

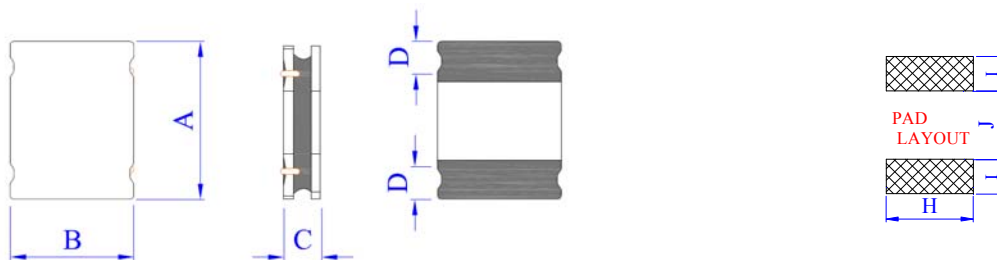
SMD Power Inductors / AHNH Series

Features

- Fe base metal core provides large saturation current.
- Metallization on ferrite core results in excellent shock resistance and damage-free durability.
- Closed magnetic circuit reduces leakage flux and Electro Magnetic Interference(EMI).
- Low DCR decreases power loss,small take up less PCB real estate.
- Automatic production ensures high quality and consistency.

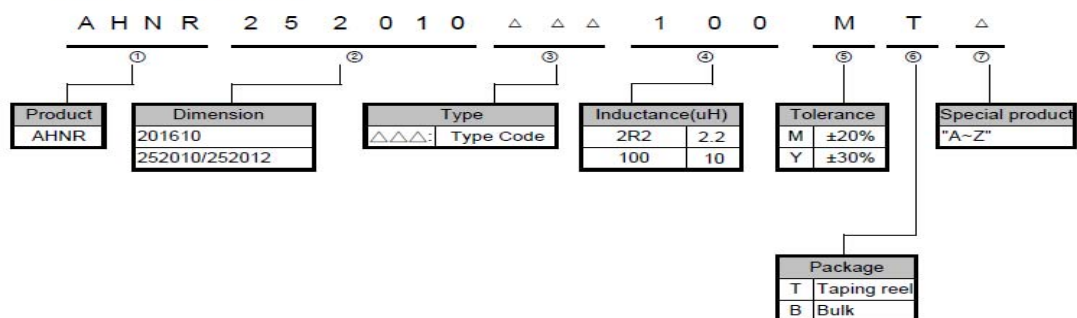
Applications

- Smartphone.
- Blue-ray disc recorders, set top box.
- Notebook, desktop computers, servers.
- Portable gaming devices, personal navigation systems, personal multimedia devices.
- **Shape & Dimensions**



TYPE	A (mm)	B (mm)	C (mm)	D (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AHNR201610M	2.0 ± 0.30	1.6 ± 0.30	1.05 MAX.	0.6	1.8	0.80	0.8
AHNR252010	2.5 ± 0.25	2.1 ± 0.25	1.0 MAX.	0.8	2.2	0.95	0.8
AHNR252012	2.5 ± 0.25	2.1 ± 0.25	1.2 MAX.	0.8	2.2	0.95	0.8

