# SMD POWER COIL-*JNR 3010H*

## PRODUCT IDENTIFICATION

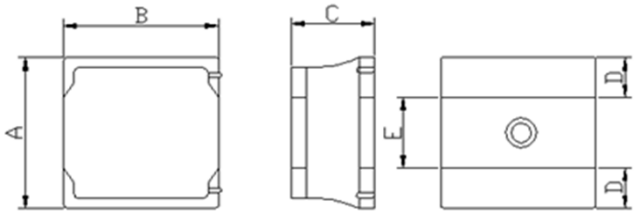
JNR 3010 H – 1R0 N

- JNR: Type
- 3010: Size
- H: Lead Free
- 1R0: Inductance
- N: Tol.

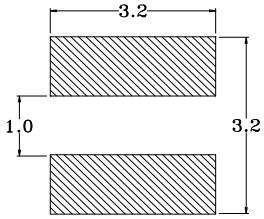
## FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## DIMENSIONS (mm)




**Recommended PC Board Pattern**




| Part No. | Size (mm) | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| JNR 3010H | 3.0 ± 0.2 | 3.0 ± 0.2 | 1.0 Max. | 1.0 Ref. | 1.0 Ref. |

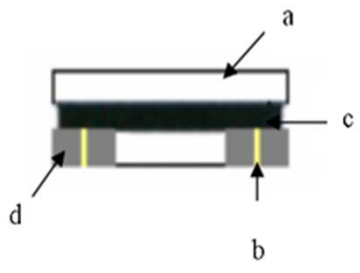
## SERIES LIST

| No. | Part No. | L (μH) | Tol. | Test Frequency (Hz) | RDC (Ω) ±20% | Isat (A) typ. | Irms (A) typ. |
|---|---|---|---|---|---|---|---|
| 1 | JNR 3010H-1R0N | 1.0 | ±30% | 1M / 0.1V | 0.055 | 1.80 | 2.10 |
| 2 | JNR 3010H-1R5N | 1.5 | ±30% | 1M / 0.1V | 0.070 | 1.50 | 1.90 |
| 3 | JNR 3010H-2R2M | 2.2 | ±20% | 1M / 0.1V | 0.090 | 1.30 | 1.70 |
| 4 | JNR 3010H-3R3M | 3.3 | ±20% | 1M / 0.1V | 0.130 | 1.10 | 1.50 |
| 5 | JNR 3010H-4R7M | 4.7 | ±20% | 1M / 0.1V | 0.170 | 0.90 | 1.30 |
| 6 | JNR 3010H-6R8M | 6.8 | ±20% | 1M / 0.1V | 0.260 | 0.77 | 1.00 |
| 7 | JNR 3010H-100M | 10 | ±20% | 1M / 0.1V | 0.350 | 0.63 | 0.80 |
| 8 | JNR 3010H-150M | 15 | ±20% | 1M / 0.1V | 0.510 | 0.54 | 0.70 |
| 9 | JNR 3010H-220M | 22 | ±20% | 1M / 0.1V | 0.750 | 0.43 | 0.60 |

Note:

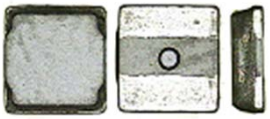
1. All test data referenced to 25℃ ambient
2. Isat：Saturation Current (Isat) will cause L0 to drop approximately 30%.
3. Irms：Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃

## Materials




| No. | Description | Specification |
|---|---|---|
| a | Core | Ferrite Core |
| b | Wire | Enameled Copper Wire |
| c | Glue | Epoxy with magnetic powder |
| d | Terminal | Ag/Ni/Sn |

# SMD POWER COIL-*JNR 3012H*



## PRODUCT IDENTIFICATION

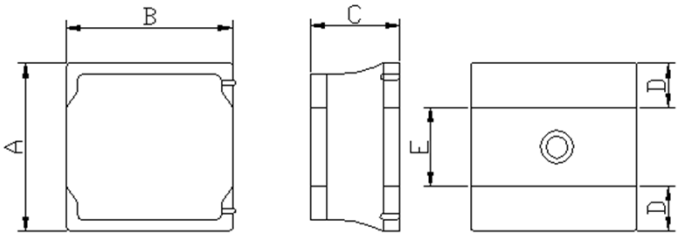
**JNR 3012H – 2R2**

**Type Size Inductance**

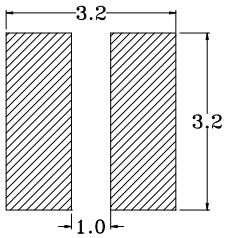
## ■ FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## ■ DIMENSIONS (mm)




**Recommended PC Board Pattern**




| Part No. | Size (mm) | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| JNR 3012H | 3.0 ± 0.2 | 3.2 ± 0.2 | 1.2 Max. | 1.0 Ref. | 1.0 Ref. |

## ■ SERIES LIST

| No. | Part No. | L (μH) | Test Frequency (Hz) | RDC (Ω) ±20% | I sat (A) Typ. | I rms (A) Typ. |
|---|---|---|---|---|---|---|
| 1 | JNR 3012H-1R0N | 1.0 ± 30% | 1M / 0.1V | 0.042 | 2.15 | 2.00 |
| 2 | JNR 3012H-1R5N | 1.5 ± 30% | 1M / 0.1V | 0.056 | 1.70 | 1.85 |
| 3 | JNR 3012H-2R2M | 2.2 ± 20% | 1M / 0.1V | 0.080 | 1.50 | 1.70 |
| 4 | JNR 3012H-3R3M | 3.3 ± 20% | 1M / 0.1V | 0.100 | 1.20 | 1.55 |
| 5 | JNR 3012H-4R7M | 4.7 ± 20% | 1M / 0.1V | 0.130 | 1.05 | 1.30 |
| 6 | JNR 3012H-6R8M | 6.8 ± 20% | 1M / 0.1V | 0.180 | 0.90 | 1.05 |
| 7 | JNR 3012H-100M | 10 ± 20% | 1M / 0.1V | 0.245 | 0.76 | 0.89 |
| 8 | JNR 3012H-150M | 15 ± 20% | 1M / 0.1V | 0.386 | 0.62 | 0.74 |
| 9 | JNR 3012H-220M | 22 ± 20% | 1M / 0.1V | 0.580 | 0.49 | 0.61 |

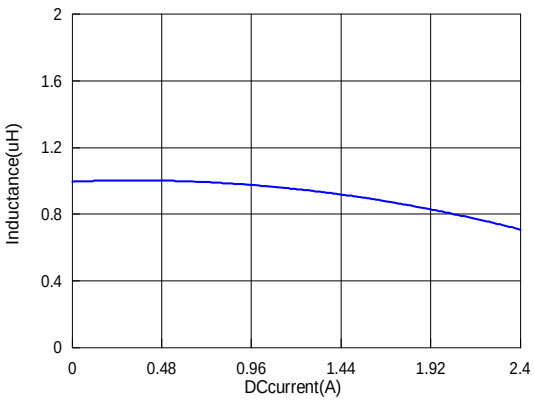
Note:

