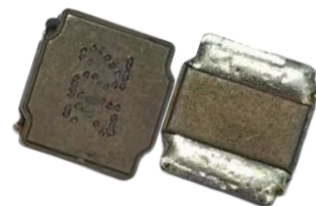




Sealed Power Inductors - HNR-A Series-CA

HNR-A series, metal alloy wire wound power inductor, its rated current could be increased up to 35% compare to ferrite base power inductor.



FEATURES

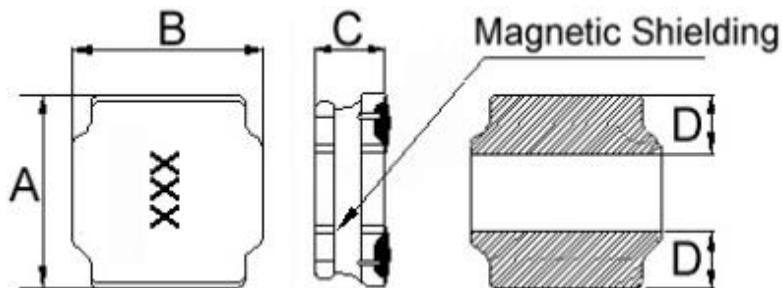
- * RoHS, Halogen Free and REACH Compliance
- * Constructure Low RDC and high rated current.
- * Wide inductance range
- * Shielded and miniature package design

产品标识 Product Identification

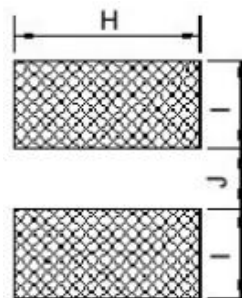
HNR □□□□ - □□□ □ - **A** - **CA**
(1) (2) (3) (4) (5) (6)

- (1) HNR 向华料号 Part Number
(2) 尺寸 Dimensions
(3) 电感量 Inductance
(4) 电感量公差 Inductance Tolerance
(5) 材质 Metal Alloy
(6) 尾码 Tail code

Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D Typ.	H Typ.	I Typ.	J Typ.
HNR201610-A-CA	2.0±0.3	1.6±0.3	1.05max	0.6	1.7	0.7	0.7
HNR252010-A-CA	2.5±0.3	2.0±0.3	1.02max	0.8	2.0	0.85	0.8
HNR252012-A-CA	2.5±0.3	2.0±0.3	1.2±0.05	0.8	2.0	0.85	0.8
HNR3012-A-CA	3.0±0.2	3.0±0.2	1.35max	0.9	2.7	0.8	1.5
HNR3015-A-CA	3.0±0.2	3.0±0.2	1.5 ^{+0.2} _{-0.3}	0.9	2.5	1.0	1.0
HNR4012-A-CA	4.0±0.2	4.0±0.2	1.2 ^{+0.2} _{-0.3}	1.3	3.7	1.2	1.6
HNR4020-A-CA	4.0±0.2	4.0±0.2	2.0 ^{+0.2} _{-0.3}	1.3	3.7	1.2	1.6



Sealed Power Inductors - HNR201610-A Series-CA

HNR201610-A series Electrical Characteristics

Part No.	Inductance	Tolerance	Test Freq.	RDC(mΩ)	Isat(A)	Irms(A)
	(uH)	(±%)		Max	Typ.(Max)	Typ.(Max)
HNR201610-R24□-A-CA	0.24	30	1MHz, 1V	40	5.50(4.50)	3.45(3.00)
HNR201610-R33□-A-CA	0.33	30	1MHz, 1V	49	5.20(4.40)	3.10(2.70)
HNR201610-R47□-A-CA	0.47	30	1MHz, 1V	49	4.70(4.00)	3.10(2.70)
HNR201610-R68□-A-CA	0.68	30	1MHz, 1V	65	4.00(3.50)	2.80(2.50)
HNR201610-1R0□-A-CA	1.0	30	1MHz, 1V	95	3.80(3.30)	2.30(2.00)
HNR201610-1R5□-A-CA	1.5	30	1MHz, 1V	130	2.30(1.95)	2.00(1.70)
HNR201610-2R2□-A-CA	2.2	20,30	1MHz, 1V	180	2.15(1.90)	1.60(1.40)
HNR201610-3R3□-A-CA	3.3	20,30	1MHz, 1V	307	1.60(1.40)	1.30(1.10)
HNR201610-4R7□-A-CA	4.7	20,30	1MHz, 1V	425	1.40(1.10)	1.00(0.90)
HNR201610-6R8□-A-CA	6.8	20,30	1MHz, 1V	620	1.10(0.95)	0.82(0.70)
HNR201610-8R2□-A-CA	8.2	20,30	1MHz, 1V	870	1.00(0.86)	0.76(0.66)
HNR201610-100□-A-CA	10	20,30	1MHz, 1V	875	0.95(0.80)	0.70(0.60)