PRODUCT IDENTIFICATION



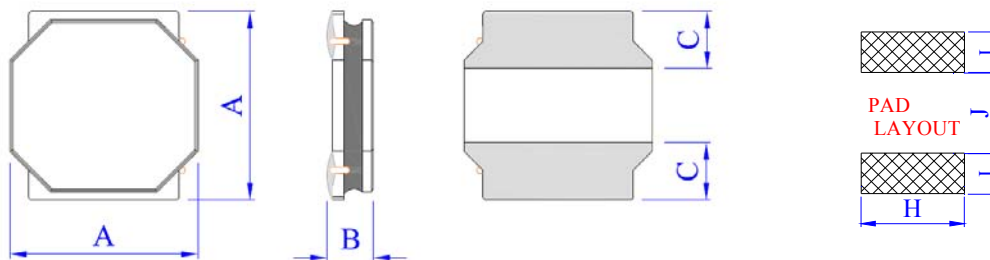
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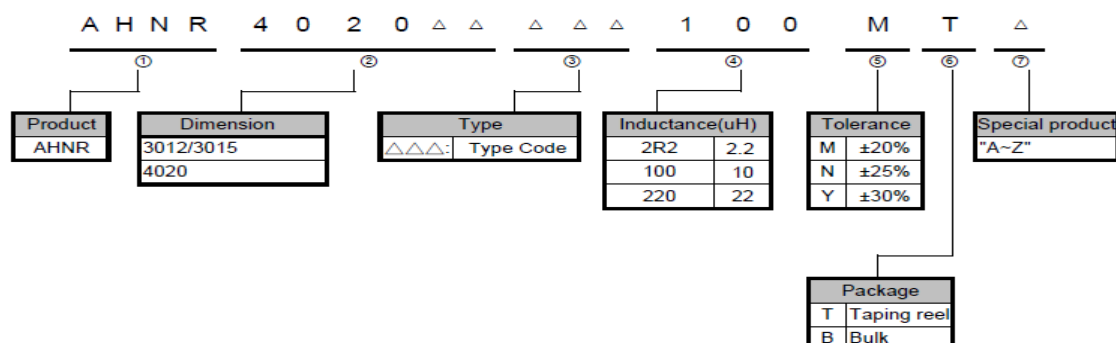
Applications

- Smartphone.
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- **Shape & Dimensions**



TYPE	A (mm)	B (mm)	C (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AHNR3012	3.0±0.2	1.25 MAX.	0.8	2.7	0.90	1.2
AHNR3015	3.0±0.2	1.5 MAX.	0.8	2.7	0.90	1.2
AHNR4020	4.0±0.2	2.0 MAX.	1.3	3.7	1.50	1.2

PRODUCT IDENTIFICATION



◆ AHNR201610M Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AHNR201610MR47□T	0.47	Y	1.0	70	4.00	2.50
AHNR201610MR68□T	0.68	Y	1.0	72	3.50	2.30
AHNR201610M1R0□T	1.0	Y	1.0	115	2.80	1.85
AHNR201610M1R5□T	1.5	Y	1.0	155	1.95	1.50
AHNR201610M2R2□T	2.2	Y	1.0	185	1.70	1.30
AHNR201610M3R3□T	3.3	M,Y	1.0	360	1.40	1.10
AHNR201610M4R7□T	4.7	M,Y	1.0	528	1.20	0.90
AHNR201610M6R8□T	6.8	M,Y	1.0	680	0.80	0.70

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise).

* □ Tolerance M : $\pm 20\%$, Y : $\pm 30\%$

* Isat: For Inductance drop 30% from its value without current.

* Irms: The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$ ($T_a = 25^{\circ}\text{C}$).

◆ AHNR252010 Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AHNR252010R33□T	0.33	Y	1.0	39	4.80	3.70
AHNR252010R47□T	0.47	Y	1.0	45	4.40	3.40
AHNR252010R68□T	0.68	Y	1.0	59	3.20	2.75
AHNR2520101R0□T	1.0	M,Y	1.0	76	3.10	2.50
AHNR2520101R5□T	1.5	M,Y	1.0	100	2.80	2.00
AHNR2520102R2□T	2.2	M,Y	1.0	135	2.30	1.80
AHNR2520103R3□T	3.3	M,Y	1.0	235	1.60	1.40
AHNR2520104R7□T	4.7	M,Y	1.0	276	1.30	1.10
AHNR2520106R8□T	6.8	M,Y	1.0	416	1.15	1.05
AHNR252010100□T	10	M,Y	1.0	500	1.00	0.90
AHNR252010220□T	22	M,Y	1.0	1300	0.60	0.60

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise).

* □ Tolerance M : $\pm 20\%$, Y : $\pm 30\%$

* Isat: For Inductance drop 30% from its value without current.

* Irms: The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$ ($T_a = 25^{\circ}\text{C}$).