Isat：Based on inductance change （△L/L0：≦-30%）@ ambient temp. 25℃

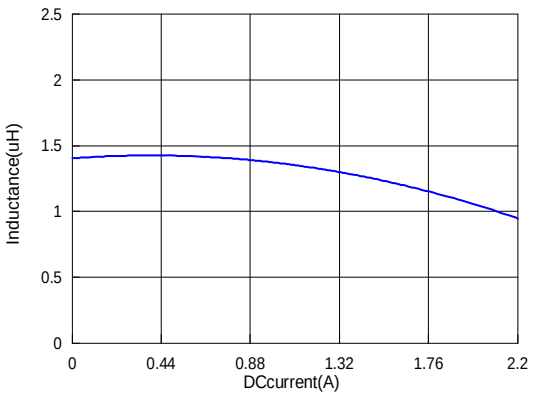
Irms：Based on temperature rise （△T：40℃.）Max

### Typical Performance Curves

JNR 3012H-1R0




JNR 3012H-1R5



# SMD POWER COIL-*JNR 3015H*

## PRODUCT IDENTIFICATION

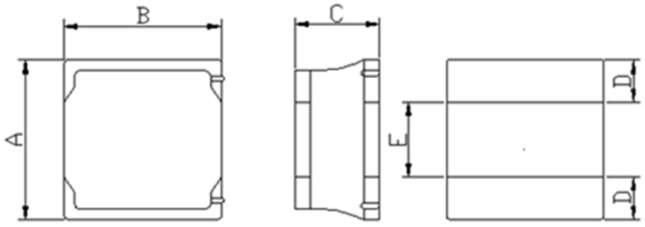
JNR 3015 H – 2R2 M

- JNR: Type
- 3015: Size
- H: Lead Free
- 2R2: Inductance
- M: Tol.

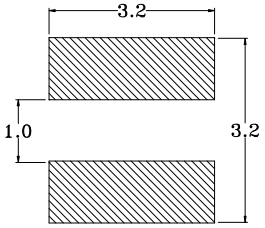
## FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. Operating temperature :-40~+125℃
   (Including self - temperature rise)

## DIMENSIONS (mm)




**Recommended PC Board Pattern**




| Part No. | Size (mm) | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| JNR 3015H | 3.0 ± 0.2 | 3.0 ± 0.2 | 1.5 Max. | 1.0 Ref. | 1.0 Ref. |

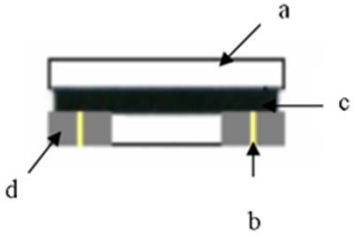
## SERIES LIST

| No. | Part No. | L (μH) | Tol. | Test Freq. (Hz) | RDC (Ω) ±20% | SRF (MHz) min. | Isat (A) typ. | Isat (A) max. | Irms (A) typ. | Irms (A) max. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | JNR 3015H-1R0N | 1.0 | ±30% | 100K/1V | 0.03 | 100 | 2.20 | 2.00 | 2.20 | 2.00 |
| 2 | JNR 3015H-1R5N | 1.5 | ±30% | 100K/1V | 0.04 | 87 | 2.00 | 1.80 | 2.00 | 1.80 |
| 3 | JNR 3015H-2R2M | 2.2 | ±20% | 100K/1V | 0.06 | 64 | 1.70 | 1.50 | 1.70 | 1.50 |
| 4 | JNR 3015H-3R3M | 3.3 | ±20% | 100K/1V | 0.08 | 49 | 1.40 | 1.20 | 1.40 | 1.20 |
| 5 | JNR 3015H-4R7M | 4.7 | ±20% | 100K/1V | 0.12 | 40 | 1.20 | 1.00 | 1.20 | 1.00 |
| 6 | JNR 3015H-6R8M | 6.8 | ±20% | 100K/1V | 0.16 | 36 | 1.00 | 0.90 | 1.00 | 0.90 |
| 7 | JNR 3015H-100M | 10 | ±20% | 100K/1V | 0.22 | 28 | 0.75 | 0.65 | 0.80 | 0.70 |
| 8 | JNR 3015H-150M | 15 | ±20% | 100K/1V | 0.32 | 23 | 0.65 | 0.55 | 0.70 | 0.60 |
| 9 | JNR 3015H-220M | 22 | ±20% | 100K/1V | 0.46 | 20 | 0.55 | 0.45 | 0.60 | 0.50 |
| 10 | JNR 3015H-330M | 33 | ±20% | 100K/1V | 0.80 | 18 | 0.40 | 0.35 | 0.45 | 0.40 |
| 11 | JNR 3015H-470M | 47 | ±20% | 100K/1V | 1.20 | 17 | 0.35 | 0.30 | 0.40 | 0.35 |

Note:

1. All test data referenced to 25℃ ambient
2. Isat：Saturation Current (Isat) will cause L0 to drop approximately 30%.
3. Irms：Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃

## Materials




| No. | Description | Specification |
|---|---|---|
| a | Core | Ferrite Core |
| b | Wire | Enameled Copper Wire |
| c | Glue | Epoxy with magnetic powder |
| d | Terminal | Ag/Ni/Sn |

# SMD POWER COIL-*JNR 4010H*

## PRODUCT IDENTIFICATION

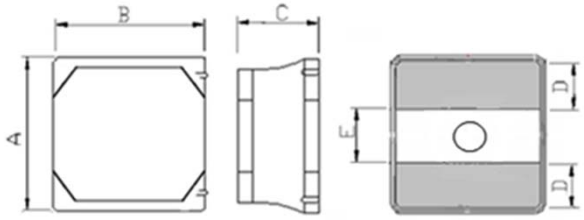
JNR 4010 H – 2R2 M

- JNR: Type
- 4010: Size
- H: Lead Free
- 2R2: Inductance
- M: Tol.

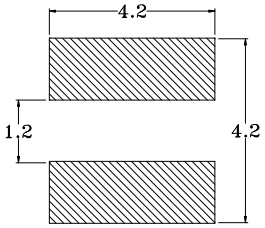
## FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## DIMENSIONS (mm)




**Recommended PC Board Pattern**




| Part No. | Size (mm) | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| JNR 4010H | 4.0 ± 0.2 | 4.0 ± 0.2 | 1.0 Max. | 1.2 Ref. | 1.6 Ref. |

