02 | 1 | ±20% | 25 | 21 | 5.10 | 5.60 | 5.00 | 5.50 |
| APH322510C1R5MP01 | 1.5 | ±20% | 42 | 34 | 4.40 | 5.00 | 3.60 | 4.00 |
| APH322510C2R2MP01 | 2.2 | ±20% | 66 | 55 | 3.50 | 4.00 | 3.40 | 3.70 |
| APH322510C3R3MP01 | 3.3 | ±20% | 120 | 105 | 3.30 | 3.70 | 2.30 | 2.70 |
| APH322510C4R7MP01 | 4.7 | ±20% | 140 | 125 | 2.50 | 2.80 | 1.90 | 2.30 |
| APH322510C6R8MP01 | 6.8 | ±20% | 320 | 290 | 2.00 | 2.40 | 1.60 | 1.90 |
| APH322510C100MP01 | 10 | ±20% | 365 | 325 | 1.80 | 2.20 | 1.80 | 2.20 |

### APH322512 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH322512CR10MP01 | 0.1 | ±20% | 7 | 5.2 | 16.50 | 18.00 | 11.00 | 12.00 |
| APH322512CR11MP01 | 0.11 | ±20% | 6 | 4.5 | 15.50 | 17.00 | 12.00 | 13.00 |

## ELECTRICAL CHARACTERISTICS

● APH322512 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH322512CR11MP03 | 0.11 | ±20% | 7 | 5.5 | 18.00 | 18.50 | 11.00 | 12.00 |
| APH322512CR22MP01 | 0.22 | ±20% | 10 | 6.6 | 11.00 | 11.50 | 8.70 | 9.20 |
| APH322512CR22MX01 | 0.22 | ±20% | 10 | 6.6 | 11.00 | 11.50 | 8.70 | 9..2 |
| APH322512CR22MP02 | 0.22 | ±20% | 8 | 6.2 | 11.00 | 12.00 | 10.00 | 11.00 |
| APH322512CR24MP01 | 0.24 | ±20% | 12 | 7 | 10.50 | 11.00 | 8.50 | 9.00 |
| APH322512CR33MP01 | 0.33 | ±20% | 14 | 9 | 9.50 | 10.00 | 8.10 | 8.40 |
| APH322512CR47MP01 | 0.47 | ±20% | 19 | 14 | 8.20 | 8.60 | 7.20 | 7.50 |
| APH322512CR47MX01 | 0.47 | ±20% | 19 | 14 | 8.20 | 8.60 | 7.20 | 7.50 |
| APH322512CR47MP02 | 0.47 | ±20% | 14 | 11 | 8.20 | 8.60 | 7.20 | 7.50 |
| APH322512CR47MP03 | 0.47 | ±20% | 11 | 10 | 8.00 | 8.50 | 8.00 | 8.50 |
| APH322512CR56MP01 | 0.56 | ±20% | 19 | 15 | 8.00 | 8.40 | 7.50 | 8.00 |
| APH322512CR68MP01 | 0.68 | ±20% | 23 | 18 | 7.70 | 8.10 | 6.80 | 7.30 |
| APH322512CR68MP02 | 0.68 | ±20% | 15 | 12 | 7.50 | 8.00 | 6.50 | 7.00 |
| APH322512C1R0MP01 | 1 | ±20% | 30 | 26 | 5.80 | 6.60 | 4.80 | 5.30 |
| APH322512C1R0MX01 | 1 | ±20% | 30 | 26 | 5.80 | 6.60 | 4.80 | 5.30 |
| APH322512C1R0MP02 | 1 | ±20% | 21 | 18 | 7.00 | 7.70 | 6.00 | 6.50 |
| APH322512C1R0MP03 | 1 | ±20% | 32 | 26 | 8.00 | 8.30 | 5.50 | 6.00 |
| APH322512C1R2MP01 | 1.2 | ±20% | 32 | 26 | 5.40 | 5.90 | 5.20 | 5.70 |
| APH322512C1R5MP01 | 1.5 | ±20% | 44 | 37 | 4.70 | 5.10 | 4.30 | 4.70 |
| APH322512C2R2MP01 | 2.2 | ±20% | 70 | 58 | 4.20 | 4.60 | 3.00 | 3.60 |
| APH322512C2R2MP02 | 2.2 | ±20% | 50 | 42 | 4.50 | 5.00 | 3.70 | 4.20 |
| APH322512C2R2MX02 | 2.2 | ±20% | 50 | 42 | 4.50 | 5.00 | 3.70 | 4.20 |
| APH322512C3R3MP01 | 3.3 | ±20% | 95 | 75 | 3.20 | 3.70 | 2.50 | 2.90 |
| APH322512C3R3MX01 | 3.3 | ±20% | 95 | 75 | 3.20 | 3.70 | 2.50 | 2.90 |
| APH322512C3R3MX02 | 3.3 | ±20% | 67 | 62 | 3.20 | 3.70 | 2.50 | 2.90 |
| APH322512C4R7MP01 | 4.7 | ±20% | 135 | 115 | 2.60 | 2.90 | 2.80 | 3.00 |
| APH322512C4R7MP03 | 4.7 | ±20% | 120 | 105 | 2.60 | 3.00 | 2.80 | 3.00 |
| APH322512C4R7MP13 | 4.7 | ±20% | 135 | 115 | 2.80 | 3.20 | 2.80 | 3.00 |
| APH322512C4R7MP02 | 4.7 | ±20% | 115 | 105 | 2.70 | 3.00 | 2.60 | 3.00 |
| APH322512C6R8MP01 | 6.8 | ±20% | 210 | 177 | 2.40 | 2.80 | 1.90 | 2.10 |
| APH322512C100MP01 | 10 | ±20% | 230 | 210 | 1.90 | 2.30 | 1.80 | 2.20 |