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current.
- I rms for a 40℃ temperature rise from 25℃ ambient with current

**Sealed Power Inductors - HNR252010-A Series-CA****HNR252010-A series Electrical Characteristics**

Part No.	Inductance	Tolerance	Test Freq.	RDC(mΩ)	Isat(A)	Irms(A)
	(uH)	(±%)		Max	Typ.(Max)	Typ.(Max)
HNR252010-R24□-A-CA	0.24	30	1MHz,1V	33	7.10(6.10)	4.50(3.70)
HNR252010-R33□-A-CA	0.33	30	1MHz,1V	39	5.50(4.80)	4.05(3.50)
HNR252010-R47□-A-CA	0.47	30	1MHz,1V	45	5.20(4.40)	3.60(3.20)
HNR252010-R68□-A-CA	0.68	30	1MHz,1V	59	3.60(3.20)	3.20(2.75)
HNR252010-1R0□-A-CA	1.0	30	1MHz,1V	85	4.00(3.10)	2.60(2.20)
HNR252010-1R5□-A-CA	1.5	30	1MHz,1V	106	3.00(2.60)	2.30(2.00)
HNR252010-2R2□-A-CA	2.2	20,30	1MHz,1V	155	2.20(1.90)	1.80(1.50)
HNR252010-3R3□-A-CA	3.3	20,30	1MHz,1V	235	1.80(1.60)	1.40(1.20)
HNR252010-4R7□-A-CA	4.7	20,30	1MHz,1V	340	1.50(1.30)	1.10(1.00)
HNR252010-6R8□-A-CA	6.8	20,30	1MHz,1V	480	1.15(1.00)	1.00(0.95)
HNR252010-100□-A-CA	10	20,30	1MHz,1V	740	1.00(0.90)	0.75(0.65)

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current.
- Irms for a 40℃ temperature rise from 25℃ ambient with current

**Sealed Power Inductors - HNR252012-A Series-CA****HNR252012-A series Electrical Characteristics**

Part No.	Inductance	Tolerance	Test Freq.	RDC(mΩ)	Isat(A)	Irms(A)
	(uH)	(±%)		Max	Typ.(Max)	Typ.(Max)
HNR252012-R24□-A-CA	0.24	30	1MHz,1V	23	7.80(6.50)	4.70(4.05)
HNR252012-R33□-A-CA	0.33	30	1MHz,1V	35	6.30(5.35)	4.30(3.70)
HNR252012-R47□-A-CA	0.47	30	1MHz,1V	35	5.60(4.90)	4.00(3.45)
HNR252012-R68□-A-CA	0.68	30	1MHz,1V	45	4.50(3.80)	3.60(3.15)
HNR252012-1R0□-A-CA	1.0	30	1MHz,1V	54	4.20(3.60)	3.40(3.00)
HNR252012-1R5□-A-CA	1.5	30	1MHz,1V	100	3.50(2.90)	2.80(2.40)
HNR252012-2R2□-A-CA	2.2	20,30	1MHz,1V	120	3.00(2.60)	2.15(1.90)
HNR252012-3R3□-A-CA	3.3	20,30	1MHz,1V	215	2.10(1.70)	1.80(1.50)
HNR252012-4R7□-A-CA	4.7	20,30	1MHz,1V	260	1.90(1.60)	1.45(1.25)
HNR252012-6R8□-A-CA	6.8	20,30	1MHz,1V	366	1.40(1.20)	1.10(0.95)
HNR252012-8R2□-A-CA	8.2	20,30	1MHz,1V	460	1.36(1.15)	1.06(0.88)
HNR252012-100□-A-CA	10	20,30	1MHz,1V	480	1.35(1.10)	1.00(0.85)