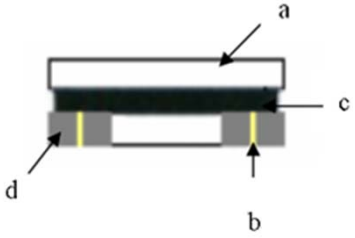
## SERIES LIST

| No. | Part No. | L (μH) | Tol. | Test Freq. (Hz) | RDC (Ω) ±20% | SRF (MHz) typ. | Isat (A) typ. | Isat (A) max. | Irms (A) typ. | Irms (A) max. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | JNR 4010H-1R0N | 1.0 | ±30% | 100K/1V | 0.056 | 116 | 2.40 | 2.00 | 2.30 | 1.90 |
| 2 | JNR 4010H-2R2M | 2.2 | ±20% | 100K/1V | 0.085 | 73 | 1.50 | 1.20 | 1.80 | 1.50 |
| 3 | JNR 4010H-3R3M | 3.3 | ±20% | 100K/1V | 0.100 | 58 | 1.30 | 1.10 | 1.70 | 1.40 |
| 4 | JNR 4010H-4R7M | 4.7 | ±20% | 100K/1V | 0.140 | 47 | 1.20 | 0.95 | 1.50 | 1.20 |
| 5 | JNR 4010H-6R8M | 6.8 | ±20% | 100K/1V | 0.200 | 38 | 1.00 | 0.80 | 1.20 | 1.00 |
| 6 | JNR 4010H-100M | 10 | ±20% | 100K/1V | 0.300 | 31 | 0.80 | 0.62 | 0.90 | 0.75 |
| 7 | JNR 4010H-150M | 15 | ±20% | 100K/1V | 0.430 | 24 | 0.70 | 0.54 | 0.80 | 0.60 |
| 8 | JNR 4010H-220M | 22 | ±20% | 100K/1V | 0.570 | 19 | 0.60 | 0.45 | 0.80 | 0.50 |

Note:

1. All test data referenced to 25℃ ambient
2. Isat：Based on inductance change （△L/L0：≦30%）
3. Irms：Based on temperature rise （△T：40℃ typ.）max

## Materials




| No. | Description | Specification |
|---|---|---|
| a | Core | Ferrite Core |
| b | Wire | Enameled Copper Wire |
| c | Glue | Epoxy with magnetic powder |
| d | Terminal | Ag/Ni/Sn |

# SMD POWER COIL-*JNR 4012H*

## PRODUCT IDENTIFICATION

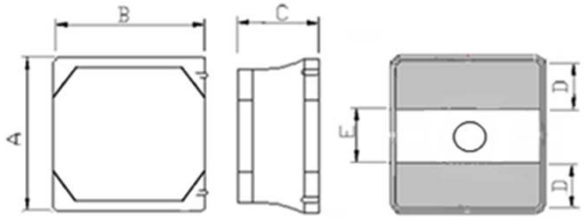
JNR 4012 H – 2R2 M

- JNR: Type
- 4012: Size
- H: Lead Free
- 2R2: Inductance
- M: Tol.

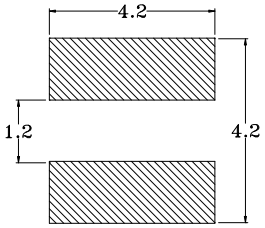
## FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## DIMENSIONS (mm)




**Recommended PC Board Pattern**




| Part No. | Size (mm) | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| JNR 4012H | 4.0 ± 0.2 | 4.0 ± 0.2 | 1.2 Max. | 1.2 Ref. | 1.6 Ref. |

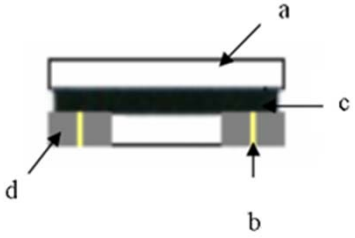
## SERIES LIST

| No. | Part No. | L (μH) | Tol. | Test Freq. (Hz) | RDC (Ω) ±20% | SRF (MHz) typ. | Isat (A) typ. | Isat (A) max. | Irms (A) typ. | Irms (A) max. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | JNR 4012H-1R0N | 1.0 | ±30% | 100K/1V | 0.042 | 100 | 3.30 | 2.80 | 2.50 | 2.20 |
| 2 | JNR 4012H-2R2M | 2.2 | ±20% | 100K/1V | 0.060 | 70 | 1.95 | 1.65 | 2.20 | 1.90 |
| 3 | JNR 4012H-3R3M | 3.3 | ±20% | 100K/1V | 0.070 | 60 | 1.60 | 1.40 | 1.90 | 1.70 |
| 4 | JNR 4012H-4R7M | 4.7 | ±20% | 100K/1V | 0.095 | 45 | 1.40 | 1.20 | 1.70 | 1.50 |
| 5 | JNR 4012H-6R8M | 6.8 | ±20% | 100K/1V | 0.125 | 35 | 1.10 | 0.90 | 1.50 | 1.30 |
| 6 | JNR 4012H-100M | 10 | ±20% | 100K/1V | 0.180 | 30 | 1.00 | 0.80 | 1.30 | 1.10 |
| 7 | JNR 4012H-150M | 15 | ±20% | 100K/1V | 0.260 | 24 | 0.80 | 0.65 | 0.95 | 0.75 |
| 8 | JNR 4012H-220M | 22 | ±20% | 100K/1V | 0.400 | 18 | 0.60 | 0.50 | 0.72 | 0.62 |

Note:

1. All test data referenced to 25℃ ambient
2. Isat：Based on inductance change （△L/L0：≦30%）
3. Irms：Based on temperature rise （△T：40℃ typ.）max

## Materials




| No. | Description | Specification |
|---|---|---|
| a | Core | Ferrite Core |
| b | Wire | Enameled Copper Wire |
| c | Glue | Epoxy with magnetic powder |
| d | Terminal | Ag/Ni/Sn |

# SMD POWER COIL-*JNR 4018H*


## PRODUCT IDENTIFICATION

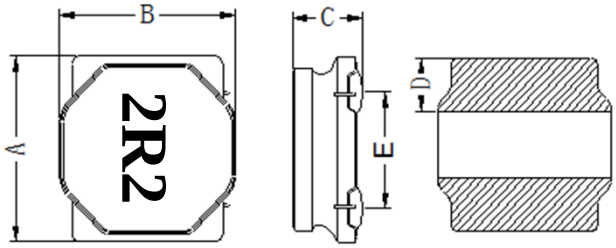
JNR 4018H – 2R2

Type Size Inductance

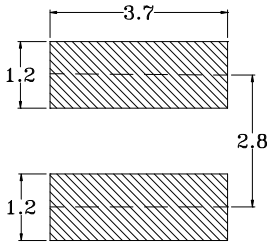
## ■ FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## ■ DIMENSIONS (mm)




**Recommended PC Board Pattern**




| Part No. | Size (mm) A | B | C | D | E |
|---|---|---|---|---|---|
| JNR 4018H | 4.0 ± 0.2 | 4.0 ± 0.2 | 1.8 Max. | 1.1 ± 0.2 | 2.5 ± 0.2 |