## ELECTRICAL CHARACTERISTICS

### APH322520 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH322520C70NMP01 | 0.07 | ±20% | 3.2 | 2.5 | 24.00 | 25.00 | 20.00 | 22.00 |
| APH322520CR10MP01 | 0.1 | ±20% | 4 | 3 | 20.50 | 21.50 | 15.00 | 16.00 |
| APH322520CR22MP01 | 0.22 | ±20% | 6 | 5 | 15.50 | 16.50 | 11.00 | 12.00 |
| APH322520CR27MP01 | 0.27 | ±20% | 6.5 | 5.5 | 15.00 | 16.00 | 15.00 | 16.00 |
| APH322520CR33MP01 | 0.33 | ±20% | 9 | 7.5 | 14.00 | 15.50 | 9.00 | 9.50 |
| APH322520CR47MP01 | 0.47 | ±20% | 10.5 | 9 | 13.00 | 15.00 | 8.50 | 9.50 |
| APH322520CR68MP01 | 0.68 | ±20% | 14.5 | 12.5 | 11.00 | 13.00 | 8.00 | 9.00 |
| APH322520C1R0MP01 | 1 | ±20% | 17.5 | 15 | 8.30 | 9.00 | 7.50 | 8.20 |
| APH322520C1R0MP03 | 1 | ±20% | 17.5 | 15 | 10.00 | 10.50 | 8.00 | 8.50 |
| APH322520C1R5MP01 | 1.5 | ±20% | 25 | 22 | 6.00 | 6.80 | 6.00 | 6.50 |
| APH322520C2R2MP01 | 2.2 | ±20% | 43 | 36 | 5.50 | 6.50 | 4.80 | 5.40 |
| APH322520C2R2MP02 | 2.2 | ±20% | 40 | 33 | 5.50 | 6.50 | 4.80 | 5.40 |
| APH322520C3R3MP01 | 3.3 | ±20% | 60 | 55 | 3.50 | 4.50 | 4.00 | 4.50 |
| APH322520C4R7MP01 | 4.7 | ±20% | 94 | 81 | 3.00 | 4.00 | 3.00 | 3.50 |
| APH322520C6R8MP01 | 6.8 | ±20% | 125 | 101 | 2.90 | 3.80 | 2.30 | 2.80 |
| APH322520C100MP01 | 10 | ±20% | 200 | 170 | 2.40 | 2.60 | 1.60 | 1.80 |
| APH322520C150MP01 | 15 | ±20% | 260 | 220 | 2.00 | 2.20 | 1.80 | 2.00 |
| APH322520C220MP01 | 22 | ±20% | 364 | 315 | 1.70 | 2.00 | 1.50 | 1.80 |

### APH404008 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH404008C100MP01 | 10 | ±20% | 455 | 400 | 1.60 | 1.90 | 1.50 | 1.80 |
| APH404008C100MP02 | 10 | ±20% | 428 | 364 | 1.60 | 1.90 | 1.50 | 1.80 |

### APH404010 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH404010C1R0MP01 | 1 | ±20% | 26 | 22 | 4.80 | 5.30 | 6.50 | 7.00 |
| APH404010C4R7MP01 | 4.7 | ±20% | 140 | 120 | 3.50 | 3.80 | 3.00 | 3.40 |
| APH404010C100MP01 | 10 | ±20% | 280 | 220 | 2.00 | 2.20 | 2.00 | 2.50 |

## ELECTRICAL CHARACTERISTICS

### APH404012 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH404012CR47MP01 | 0.47 | ±20% | 14 | 11.5 | 11.50 | 12.00 | 8.50 | 9.00 |
| APH404012CR60MP01 | 0.6 | ±20% | 14.5 | 12 | 8.50 | 9.00 | 8.00 | 8.50 |
| APH404012CR68MP01 | 0.68 | ±20% | 18 | 15 | 9.00 | 10.00 | 7.50 | 8.50 |
| APH404012C1R0MP01 | 1 | ±20% | 25 | 21 | 10.00 | 11.00 | 5.50 | 6.30 |
| APH404012C1R0MP02 | 1 | ±20% | 23 | 20 | 8.00 | 9.00 | 5.30 | 6.20 |
| APH404012C1R5MP01 | 1.5 | ±20% | 34.5 | 29 | 7.00 | 8.00 | 5.00 | 6.00 |
| APH404012C2R2MP01 | 2.2 | ±20% | 55 | 45 | 6.00 | 6.50 | 4.50 | 5.00 |
| APH404012C3R3MP01 | 3.3 | ±20% | 80 | 67 | 5.00 | 5.50 | 4.00 | 4.50 |
| APH404012C4R7MP01 | 4.7 | ±20% | 110 | 90 | 4.50 | 5.00 | 3.00 | 3.50 |
| APH404012C5R6MP01 | 5.6 | ±20% | 140 | 116 | 4.00 | 4.50 | 2.50 | 3.00 |
| APH404012C6R8MP01 | 6.8 | ±20% | 160 | 132 | 3.50 | 3.80 | 2.30 | 2.80 |
| APH404012C100MP01 | 10 | ±20% | 235 | 200 | 2.50 | 2.80 | 2.00 | 2.50 |
| APH404012C220MP01 | 22 | ±20% | 480 | 420 | 1.50 | 1.80 | 1.20 | 1.50 |