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current.
- Irms for a 40℃ temperature rise from 25℃ ambient with current

**Sealed Power Inductors - HNR3012-A Series-CA****HNR3012-A series Electrical Characteristics**

Part No.	Inductance	Tolerance	Test Freq.	RDC(mΩ)	Isat(A)	Irms(A)
	(uH)	(±%)		Max	Typ.(Max)	Typ.(Max)
HNR3012-R47□-A-CA	0.47	30	1MHz,1V	33	8.00(6.80)	4.30(3.90)
HNR3012-1R0□-A-CA	1.0	30	1MHz,1V	54	5.20(4.20)	3.10(2.70)
HNR3012-1R5□-A-CA	1.5	30	1MHz,1V	74	4.10(3.40)	2.90(2.50)
HNR3012-2R2□-A-CA	2.2	20,30	1MHz,1V	108	3.35(2.80)	2.35(2.05)
HNR3012-3R3□-A-CA	3.3	20,30	1MHz,1V	155	2.60(2.20)	2.00(1.70)
HNR3012-4R7□-A-CA	4.7	20,30	1MHz,1V	235	2.50(2.00)	1.70(1.30)
HNR3012-6R8□-A-CA	6.8	20,30	1MHz,1V	340	1.90(1.60)	1.25(1.10)
HNR3012-100□-A-CA	10	20,30	1MHz,1V	432	1.45(1.20)	1.15(1.00)

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current.
- Irms for a 40℃ temperature rise from 25℃ ambient with current

**Sealed Power Inductors - HNR3015-A Series-CA****HNR3015-A series Electrical Characteristics**

Part No.	Inductance	Tolerance	Test Freq.	RDC(mΩ)	Isat(A)	Irms(A)
	(uH)	(±%)		Max	Typ.(Max)	Typ.(Max)
HNR3015-R33□-A-CA	0.33	30	1MHz,1V	35	10.00(9.00)	4.50(4.00)
HNR3015-1R0□-A-CA	1.0	30	1MHz,1V	48	7.00(5.80)	3.80(3.30)
HNR3015-1R5□-A-CA	1.5	30	1MHz,1V	72	5.50(4.60)	2.70(2.20)
HNR3015-2R2□-A-CA	2.2	20,30	1MHz,1V	115	4.50(4.00)	2.30(2.00)
HNR3015-3R3□-A-CA	3.3	20,30	1MHz,1V	175	4.00(3.40)	2.50(2.00)
HNR3015-4R7□-A-CA	4.7	20,30	1MHz,1V	215	3.30(3.00)	2.40(1.80)
HNR3015-6R8□-A-CA	6.8	20,30	1MHz,1V	290	2.50(2.00)	2.00(1.50)
HNR3015-100□-A-CA	10	20,30	1MHz,1V	460	2.00(1.50)	2.00(1.50)
HNR3015-150□-A-CA	15	20,30	1MHz,1V	850	1.80(1.40)	1.20(1.00)
HNR3015-220□-A-CA	22	20,30	1MHz,1V	975	1.40(1.15)	0.90(0.75)

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current.
- Irms for a 40℃ temperature rise from 25℃ ambient with current

**Sealed Power Inductors - HNR4012-A Series-CA****HNR4012-A series Electrical Characteristics**

Part No.	Inductance	Tolerance	Test Freq.	RDC(mΩ)	Isat(A)	Irms(A)	Marking
	(uH)	(±%)		Max	Typ.(Max)	Typ.(Max)	
HNR4012-R68□-A-CA	0.68	30	1MHz,1V	46	5.60(5.00)	4.70(4.00)	R68
HNR4012-1R0□-A-CA	1.0	30	1MHz,1V	66	5.30(4.50)	4.20(3.60)	1R0
HNR4012-1R5□-A-CA	1.5	30	1MHz,1V	70	4.50(3.90)	3.90(3.20)	1R5
HNR4012-2R2□-A-CA	2.2	20,30	1MHz,1V	102	2.80(2.50)	2.80(2.30)	2R2
HNR4012-3R3□-A-CA	3.3	20,30	1MHz,1V	145	2.60(2.30)	2.50(2.20)	3R3
HNR4012-4R7□-A-CA	4.7	20,30	1MHz,1V	187	2.60(2.30)	2.20(1.90)	4R7
HNR4012-6R8□-A-CA	6.8	20,30	1MHz,1V	255	2.20(1.60)	1.90(1.60)	6R8
HNR4012-100□-A-CA	10	20,30	1MHz,1V	408	1.80(1.40)	1.50(1.10)	100
HNR4012-150□-A-CA	15	20,30	1MHz,1V	632	1.60(1.20)	1.25(0.90)	150
HNR4012-220□-A-CA	22	20,30	1MHz,1V	763	1.35(1.10)	0.95(0.75)	220