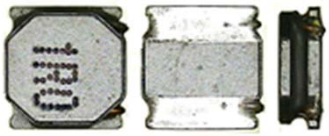
## ■ SERIES LIST

| No. | Part No. | L (μH) | Test Frequency (Hz) | SRF Min. (MHz) | RDC ±20% (Ω) | Isat (A) | Irms (A) |
|---|---|---|---|---|---|---|---|
| 1 | JNR 4018H-1R0N | 1.0 | 100K/1V | 90 | 0.027 | 4.00 | 3.20 |
| 2 | JNR 4018H-1R5N | 1.5 | 100K/1V | 75 | 0.037 | 3.30 | 2.40 |
| 3 | JNR 4018H-2R2M | 2.2 | 100K/1V | 60 | 0.042 | 3.00 | 2.20 |
| 4 | JNR 4018H-3R3M | 3.3 | 100K/1V | 45 | 0.055 | 2.30 | 2.00 |
| 5 | JNR 4018H-4R7M | 4.7 | 100K/1V | 35 | 0.070 | 2.00 | 1.70 |
| 6 | JNR 4018H-6R8M | 6.8 | 100K/1V | 30 | 0.098 | 1.60 | 1.45 |
| 7 | JNR 4018H-100M | 10 | 100K/1V | 25 | 0.150 | 1.30 | 1.20 |
| 8 | JNR 4018H-150M | 15 | 100K/1V | 18 | 0.210 | 1.10 | 0.85 |
| 9 | JNR 4018H-220M | 22 | 100K/1V | 15 | 0.290 | 0.90 | 0.72 |
| 10 | JNR 4018H-330M | 33 | 100K/1V | 12 | 0.460 | 0.70 | 0.55 |
| 11 | JNR 4018H-470M | 47 | 100K/1V | 10 | 0.650 | 0.60 | 0.44 |
| 12 | JNR 4018H-680M | 68 | 100K/1V | 8.3 | 1.00 | 0.50 | 0.32 |
| 13 | JNR 4018H-101M | 100 | 100K/1V | 6.5 | 1.45 | 0.42 | 0.28 |
| 14 | JNR 4018H-151M | 150 | 100K/1V | 5.5 | 2.30 | 0.34 | 0.22 |
| 15 | JNR 4018H-221M | 220 | 100K/1V | 4.0 | 3.80 | 0.275 | 0.17 |

Note:

Isat：Based on inductance change （△L/L0：≦-30%）@ ambient temp. 25℃

Irms：Based on temperature rise （△T：40℃ typ.）



## PRODUCT IDENTIFICATION

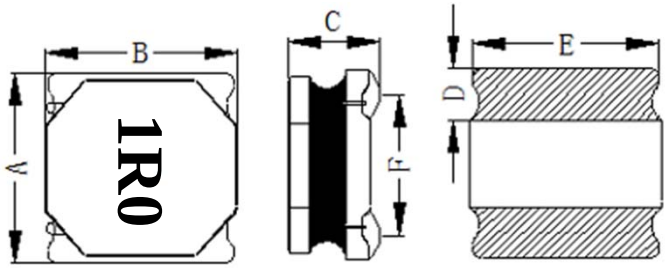
**JNR 5020H – 1R0**

**Type Size Inductance**

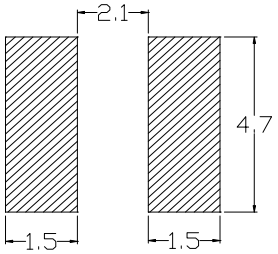
## FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## DIMENSIONS (mm)




**Recommended PC Board Pattern**




| Part No. | Size (mm) | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| JNR 5020H | 5.0 ± 0.2 | 5.0 ± 0.2 | 1.8 ± 0.2 | 1.3 ± 0.2 | 4.7 ± 0.2 | 3.7 Ref. |

## SERIES LIST

| No. | Part No. | L (μH) | Test Frequency (Hz) | RDC (mΩ) ±20% | I sat (A) | I rms (A) |
|---|---|---|---|---|---|---|
| 1 | JNR 5020H-1R0N | 1.0 ± 30% | 100 K / 1V | 20 | 5.00 | 4.10 |
| 2 | JNR 5020H-1R2N | 1.2 ± 30% | 100 K / 1V | 20 | 4.80 | 3.80 |
| 3 | JNR 5020H-1R5N | 1.5 ± 30% | 100 K / 1V | 25 | 4.50 | 3.50 |
| 4 | JNR 5020H-2R2N | 2.2 ± 30% | 100 K / 1V | 32 | 4.10 | 3.30 |
| 5 | JNR 5020H-2R7M | 2.7 ± 20% | 100 K / 1V | 38 | 3.80 | 3.00 |
| 6 | JNR 5020H-3R3M | 3.3 ± 20% | 100 K / 1V | 43 | 3.50 | 2.80 |
| 7 | JNR 5020H-4R7M | 4.7 ± 20% | 100 K / 1V | 60 | 2.70 | 2.40 |
| 8 | JNR 5020H-5R6M | 5.6 ± 20% | 100 K / 1V | 69 | 2.40 | 2.10 |
| 9 | JNR 5020H-6R8M | 6.8 ± 20% | 100 K / 1V | 90 | 2.10 | 1.90 |
| 10 | JNR 5020H-8R2M | 8.2 ± 20% | 100 K / 1V | 98 | 1.90 | 1.75 |
| 11 | JNR 5020H-100M | 10 ± 20% | 100 K / 1V | 110 | 1.70 | 1.60 |
| 12 | JNR 5020H-120M | 12 ± 20% | 100 K / 1V | 135 | 1.40 | 1.40 |
| 13 | JNR 5020H-150M | 15 ± 20% | 100 K / 1V | 165 | 1.30 | 1.25 |
| 14 | JNR 5020H-180M | 18 ± 20% | 100 K / 1V | 190 | 1.20 | 1.17 |
| 15 | JNR 5020H-220M | 22 ± 20% | 100 K / 1V | 225 | 1.10 | 1.10 |
| 16 | JNR 5020H-330M | 33 ± 20% | 100 K / 1V | 335 | 0.80 | 0.80 |
| 17 | JNR 5020H-470M | 47 ± 20% | 100 K / 1V | 460 | 0.70 | 0.70 |

Note:

1. All test data referenced to 25℃ ambient
2. Saturation Current (Isat) will cause L0 to drop approximately 30%
3. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
4. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part emperature. Part temperature should be verified in the end application.

# SMD POWER COIL-*JNR 5040H*


## PRODUCT IDENTIFICATION

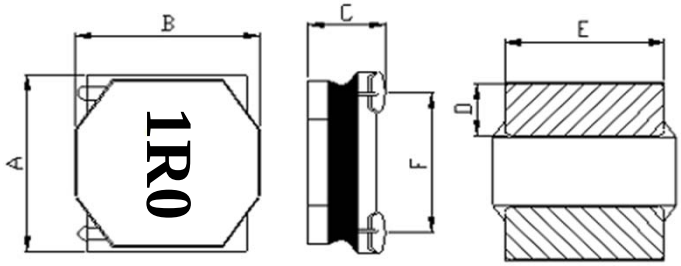
JNR 5040H – 1R0

Type Size Inductance

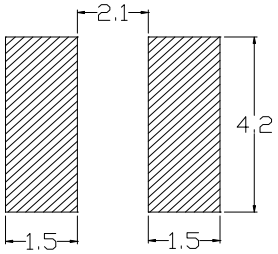
## ■ FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## ■ DIMENSIONS (mm)