### APH404015 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH404015C4R7MP01 | 4.7 | ±20% | 63 | 53 | 5.00 | 5.50 | 4.50 | 5.00 |
| APH404015C5R6MP01 | 5.6 | ±20% | 80 | 66 | 4.30 | 4.80 | 4.00 | 4.50 |

### APH404020 Series

| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH404020CR33MP01 | 0.33 | ±20% | 6 | 5 | 17.00 | 18.00 | 8.50 | 9.50 |
| APH404020CR47MX01 | 0.47 | ±20% | 8.5 | 7 | 15.00 | 16.00 | 8.00 | 8.50 |
| APH404020C1R0MX01 | 1 | ±20% | 14.5 | 12 | 11.50 | 12.50 | 6.00 | 6.50 |
| APH404020C1R5MX01 | 1.5 | ±20% | 22 | 18 | 9.50 | 10.50 | 5.50 | 6.00 |
| APH404020C2R2MX01 | 2.2 | ±20% | 36 | 30 | 8.50 | 9.50 | 5.00 | 5.50 |
| APH404020C2R2MX02 | 2.2 | ±20% | 28 | 24 | 7.50 | 8.50 | 6.00 | 7.00 |
| APH404020C3R3MX01 | 3.3 | ±20% | 40 | 35 | 7.00 | 8.00 | 5.80 | 6.30 |
| APH404020C4R7MX01 | 4.7 | ±20% | 58 | 47 | 5.50 | 6.30 | 4.00 | 5.00 |
| APH404020C6R8MX01 | 6.8 | ±20% | 105 | 90 | 4.50 | 5.40 | 3.20 | 3.70 |

## ELECTRICAL CHARACTERISTICS

- APH404020 Series

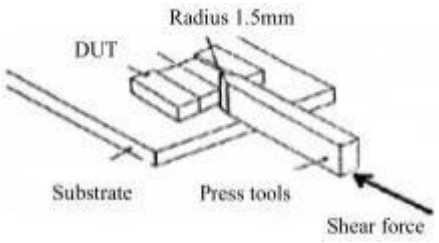
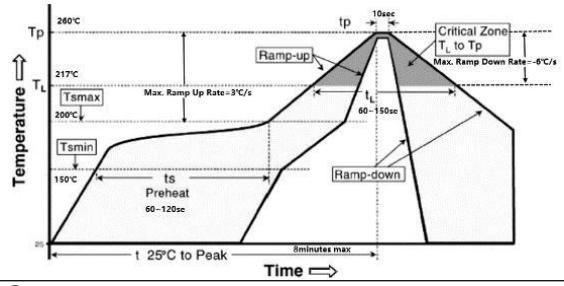
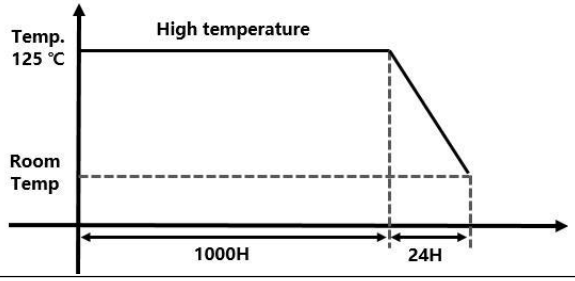
| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH404020C100MX01 | 10 | ±20% | 135 | 113 | 4.00 | 4.90 | 3.00 | 3.40 |
| APH404020C150MX01 | 15 | ±20% | 250 | 210 | 3.00 | 3.50 | 1.70 | 2.30 |
| APH404020C220MX01 | 22 | ±20% | 330 | 275 | 2.30 | 2.90 | 1.30 | 1.80 |