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current.
- Irms for a 40℃ temperature rise from 25℃ ambient with current



Sealed Power Inductors - HNR4020-A Series-CA

HNR4020-A series Electrical Characteristics

Part No.	Inductance	Tolerance	Test Freq.	RDC(mΩ)	Isat(A)	Irms(A)	Marking
	(uH)	(±%)		Max	Typ.(Max)	Typ.(Max)	
HNR4020-R47□-A-CA	0.47	30	1MHz, 1V	32	12.0(10.0)	7.50(6.40)	R47
HNR4020-1R0□-A-CA	1.0	30	1MHz, 1V	39	7.70(7.00)	4.50(3.00)	1R0
HNR4020-2R2□-A-CA	2.2	20,30	1MHz, 1V	93	7.00(6.00)	3.50(3.00)	2R2
HNR4020-3R3□-A-CA	3.3	20,30	1MHz, 1V	117	5.20(4.80)	3.20(2.15)	3R3
HNR4020-4R7□-A-CA	4.7	20,30	1MHz, 1V	153	4.70(4.40)	2.20(2.00)	4R7
HNR4020-100□-A-CA	10	20,30	1MHz, 1V	235	3.50(2.80)	2.35(2.00)	100

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

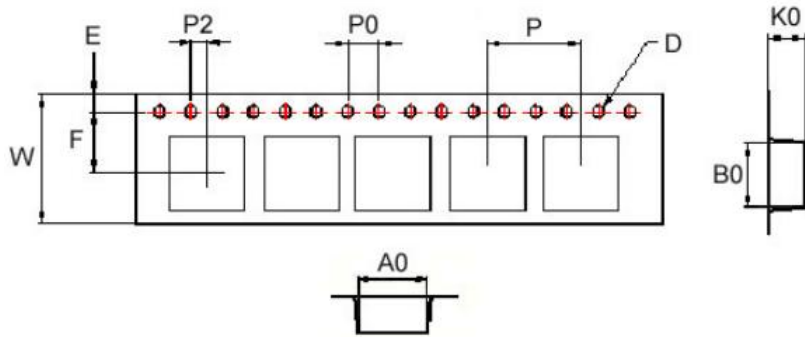
- Operating temperature range—55℃~125℃ (Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current.
- Irms for a 40℃ temperature rise from 25℃ ambient with current



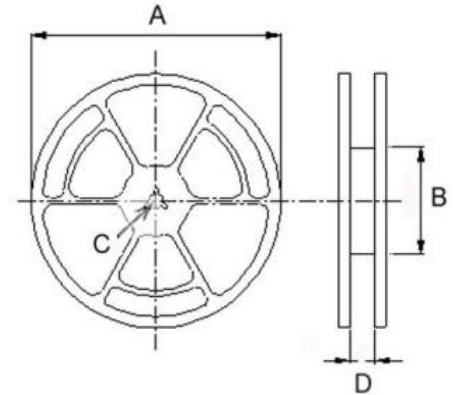
Sealed Power Inductors - HNR-A Series-CA

Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions										Reel Dimensions				Quantity PCS/REEL
	A0	B0	K0	D	E	F	W	P	P0	P2	A	B	C	D	
HNR201610-A-CA	1.90	2.20	1.15	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	2000
HNR252010-A-CA	2.40	2.70	1.15	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	2000
HNR252012-A-CA	2.40	2.70	1.35	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	2000
HNR3012-A-CA	3.20	3.20	1.40	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	2000
HNR3015-A-CA	3.30	3.30	1.60	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	2000
HNR4012-A-CA	4.25	4.25	1.30	1.55	1.75	5.5	12	8.1	4	2	180	60	13	13.2	1000
HNR4020-A-CA	4.25	4.25	2.30	1.55	1.75	5.5	12	8.1	4	2	180	60	13	13.2	800