**Recommended PC Board Pattern**




| Part No. | Inductance | Size (mm) A | B | C | D | E | F |
|---|---|---|---|---|---|---|---|
| JNR 5040H | ≤10 uH | 4.95±0.2 | 4.95±0.2 | 3.9±0.2 | 1.3±0.3 | 4.2±0.2 | 3.7 Ref. |
| | >10 uH | | | 3.8±0.2 | | | |

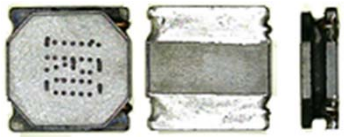
## ■ SERIES LIST

| No. | Part No. | L (μH) | Test Frequency (Hz) | RDC (mΩ) ±20% | I sat (A) | I rms (A) |
|---|---|---|---|---|---|---|
| 1 | JNR 5040H-1R0N | 1.0 ± 30% | 100 K / 1V | 12 | 7.50 | 5.00 |
| 2 | JNR 5040H-1R5N | 1.5 ± 30% | 100 K / 1V | 15 | 6.50 | 4.50 |
| 3 | JNR 5040H-2R2N | 2.2 ± 30% | 100 K / 1V | 21 | 5.70 | 3.80 |
| 4 | JNR 5040H-3R3M | 3.3 ± 20% | 100 K / 1V | 24 | 4.40 | 3.50 |
| 5 | JNR 5040H-4R7M | 4.7 ± 20% | 100 K / 1V | 32 | 3.90 | 3.20 |
| 6 | JNR 5040H-6R8M | 6.8 ± 20% | 100 K / 1V | 43 | 3.30 | 2.50 |
| 7 | JNR 5040H-100M | 10 ± 20% | 100 K / 1V | 56 | 2.52 | 2.20 |
| 8 | JNR 5040H-150M | 15 ± 20% | 100 K / 1V | 80 | 2.00 | 1.80 |
| 9 | JNR 5040H-220M | 22 ± 20% | 100 K / 1V | 123 | 1.62 | 1.50 |
| 10 | JNR 5040H-330M | 33 ± 20% | 100 K / 1V | 180 | 1.30 | 1.20 |
| 11 | JNR 5040H-470M | 47 ± 20% | 100 K / 1V | 270 | 1.10 | 1.00 |
| 12 | JNR 5040H-680M | 68 ± 20% | 100 K / 1V | 400 | 0.90 | 0.80 |
| 13 | JNR 5040H-101M | 100 ± 20% | 100 K / 1V | 560 | 0.75 | 0.72 |

Note:

1. All test data referenced to 25℃ ambient
2. Saturation Current (Isat) will cause L0 to drop approximately 30%
3. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
4. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part emperature. Part temperature should be verified in the end application.

# SMD POWER COIL-*JNR 6020H*



## PRODUCT IDENTIFICATION

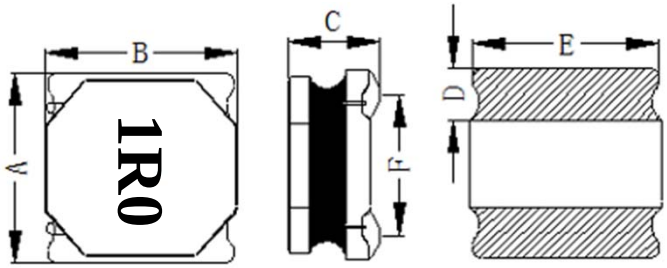
**JNR 6020H – 1R0**

**Type Size Inductance**

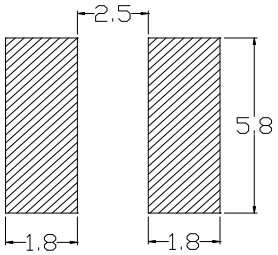
## ■ FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## ■ DIMENSIONS (mm)




**Recommended PC Board Pattern**




| Part No. | Size (mm) | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| JNR 6020H | 6.0 ± 0.2 | 6.0 ± 0.2 | 1.8 ± 0.2 | 1.6 ± 0.3 | 5.8 ± 0.3 | 4.3 Ref. |

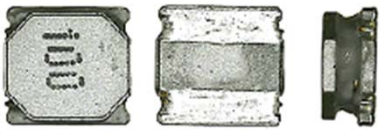
## ■ SERIES LIST

| No. | Part No. | L (μH) | Test Frequency (Hz) | RDC (mΩ) ±20% | I sat (A) | I rms (A) |
|---|---|---|---|---|---|---|
| 1 | JNR 6020H-1R0M | 1.0 ± 20% | 100 K / 1V | 19 | 6.2 | 4.5 |
| 2 | JNR 6020H-1R5M | 1.5 ± 20% | 100 K / 1V | 22.5 | 5.5 | 3.8 |
| 3 | JNR 6020H-2R0M | 2.0 ± 20% | 100 K / 1V | 25 | 5.3 | 3.65 |
| 4 | JNR 6020H-2R2M | 2.2 ± 20% | 100 K / 1V | 29 | 5.0 | 3.5 |
| 5 | JNR 6020H-3R3M | 3.3 ± 20% | 100 K / 1V | 35 | 4.0 | 3.3 |
| 6 | JNR 6020H-4R7M | 4.7 ± 20% | 100 K / 1V | 54 | 3.0 | 2.8 |
| 7 | JNR 6020H-5R6M | 5.6 ± 20% | 100 K / 1V | 59 | 2.7 | 2.6 |
| 8 | JNR 6020H-6R8M | 6.8 ± 20% | 100 K / 1V | 78 | 2.6 | 2.5 |
| 9 | JNR 6020H-8R2M | 8.2 ± 20% | 100 K / 1V | 103 | 2.4 | 2.3 |
| 10 | JNR 6020H-100M | 10 ± 20% | 100 K / 1V | 106 | 2.1 | 2.1 |
| 11 | JNR 6020H-150M | 15 ± 20% | 100 K / 1V | 138 | 1.5 | 1.6 |
| 12 | JNR 6020H-220M | 22 ± 20% | 100 K / 1V | 204 | 1.3 | 1.4 |

Note:

1. All test data referenced to 25℃ ambient
2. Saturation Current (Isat) will cause L0 to drop approximately 30%
3. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
4. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part emperature. Part temperature should be verified in the end application.