- APH404030 Series

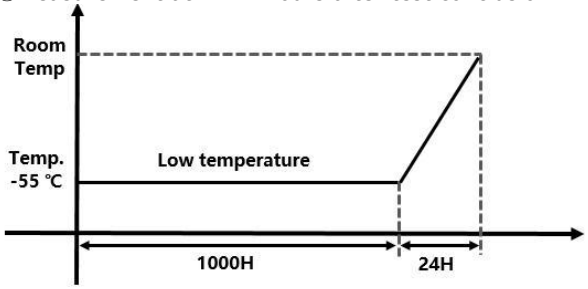
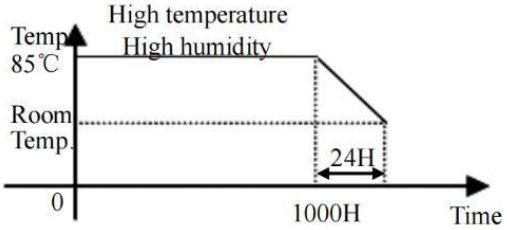
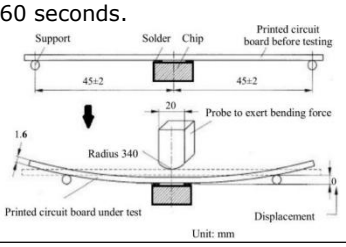
| Part Number | Inductance | Inductance Tolerance | DC Resistance | | Saturation Current | | Heat Rating Current | |
|---|---|---|---|---|---|---|---|---|
| | @1MHz,1V | | Max. | Typ. | Max. | Typ. | Max. | Typ. |
| Unit | μH | - | mΩ | | A | | A | |
| Symbol | L | - | DCR | | Isat | | Irms | |
| APH404030CR33MP01 | 0.33 | ±20% | 6 | 4.5 | 23.00 | 25.00 | 15.00 | 16.00 |
| APH404030CR47MP01 | 0.47 | ±20% | 7 | 5.5 | 21.00 | 23.00 | 14.00 | 15.00 |
| APH404030CR56MP01 | 0.56 | ±20% | 7.5 | 6 | 20.00 | 22.00 | 14.00 | 15.00 |
| APH404030CR68MP01 | 0.68 | ±20% | 10 | 8.3 | 15.00 | 17.00 | 8.00 | 9.50 |
| APH404030C1R0MX01 | 1 | ±20% | 12 | 10 | 14.00 | 15.50 | 9.00 | 10.00 |
| APH404030C1R5MX01 | 1.5 | ±20% | 18 | 15 | 11.00 | 12.50 | 6.00 | 6.50 |
| APH404030C2R2MX01 | 2.2 | ±20% | 22 | 19 | 9.50 | 10.50 | 8.50 | 9.00 |
| APH404030C2R2MX03 | 2.2 | ±20% | 25 | 22 | 10.00 | 11.00 | 8.60 | 9.20 |
| APH404030C3R3MX01 | 3.3 | ±20% | 35 | 30 | 7.50 | 8.50 | 4.80 | 5.30 |
| APH404030C4R7MX01 | 4.7 | ±20% | 46 | 41 | 6.00 | 7.00 | 4.00 | 4.30 |
| APH404030C4R7MP02 | 4.7 | ±20% | 42 | 36 | 6.80 | 7.80 | 5.50 | 6.00 |
| APH404030C5R6MP01 | 5.6 | ±20% | 48 | 41 | 6.20 | 7.00 | 5.00 | 5.50 |
| APH404030C6R8MP01 | 6.8 | ±20% | 62 | 51 | 5.10 | 6.30 | 3.80 | 4.20 |
| APH404030C8R2MP01 | 8.2 | ±20% | 102 | 90 | 4.80 | 5.20 | 3.50 | 3.90 |
| APH404030C100MP01 | 10 | ±20% | 110 | 92 | 4.50 | 4.90 | 3.30 | 3.70 |
| APH404030C150MP01 | 15 | ±20% | 170 | 145 | 3.80 | 4.20 | 2.50 | 2.70 |
| APH404030C220MP01 | 22 | ±20% | 220 | 190 | 3.00 | 3.40 | 2.20 | 2.50 |
| APH404030C470MP01 | 47 | ±20% | 550 | 480 | 2.00 | 2.20 | 1.20 | 1.40 |

- All test data is referenced to 25 ℃ ambient.
- Irms:DC current (A) that will cause an approximate △T of 40 ℃.
- Isat:DC current (A) that will cause L0 to drop approximately 30%.
- The part temperature (ambient + temp rise) should not exceed 125 under ℃ the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which ovalue is lower.

## RELIABILITY TEST

| Item | Requirements | Test Methods and Remarks |
|---|---|---|
| 1.<br>Solderability | 1.No case deformation or change in appearance.<br>2.Terminal area must have 95% min. Solder coverage. | ①Temperature:245± 5℃.<br>②Solder Composition: Sn/Ag3.0/Cu0.5(Pb-Free).<br>③Sample immersion tin furnace 5 ±0.5s. |
| 2.<br>Adhesion of terminal electrode | 1.Strong bond between the pad and the core, without come off PCB. | ①Preconditioning：245℃Reflow 3 times<br>②Inductors shall be subjected to (260+0/-5℃.)℃ for (10±5)s Soldering in the base whit 0.3mm solder.<br>③Apply electrode way plus tax X N for (10±1) seconds.<br> |
| 3.<br>Reflow test | 1.No physical damage.<br>2.\| ΔL0/L0 \| ≤10% | ①The peak temperature: 260+0/-5℃.<br>②Reflow:3times.<br>③Temperature curve is as below.<br> |
| 4.<br>High temperature | 1.No physical damage.<br>2.\| ΔL0/L0 \| ≤10% | ①Preconditioning: Bake at 125+5℃ for 24±0.5H，245℃Reflow 3 times<br>②Temperature: 125±2℃.<br>③Time : 1000 hours.<br>④Measurement at 24±4 hours after test conclusion.<br> |

## RELIABILITY TEST

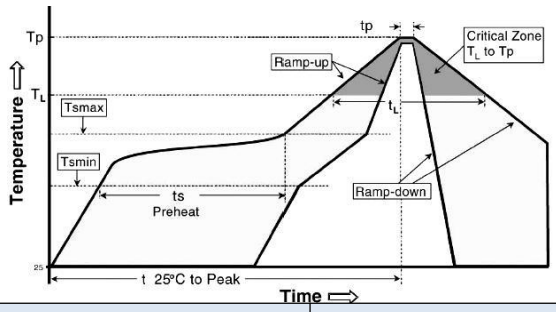
| Item | Requirements | Test Methods and Remarks |
|---|---|---|
| 5.<br>Low temperature | 1.No physical damage.<br>2. \| ΔL0/L0 \| ≤10% | ①Preconditioning: Bake at 125+5℃ for 24±0.5H, 245℃Reflow 3 times<br>②Temperature: -55±2℃.<br>③Time : 1000 hours.<br>④Measurement at 24±4 hours after test conclusion.<br> |
| 6.<br>Thermal shock | 1.No physical damage.<br>2. \| ΔL0/L0 \| ≤10% | ①Preconditioning: Bake at 125+5℃ for 24±0.5H, 245℃Reflow 3 times<br>②Repeat 500 cycle as follow :<br>(-55±2 ℃ ,30±3minutes)<br>(Room temperature, 5 minutes)<br>(+125 ± 2 ℃ ,30 ± 3minutes)<br>(Room temperature, 5 minutes)<br>③Measurement at 24±4 hours after test conclusion. |
| 7.<br>Resistance to Soldering Heat | 1.No physical damage.<br>2. \| ΔL0/L0 \| ≤10% | ①Solder Composition: Sn/Ag3.0/Cu0.5(Pb-Free).<br>②Solder Temperature: 260±5℃.<br>③Immersion Time: 10±1sec. |
| 8.<br>Static Humidity | 1.No physical damage.<br>2. \| ΔL0/L0 \| ≤10% | ①Preconditioning: Bake at 125+5℃ for 24±0.5H, 245℃Reflow 3 times<br>②1000 hours, 85°C/85%RH.<br>③Unpowered.<br>④Measurement at 24±4 hours after test conclusion.<br> |
| 9.<br>Board Flex | 1.No physical damage.<br>2. \| ΔL0/L0 \| ≤10% | ①Preconditioning：245℃Reflow 3 times<br>②Part mounted on a 100mm*40mm FR4 PCB board, which is 1.6±0.2 mm thick and as a Layer-thickness 35μm ± 10 μm.<br>③Bending speed is 1mm/s.<br>④Keeping the P.C Board 2 mm minimum for 60 seconds.<br> |