# SMD POWER COIL-*JNR 6028H*



## PRODUCT IDENTIFICATION

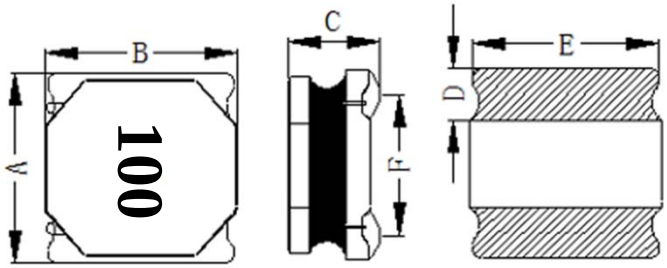
JNR 6028H – 100

Type Size Inductance

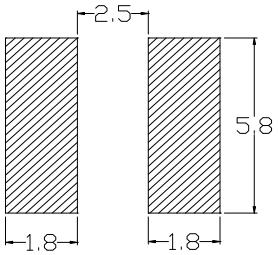
## FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## DIMENSIONS (mm)




**Recommended PC Board Pattern**




| Part No. | Size (mm) | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| JNR 6028H | 6.0 ± 0.2 | 6.0 ± 0.2 | 2.6 ± 0.2 | 1.6 ± 0.3 | 5.8 ± 0.3 | 4.3 Ref. |

## SERIES LIST

| No. | Part No. | L (μH) | Test Frequency (Hz) | RDC (mΩ) ±20% | I sat (A) | I rms (A) |
|---|---|---|---|---|---|---|
| 1 | JNR 6028H-1R0N | 1.0 ± 30% | 100 K / 1V | 10 | 5.75 | 5.20 |
| 2 | JNR 6028H-1R5N | 1.5 ± 30% | 100 K / 1V | 14 | 5.30 | 4.95 |
| 3 | JNR 6028H-2R2M | 2.2 ± 20% | 100 K / 1V | 18 | 5.00 | 4.50 |
| 4 | JNR 6028H-3R3M | 3.3 ± 20% | 100 K / 1V | 24 | 4.30 | 3.60 |
| 5 | JNR 6028H-4R7M | 4.7 ± 20% | 100 K / 1V | 30 | 3.20 | 3.10 |
| 6 | JNR 6028H-6R8M | 6.8 ± 20% | 100 K / 1V | 47 | 2.85 | 2.50 |
| 7 | JNR 6028H-100M | 10 ± 20% | 100 K / 1V | 65 | 2.10 | 2.00 |
| 8 | JNR 6028H-150M | 15 ± 20% | 100 K / 1V | 98 | 2.00 | 1.80 |
| 9 | JNR 6028H-220M | 22 ± 20% | 100 K / 1V | 138 | 1.60 | 1.50 |
| 10 | JNR 6028H-330M | 33 ± 20% | 100 K / 1V | 200 | 1.40 | 1.30 |
| 11 | JNR 6028H-470M | 47 ± 20% | 100 K / 1V | 280 | 1.15 | 1.06 |
| 12 | JNR 6028H-680M | 68 ± 20% | 100 K / 1V | 420 | 1.00 | 0.81 |
| 13 | JNR 6028H-101M | 100 ± 20% | 100 K / 1V | 605 | 0.80 | 0.72 |

Note:

1. All test data referenced to 25℃ ambient
2. Saturation Current (Isat) will cause L0 to drop approximately 30%
3. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
4. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part emperature. Part temperature should be verified in the end application.

# SMD POWER COIL-*JNR 6045H*


## PRODUCT IDENTIFICATION

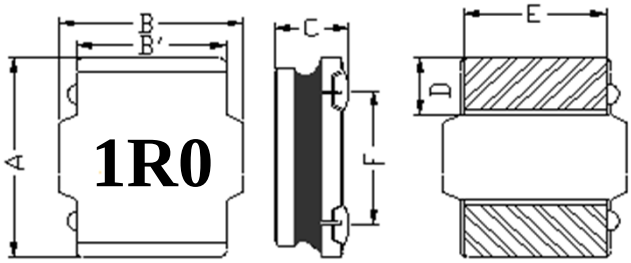
JNR 6045 H – 1R0 M

- JNR: Type
- 6045: Size
- H: Lead Free
- 1R0: Inductance
- M: Tol.

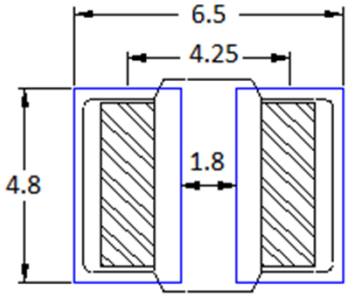
## FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## DIMENSIONS (mm)




Recommended PC Board Pattern




| Part No. | Size (mm) | | | | | | |
|---|---|---|---|---|---|---|---|
| | A | B | B' | C | D | E | F |
| JNR 6045H | 6.0 ± 0.3 | 6.0 ± 0.4 | 4.8 ± 0.2 | 4.2 ± 0.3 | 1.7 ± 0.3 | 4.5 ± 0.3 | 4.25 ± 0.3 |

## SERIES LIST

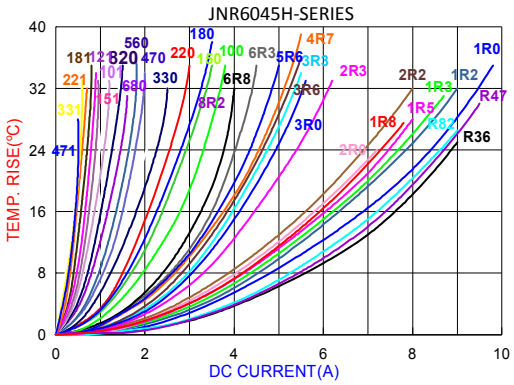
| No. | Part No. | L (μH) | TOL. ± (%) | Test Freq.(Hz) | RDC (mΩ) ±20% | I sat (A) | | I rms (A) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Max. | Typ. | Max. | Typ. |
| 1 | JNR 6045H-R36 | 0.36 | M,N | 1M / 1V | 4.8 | 16.50 | 18.00 | 8.50 | 9.00 |
| 2 | JNR 6045H-R47 | 0.47 | M,N | 1M / 1V | 6.8 | 16.00 | 17.00 | 8.00 | 8.60 |
| 3 | JNR 6045H-R82 | 0.82 | M,N | 1M / 1V | 8.5 | 13.50 | 14.50 | 7.50 | 8.20 |
| 4 | JNR 6045H-1R0 | 1.0 | M,N | 1M / 1V | 10.0 | 12.50 | 13.50 | 7.30 | 8.00 |
| 5 | JNR 6045H-1R2 | 1.2 | M,N | 1M / 1V | 10.5 | 11.50 | 12.50 | 7.00 | 7.50 |
| 6 | JNR 6045H-1R3 | 1.3 | M,N | 1M / 1V | 10.5 | 11.50 | 12.50 | 7.00 | 7.50 |
| 7 | JNR 6045H-1R5 | 1.5 | M,N | 1M / 1V | 11.7 | 11.00 | 12.00 | 6.60 | 7.00 |
| 8 | JNR 6045H-1R8 | 1.8 | M,N | 1M / 1V | 12.0 | 10.00 | 11.00 | 6.20 | 6.80 |
| 9 | JNR 6045H-2R0 | 2.0 | M,N | 1M / 1V | 13.5 | 9.50 | 10.50 | 5.80 | 6.50 |
| 10 | JNR 6045H-2R2 | 2.2 | M,N | 1M / 1V | 15.0 | 8.55 | 9.50 | 5.30 | 6.00 |
| 11 | JNR 6045H-2R3 | 2.3 | M,N | 1M / 1V | 16.0 | 8.20 | 9.30 | 5.00 | 5.80 |
| 12 | JNR 6045H-3R0 | 3.0 | M,N | 1M / 1V | 20.0 | 7.50 | 8.00 | 4.60 | 5.20 |
| 13 | JNR 6045H-3R3 | 3.3 | M,N | 1M / 1V | 21.0 | 7.30 | 7.80 | 4.50 | 5.00 |
| 14 | JNR 6045H-3R6 | 3.6 | M,N | 1M / 1V | 22.5 | 6.90 | 7.40 | 4.30 | 4.90 |
| 15 | JNR 6045H-4R7 | 4.7 | M,N | 1M / 1V | 26.0 | 6.20 | 6.80 | 4.00 | 4.50 |
| 16 | JNR 6045H-5R6 | 5.6 | M,N | 1M / 1V | 31.0 | 5.70 | 6.40 | 3.70 | 4.10 |
| 17 | JNR 6045H-6R3 | 6.3 | M,N | 1M / 1V | 33.0 | 5.30 | 5.90 | 3.50 | 3.80 |
| 18 | JNR 6045H-6R8 | 6.8 | M,N | 1M / 1V | 34.0 | 5.15 | 5.70 | 3.30 | 3.60 |
| 19 | JNR 6045H-8R2 | 8.2 | M,N | 1M / 1V | 46.0 | 4.50 | 5.10 | 2.90 | 3.40 |
| 20 | JNR 6045H-100 | 10 | K,M,N | 1M / 1V | 52.0 | 4.20 | 4.60 | 2.60 | 3.20 |
| 21 | JNR 6045H-150 | 15 | K,M,N | 1M / 1V | 71.0 | 3.30 | 3.80 | 2.20 | 2.80 |
| 22 | JNR 6045H-180 | 18 | K,M,N | 1M / 1V | 80.0 | 2.90 | 3.40 | 2.10 | 2.60 |
| 23 | JNR 6045H-220 | 22 | K,M,N | 1M / 1V | 96.0 | 2.70 | 3.30 | 1.90 | 2.30 |
| 24 | JNR 6045H-330 | 33 | K,M,N | 1M / 1V | 145 | 2.10 | 2.50 | 1.50 | 1.80 |
| 25 | JNR 6045H-470 | 47 | K,M,N | 1M / 1V | 200 | 1.75 | 2.00 | 1.20 | 1.60 |
| 26 | JNR 6045H-560 | 56 | K,M,N | 1M / 1V | 230 | 1.65 | 1.80 | 1.00 | 1.40 |