## RELIABILITY TEST

| Item | Requirements | Test Methods and Remarks |
|---|---|---|
| 10.<br>Vibration | 1.No physical damage.<br>2.｜ΔL0/L0｜≤10% | ①Preconditioning：245℃Reflow 3 times<br>②Frequency range：10~2000Hz.<br>③Amplitude: 1.5mm or 20g.<br>④Sweep time and duration: 10~2000~10Hz for 20 minutes.<br>⑤Each four hours in X,Y,Z direction, 12hours in total. |
| 11.<br>Mechanical Shock | 1.No physical damage.<br>2.｜ΔL0/L0｜≤10% | ① Preconditioning：245℃Reflow 3 times<br>②Peak acceleration:100G/S<br>③Duration of pulse:6ms<br>④3times in each of 6(±X, ±Y, ±Z) axes. |
| 12.<br>Loading at High Temperature | 1.No physical damage.<br>2.｜ΔL0/L0｜≤10% | ①Preconditioning: Bake at 125+5℃ for 24±0.5H，245℃Reflow 3 times<br>②Temperature: 85±2℃.<br>③Time：1000 hours.<br>④Applied Current：Rated current.<br>⑤Measurement at 24±4 hours after test conclusion |

## SOLDERING CONDITINO

- (This is for recommendation, please customer perform adjustment according to actual application)
- Recommend Reflow Soldering Profile：(solder：Sn96.5 / Ag3 / Cu0.5).

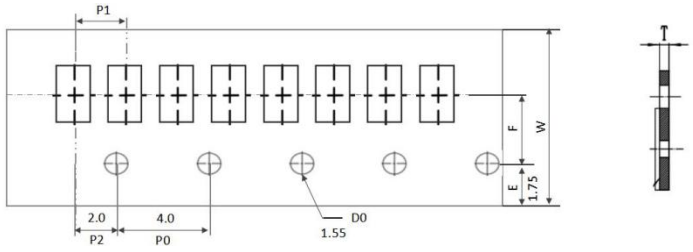



| Profile Feature | Lead (Pb)-Free solder |
|---|---|
| Preheat:<br>Temperature Min ($Ts_{min}$)<br>Temperature Max ($Ts_{max}$)<br>Time ($Ts_{min}$ to $Ts_{max}$ ) (ts) | 150℃<br>200℃<br>60 -120 seconds |
| Average ramp-up rate:<br>(Ts max to Tp) | 3℃ / second max. |
| Time maintained above :<br>Temperature ($T_L$)<br>Time ($t_L$) | 217℃<br>60-150 seconds |
| Peak Temperature (Tp) | 260℃ |
| Time within $^{+0}_{-5}$℃ of actual peak Temperature $(tp)^2$ | 10 seconds |
| Ramp-down Rate | 6℃/second max. |
| Time 25℃ to Peak Temperature | 8minutes max. |

- Allowed Re-flow times：2 times
- Remark：To avoid discoloration phenomena of chip on terminal electrodes, please use N2 Re-flow Furnace.

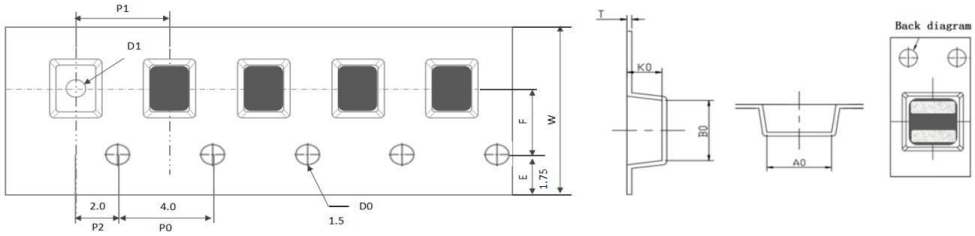
## PACKAGING

- Dimension of plastic taping: (Unit: mm)
  The following dimensions are related to the actual fit of the machine，for reference only.
- 1005-1007 Series




| Series | W | A0 | B0 | D0 | F | P1 | T | Packing Quantity |
|---|---|---|---|---|---|---|---|---|
| Tolerance | ±0.10 | ±0.04 | ±0.04 | ±0.20 | ±0.10 | ±0.05 | ±0.05 | |
| 100506 | 8.0 | 0.75 | 1.25 | 1.55 | 3.5 | 2.0 | 0.65 | 5K |
| 100765 | 8.0 | 0.90 | 1.20 | 1.55 | 3.5 | 2.0 | 0.75 | |
| 100708 | 8.0 | 0.90 | 1.20 | 1.55 | 3.5 | 2.0 | 0.95 | |

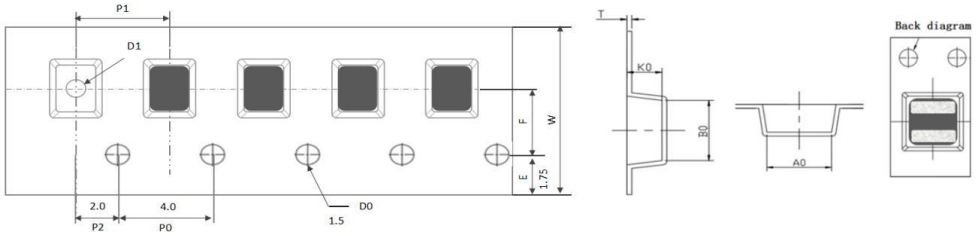
- 1210-2012 Series




| Series | W | A0 | B0 | D1 | F | K0 | P1 | T | Packing Quantity |
|---|---|---|---|---|---|---|---|---|---|
| Tolerance | / | / | / | ±0.2 | ±0.1 | / | ±0.1 | ±0.05 | |
| 121065 | 8.0 ±0.10 | 1.30 ±0.05 | 1.50 ±0.05 | 0.70 | 3.50 | 2.90 ±0.10 | 4.0 | 0.22 | 3K |
| 141265 | 8.0 ±0.10 | 1.50 +0.10/-0.05 | 1.70 +0.10/-0.05 | 0.60 | 3.50 | 2.90 ±0.10 | 4.0 | 0.22 | |
| 141207 | 8.0 ±0.10 | 1.50 +0.10/-0.05 | 1.70 +0.10/-0.05 | 0.60 | 3.50 | 0.95 ±0.10 | 4.0 | 0.22 | |
| 141208 | 8.0 ±0.10 | 1.50 +0.10/-0.05 | 1.70 +0.10/-0.05 | 0.60 | 3.50 | 0.95 ±0.10 | 4.0 | 0.22 | |
| 160806 | 8.0 ±0.10 | 1.0 ±0.05 | 1.82 ±0.05 | 0.60 | 3.50 | 2.90 ±0.10 | 4.0 | 0.22 | |
| 160865 | 8.0 ±0.10 | 1.0 ±0.05 | 1.82 ±0.05 | 0.60 | 3.50 | 2.90 ±0.10 | 4.0 | 0.22 | |
| 160808 | 8.0 ±0.10 | 1.04 ±0.05 | 1.82 ±0.05 | 0.60 | 3.50 | 0.95 ±0.05 | 4.0 | 0.22 | |
| 201206 | 8.0 ±0.10 | 1.40 +0.1/-0.05 | 2.25 +0.10/-0.05 | 1.0 | 3.50 | 2.90 ±0.10 | 4.0 | 0.25 | |