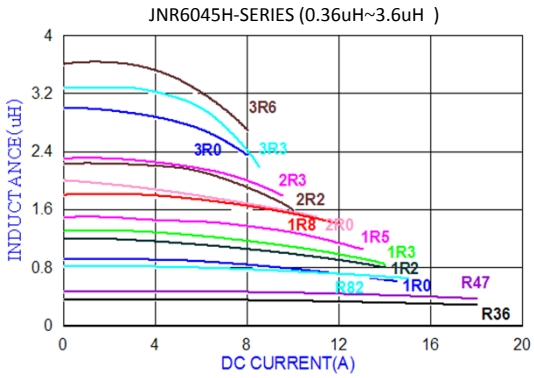
| No. | Part No. | L (μH) | TOL. ± (%) | Test Freq.(Hz) | RDC (mΩ) ±20% | I sat (A) Max. | I sat (A) Typ. | I rms (A) Max. | I rms (A) Typ. |
|---|---|---|---|---|---|---|---|---|---|
| 27 | JNR 6045H-680 | 68 | K,M,N | 1M / 1V | 305 | 1.52 | 1.60 | 0.92 | 1.10 |
| 28 | JNR 6045H-820 | 82 | K,M,N | 1M / 1V | 365 | 1.40 | 1.50 | 0.88 | 0.98 |
| 29 | JNR 6045H-101 | 100 | K,M,N | 1M / 1V | 456 | 1.25 | 1.33 | 0.82 | 0.92 |
| 30 | JNR 6045H-121 | 120 | K,M,N | 1M / 1V | 500 | 1.10 | 1.20 | 0.79 | 0.85 |
| 31 | JNR 6045H-151 | 150 | K,M,N | 1M / 1V | 626 | 1.00 | 1.10 | 0.70 | 0.75 |
| 32 | JNR 6045H-181 | 180 | K,M,N | 1M / 1V | 745 | 0.90 | 1.00 | 0.60 | 0.68 |
| 33 | JNR 6045H-221 | 220 | K,M,N | 1M / 1V | 900 | 0.77 | 0.88 | 0.50 | 0.60 |
| 34 | JNR 6045H-331 | 330 | K,M,N | 1M / 1V | 1400 | 0.55 | 0.60 | 0.45 | 0.55 |
| 35 | JNR 6045H-471 | 470 | K,M,N | 1M / 1V | 2050 | 0.45 | 0.50 | 0.35 | 0.40 |

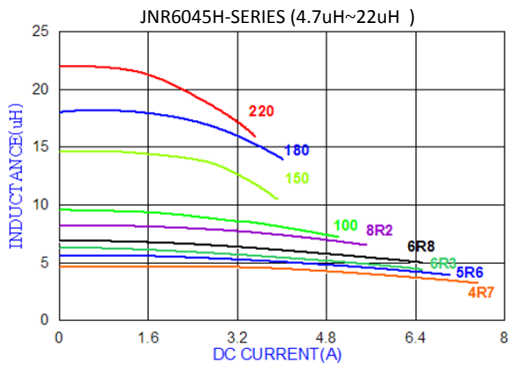
Note:

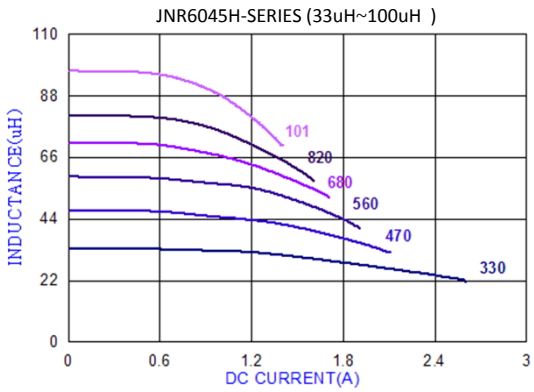
1. All test data referenced to 25℃ ambient
2. Saturation Current (Isat) will cause L0 to drop approximately 30%
3. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
4. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part emperature. Part temperature should be verified in the end application.

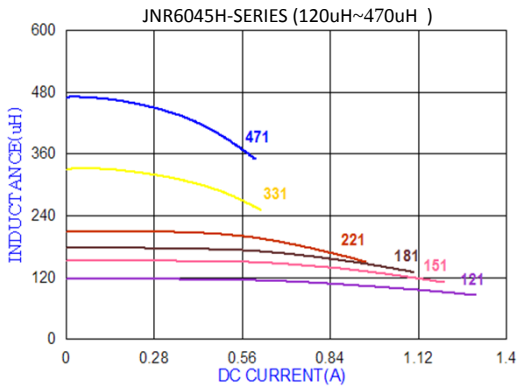
## TYPICAL PERFORMANCE CURVES



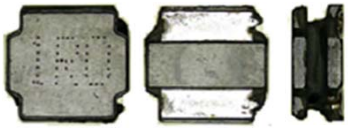



# SMD POWER COIL-*JNR 8040H*



## PRODUCT IDENTIFICATION

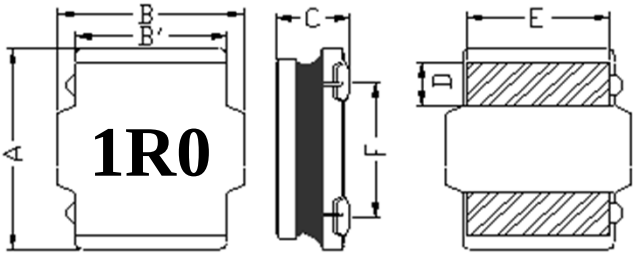
JNR 8040 H – 1R0 M

- JNR: Type
- 8040: Size
- H: Lead Free
- 1R0: Inductance
- M: Tol.

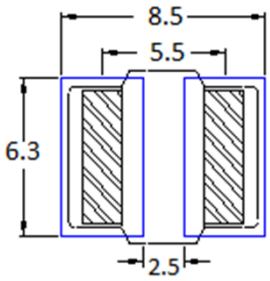
## FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

## DIMENSIONS (mm)




**Recommended PC Board Pattern**




Note:
1. The above PCB layout reference only.
2. Recommend solder paste thickness at 0.15mm and above.

| Part No. | Inductance | Size (mm) A | B | B' | C | D | E | F |
|---|---|---|---|---|---|---|---|---|
| JNR 8040H | ≤10 uH | 8.0 ±0.3 | 8.0 ±0.3 | 6.3 ±0.2 | 3.9±0.3 | 2.0 ±0.3 | 6.0 ±0.3 | 5.5 ±0.3 |
| | >10 uH | | | | 3.7±0.3 | | | |

## SERIES LIST

| No. | Part No. | L (μH) | TOL. ± (%) | Test Freq.(Hz) | RDC (mΩ) ±20% | I sat (A) Max. | I sat (A) Typ. | I rms (A) Max. | I rms (A) Typ. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | JNR 8040H-1R0 | 1.0 | M,N | 1M / 1V | 8.2 | 13.00 | 13.80 | 8.00 | 8.50 |
| 2 | JNR 8040H-1R2 | 1.2 | M,N | 1M / 1V | 8.2 | 11.50 | 12.80 | 7.80 | 8.30 |
| 3 | JNR 8040H-1R4 | 1.4 | M,N | 1M / 1V | 10 | 11.20 | 11.80 | 7.80 | 8.20 |
| 4 | JNR 8040H-1R5 | 1.5 | M,N | 1M / 1V | 10 | 11.00 | 11.50 | 7.70 | 8.00 |
| 5 | JNR 8040H-1R6 | 1.6 | M,N | 1M / 1V | 10 | 11.00 | 11.50 | 7.70 | 8.00 |
| 6 | JNR 8040H-2R0 | 2.0 | M,N | 1M / 1V | 11 | 9.60 | 10.20 | 7.10 | 7.50 |
| 7 | JNR 8040H-2R2 | 2.2 | M,N | 1M / 1V | 12 | 9.20 | 9.80 | 6.90 | 7.40 |
| 8 | JNR 8040H-2R7 | 2.7 | M,N | 1M / 1V | 13 | 8.20 | 9.00 | 6.50 | 7.00 |
| 9 | JNR 8040H-3R3 | 3.3 | M,N | 1M / 1V | 15 | 7.50 | 8.00 | 6.20 | 6.60 |
| 10 | JNR 8040H-4R7 | 4.7 | M,N | 1M / 1V | 20 | 6.00 | 6.70 | 5.30 | 5.80 |
| 11 | JNR 8040H-5R6 | 5.6 | M,N | 1M / 1V | 22 | 5.80 | 6.20 | 5.20 | 5.40 |
| 12 | JNR 8040H-6R8 | 6.8 | M,N | 1M / 1V | 25 | 5.10 | 5.60 | 5.00 | 5.10 |
| 13 | JNR 8040H-8R2 | 8.2 | M,N | 1M / 1V | 30 | 4.60 | 5.30 | 4.50 | 4.80 |
| 14 | JNR 8040H-100 | 10 | M,N | 1M / 1V | 33 | 4.30 | 5.00 | 4.20 | 4.60 |
| 15 | JNR 8040H-150 | 15 | M,N | 1M / 1V | 50 | 3.60 | 4.00 | 3.20 | 3.60 |
| 16 | JNR 8040H-220 | 22 | M,N | 1M / 1V | 73 | 2.80 | 3.10 | 2.45 | 2.90 |
| 17 | JNR 8040H-330 | 33 | M,N | 1M / 1V | 100 | 2.10 | 2.60 | 2.10 | 2.30 |
| 18 | JNR 8040H-470 | 47 | M,N | 1M / 1V | 135 | 1.90 | 2.20 | 1.70 | 2.00 |
| 19 | JNR 8040H-560 | 56 | M,N | 1M / 1V | 160 | 1.60 | 1.90 | 1.60 | 1.75 |
| 20 | JNR 8040H-680 | 68 | K,M,N | 1M / 1V | 205 | 1.50 | 1.75 | 1.50 | 1.65 |
| 21 | JNR 8040H-820 | 82 | K,M,N | 1M / 1V | 230 | 1.40 | 1.60 | 1.30 | 1.40 |
| 22 | JNR 8040H-101 | 100 | K,M,N | 1M / 1V | 300 | 1.20 | 1.45 | 1.10 | 1.20 |
| 23 | JNR 8040H-121 | 120 | K,M,N | 1M / 1V | 350 | 1.10 | 1.30 | 1.00 | 1.10 |
| 24 | JNR 8040H-151 | 150 | K,M,N | 1M / 1V | 410 | 1.03 | 1.20 | 0.90 | 0.98 |
| 25 | JNR 8040H-181 | 181 | K,M,N | 1M / 1V | 490 | 0.94 | 1.04 | 0.83 | 0.91 |
| 26 | JNR 8040H-221 | 220 | K,M,N | 1M / 1V | 610 | 0.90 | 0.99 | 0.76 | 0.85 |

| No. | Part No. | L (μH) | TOL. ± (%) | Test Freq.(Hz) | RDC (mΩ) ±20% | I sat (A) Max. | I sat (A) Typ. | I rms (A) Max. | I rms (A) Typ. |
|---|---|---|---|---|---|---|---|---|---|
| 27 | JNR 8040H-331 | 330 | K,M,N | 100K / 1V | 850 | 0.70 | 0.75 | 0.66 | 0.70 |
| 28 | JNR 8040H-471 | 470 | K,M,N | 100K / 1V | 1300 | 0.55 | 0.60 | 0.58 | 0.63 |

Note:

1. All test data referenced to 25℃ ambient
2. Saturation Current (Isat) will cause L0 to drop approximately 30%
3. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
4. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part emperature. Part temperature should be verified in the end application.

## TYPICAL PERFORMANCE CURVES