## PACKAGING

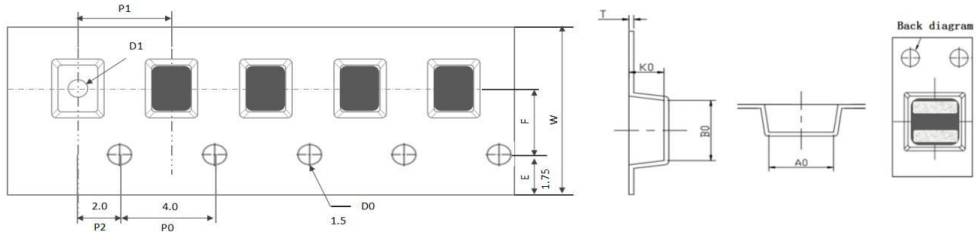
- 2012-3225 Series




| Series | W | A0 | B0 | D1 | F | K0 | P1 | T | Packing Quantity |
|---|---|---|---|---|---|---|---|---|---|
| Tolerance | / | / | / | ±0.2 | ±0.1 | / | ±0.1 | ±0.05 | |
| 201265 | 8.0 ±0.10 | 1.40 +0.1/-0.05 | 2.25 +0.10/-0.05 | 1.0 | 3.50 | 2.90 ±0.10 | 4.0 | 0.25 | 3K |
| 201208 | 8.0 ±0.10 | 1.50 ±0.10 | 2.30 ±0.10 | 1.0 | 3.50 | 1.0 ±0.10 | 4.0 | 0.22 | |
| 201210 | 8.0 ±0.10 | 1.50 ±0.10 | 2.35 ±0.10 | 1.0 | 3.50 | 1.20 ±0.10 | 4.0 | 0.22 | |
| 201212 | 8.0 ±0.10 | 1.50 ±0.10 | 2.35 ±0.10 | 1.0 | 3.50 | 1.40 ±0.10 | 4.0 | 0.22 | |
| 201655 | 8.0 ±0.10 | 1.95 ±0.10 | 2.45 ±0.10 | 1.0 | 3.50 | 2.90 ±0.10 | 4.0 | 0.25 | |
| 201606 | 8.0 ±0.10 | 1.95 ±0.10 | 2.45 ±0.10 | 1.0 | 3.50 | 2.90 ±0.10 | 4.0 | 0.25 | |
| 201665 | 8.0 ±0.10 | 1.95 ±0.10 | 2.45 ±0.10 | 1.0 | 3.50 | 2.90 ±0.10 | 4.0 | 0.25 | |
| 201607 | 8.0 ±0.10 | 1.90 ±0.10 | 2.35 ±0.10 | 1.0 | 3.50 | 1.0 ±0.10 | 4.0 | 0.25 | |
| 201608 | 8.0 ±0.10 | 1.90 ±0.10 | 2.35 ±0.10 | 1.0 | 3.50 | 1.0 ±0.10 | 4.0 | 0.25 | |
| 201610 | 8.0 ±0.10 | 1.95 ±0.10 | 2.35 ±0.10 | 1.0 | 3.50 | 1.15 ±0.10 | 4.0 | 0.25 | |
| 201612 | 8.0 ±0.10 | 1.90 ±0.10 | 2.30 ±0.10 | 1.0 | 3.50 | 1.35 ±0.10 | 4.0 | 0.25 | |
| 252055 | 8.0 ±0.10 | 2.35 +0.10/-0.05 | 2.8 +0.10/-0.05 | 1.0 | 3.50 | 2.90 ±0.10 | 4.0 | 0.23 | |
| 252075 | 8.0 ±0.10 | 2.35 +0.10/-0.05 | 2.8 +0.10/-0.05 | 1.0 | 3.50 | 1.0 ±0.10 | 4.0 | 0.23 | |
| 252008 | 8.0 ±0.10 | 2.35 +0.10/-0.05 | 2.8 +0.10/-0.05 | 1.0 | 3.50 | 1.0 ±0.10 | 4.0 | 0.23 | |
| 252010 | 8.0 ±0.10 | 2.45 ±0.10 | 2.80 ±0.10 | 1.0 | 3.50 | 1.20 ±0.10 | 4.0 | 0.25 | |
| 252012 | 8.0 ±0.10 | 2.35 +0.10/-0.05 | 2.80 +0.10/-0.05 | 1.0 | 3.50 | 1.35 ±0.10 | 4.0 | 0.23 | |
| 303010 | 12.0 ±0.3.0 | 3.40 ±0.10 | 3.40 ±0.10 | 1.50 | 5.50 | 1.40 ±0.10 | 8.0 | 0.30 | |
| 303012 | 12.0 ±0.3.0 | 3.40 ±0.10 | 3.40 ±0.10 | 1.50 | 5.50 | 1.40 ±0.10 | 8.0 | 0.30 | |
| 303015 | 12.0 ±0.3.0 | 3.40 ±0.10 | 3.40 ±0.10 | 1.50 | 5.50 | 1.70 ±0.10 | 8.0 | 0.30 | |
| 303018 | 12.0 ±0.3.0 | 3.25 ±0.10 | 3.25 ±0.10 | 1.50 | 5.50 | 2.0 ±0.10 | 8.0 | 0.23 | |
| 303020 | 12.0 ±0.3.0 | 3.40 ±0.10 | 3.45 ±0.10 | 1.50 | 5.50 | 2.20 ±0.10 | 8.0 | 0.30 | |
| 322510 | 8.0 ±0.10 | 2.80 +0.10/-0.05 | 3.50 +0.10/-0.05 | 1.0 | 3.50 | 1.15 ±0.10 | 4.0 | 0.25 | |

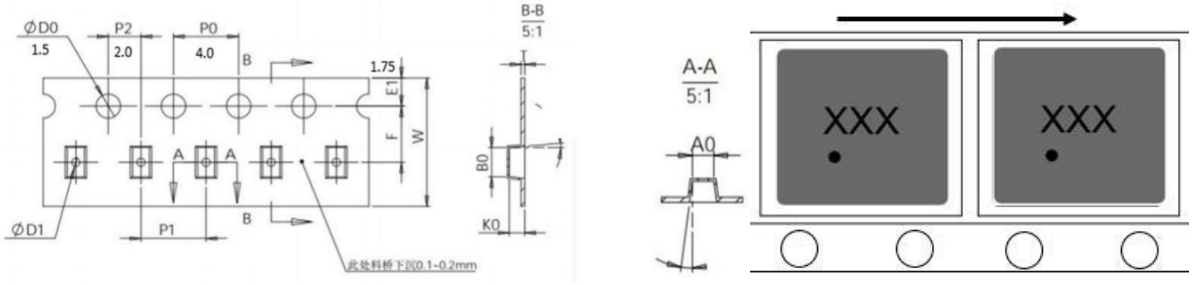
## PACKAGING

- 3225 Series




| Series | W | A0 | B0 | D1 | F | K0 | P1 | T | Packing Quantity |
|---|---|---|---|---|---|---|---|---|---|
| Tolerance | / | / | / | ±0.2 | ±0.1 | / | ±0.1 | ±0.05 | |
| 322512 | 8.0 ±0.10 | 2.90 +0.10/-0.05 | 3.50 +0.10/-0.05 | 1.0 | 3.50 | 1.35 ±0.10 | 4.0 | 0.25 | 3K |
| 322520 | 8.0 ±0.10 | 2.90 +0.10/-0.05 | 3.50 +0.10/-0.05 | 1.0 | 3.50 | 2.20 ±0.10 | 4.0 | 0.23 | 2K |

- 4040 Series

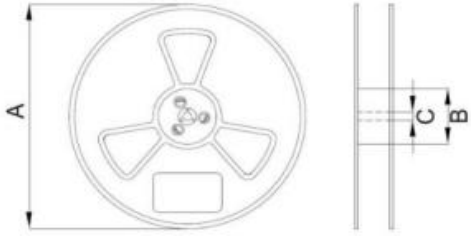



| Series | W | A0 | B0 | D1 | F | K0 | P1 | T | Packing Quantity |
|---|---|---|---|---|---|---|---|---|---|
| Tolerance | / | / | / | ±0.20 | ±0.10 | / | ±0.10 | ±0.05 | |
| 404008 | 12.0 ±0.30 | 4.40 ±0.10 | 4.40 ±0.10 | 1.50 | 5.50 | 1.0 ±0.10 | 8.0 | 0.30 | 3K |
| 404010 | 12.0 ±0.30 | 4.40 ±0.10 | 4.40 ±0.10 | 1.50 | 5.50 | 1.30 ±0.10 | 8.0 | 0.30 | |
| 404012 | 12.0 ±0.30 | 4.40 ±0.10 | 4.40 ±0.10 | 1.50 | 5.50 | 1.30 ±0.10 | 8.0 | 0.30 | |
| 404015 | 12.0 ±0.30 | 4.40 ±0.10 | 4.40 ±0.10 | 1.50 | 5.50 | 1.70 ±0.10 | 8.0 | 0.30 | |
| 404020 | 12.0 ±0.30 | 4.40 ±0.10 | 4.40 ±0.10 | 1.50 | 5.50 | 2.20 ±0.10 | 8.0 | 0.30 | |
| 404030 | 12.0 ±0.30 | 4.40 ±0.10 | 4.40 ±0.10 | 1.50 | 5.50 | 3.20 ±0.10 | 8.0 | 0.35 | 2K |

- Dimension of Reel: (Unit: mm)

☆ Packing size "W=8mm" using 178mm Reel.

☆ Packing size "W⩾12mm" using 330mm Reel.




| Type | A±2.0 | B±2.0 | C±2.0 |
|---|---|---|---|
| All | 178 | 60 | 13 |
| Type | A±2.0 | B±2.0 | C±2.0 |
| All | 330 | 100 | 13 |

## PRECAUTIONS

- 1.Storage Conditions
  Store products in a warehouse in compliance with the following condition:
  Temperature：Inductors (product with taping) +15 to +35℃；Humidity：25~70%RH.
  If the product is not used up 24H after opening, desiccant should be placed in the package and sealed
- 2.Do not subject products to rapid changes in temperature and humidity.
- 3.Do not store the products in chemical atmosphere such as one containing sulfurous acid gas or alkaline gas, that will causes poor solderability and corrosion of inductors.
- 4.Do not store products in bulk packaging to prevent collision among inductors which causes core chipping and wire breakage.
- 5.Store products on pallets to protect from humidity, dust, etc.
- 6.Avoid heat shock, vibration, direct sunlight, etc.
- 7.When designing the PCB, please consider the installation position of the non-magnetic shielded components to avoid failures caused by magnetic interference.
- 8.Do not place this product near magnets or objects with magnetic force.
- 9.The product will self-heat (temperature rise) due to power-on, and sufficient margin should be left in thermal design.
- 10.Mounting density
  If this product is placed near heat-generating products, be sure to implement sufficient heat-dissipating measures. If this product is subjected to a significant amount of heat from other products, this could adversely affect product quality, resulting in a circuit malfunction or failure of the mounted section. Also, be sure that the product is used in a manner so that the heat that the product is subjected to from other products does not exceed the upper limit of the rated operating temperature for the product.
- 11.Since the static electricity carried by the human body will be transmitted to the ground wire, please use an anti-static wrist strap.
- 12.Grease on human hands may lead to decreased solderability. Please avoid direct contact with the terminals.
- 13.This product refers to the general standard used in audio-visual entertainment, home appliances, computers,office automation, communications, power modules, LED lighting, measuring equipment.Machine tools, industrial control panels and other general electronic equipment. And the general electronicequipment should be used under the usual operation and usage methods.
- 14.Reworking with soldering iron

| ITEM | Requirement |
|---|---|
| Pre-heating | 150°C/approx. 1 min |
| Tip temperature of soldering iron | 350°C max. |
| Soldering time | 3 s (+1 s, -0 s) |
| Number of reworking operations | 1 times max. |
| It is recommended to replace the product directly, rework may cause poor appearance | |

- 15.We cannot warrant against failure caused by any use of our product that deviates from the intended use as described in this product specification.
- 16.Please approve our product specifications or transact the approval sheet for product specifications before ordering.
- 17.Our specification limits the quality of the component as a single unit. Please ensure the component is thoroughly evaluated in your application circuit.

## SAFETY REMINDERS

### SAFETY REMINDERS

● All products listed in this specification are developed, designed and intended for use in general electronics equipment. The products are not designed or Warranted to meet the requirements of the applications listed below, whose performance and/or quality require especially high reliability, or whose failure, malfunction or trouble might directly cause damage to society, person, or property. Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below. Please contact us for more details if you intend to use our products in the following applications.

☆ 1.Aerospace/aviation equipment

☆ 2.Transportation equipment (cars, electric trains, ships, etc.)

☆ 3.Medical equipment

☆ 4.Power-generation control equipment

☆ 5.Atomic energy-related equipment

☆ 6.Seabed equipment

☆ 7.Transportation control equipment

☆ 8.Public information-processing equipment

☆ 9.Military equipment

☆ 10.Electric heating apparatus, burning equipment

☆ 11.Disaster prevention/crime prevention equipment

☆ 12.Safety equipment

☆ 13.Other applications that are not considered general-purpose applications

● When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.