◆ AHNR252012 Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AHNR252012R33□T	0.33	Y	1.0	30	5.30	3.80
AHNR252012R47□T	0.47	Y	1.0	35	5.00	3.80
AHNR252012R68□T	0.68	Y	1.0	43	4.80	3.20
AHNR2520121R0□T	1.0	M,Y	1.0	64	4.00	2.90
AHNR2520121R5□T	1.5	M,Y	1.0	85	3.20	2.45
AHNR2520122R2□T	2.2	M,Y	1.0	120	2.60	2.10
AHNR2520123R3□T	3.3	M,Y	1.0	163	1.70	1.70
AHNR2520124R7□T	4.7	M,Y	1.0	260	1.60	1.25
AHNR2520126R8□T	6.8	M,Y	1.0	366	1.35	1.10
AHNR252012100□T	10	M,Y	1.0	480	1.10	0.95
AHNR252012150□T	15	M,Y	1.0	774	0.85	0.75
AHNR252012220□T	22	M,Y	1.0	1210	0.70	0.61

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise).

* □ Tolerance M : $\pm 20\%$, Y : $\pm 30\%$

* Isat: For Inductance drop 30% from its value without current.

* Irms: The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$ ($T_a = 25^{\circ}\text{C}$).

◆ AHNR3012 Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AHNR3012R33□T	0.33	Y	1.0	27.0	7.20	4.20
AHNR3012R47□T	0.47	Y	1.0	33.0	6.80	3.90
AHNR3012R68□T	0.68	Y	1.0	42.0	5.80	3.40
AHNR30121R0□T	1.0	Y	1.0	54.0	4.20	2.70
AHNR30121R5□T	1.5	Y	1.0	74.0	3.40	2.50
AHNR30122R2□T	2.2	Y	1.0	140.0	2.80	2.05
AHNR30123R3□T	3.3	Y	1.0	195.0	2.20	1.70
AHNR30124R7□T	4.7	Y	1.0	235.0	2.00	1.30
AHNR30126R8□T	6.8	M,N	1.0	340.0	1.60	1.10
AHNR3012100□T	10	M,N	1.0	500.0	1.35	1.00
AHNR3012150□T	15	M,N	1.0	665.0	1.20	0.85

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise)

* □ Tolerance M : $\pm 20\%$, N : $\pm 25\%$, Y : $\pm 30\%$

*Isat:For Inductance drop 30% from its value without current.

*Irms:The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$.($T_a=25^{\circ}\text{C}$)

◆ AHNR3015 Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AHNR30151R5□T	1.5	Y	1.0	95.0	4.50	2.50
AHNR30152R2□T	2.2	Y	1.0	145.0	4.20	2.00
AHNR30154R7□T	4.7	Y	1.0	255.0	3.50	1.50
AHNR30156R8□T	6.8	M,N	1.0	385.0	2.50	1.30
AHNR3015100□T	10	M,N	1.0	510.0	1.80	1.20
AHNR3015150□T	15	M,N	1.0	740.0	1.50	1.00
AHNR3015220□T	22	M,N	1.0	900.0	1.00	0.80

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise)

* □ Tolerance M : $\pm 20\%$, N : $\pm 25\%$, Y : $\pm 30\%$

*Isat:For Inductance drop 30% from its value without current.

*Irms:The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$.($T_a=25^{\circ}\text{C}$)

◆ AHNR4020 Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AHNR4020R22□T	0.22	Y	1.0	13.0	18.70	8.20
AHNR4020R47□T	0.47	Y	1.0	22.0	13.40	6.40
AHNR4020R68□T	0.68	Y	1.0	26.0	10.00	5.60
AHNR40201R0□T	1.0	Y	1.0	32.6	8.70	4.70
AHNR40201R5□T	1.5	Y	1.0	39.0	7.20	4.50
AHNR40202R2□T	2.2	Y	1.0	60.0	6.10	3.60
AHNR40203R3□T	3.3	Y	1.0	72.0	4.70	3.20
AHNR40204R7□T	4.7	Y	1.0	108.0	4.00	2.85
AHNR40206R8□T	6.8	M,N	1.0	156.0	3.00	2.40
AHNR4020100□T	10	M,N	1.0	198.0	2.80	2.00
AHNR4020150□T	15	M,N	1.0	365.0	2.20	1.35
AHNR4020220□T	22	M,N	1.0	580.0	1.35	1.25

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise)

* □ Tolerance M : $\pm 20\%$, N : $\pm 25\%$, Y : $\pm 30\%$

* Isat: For Inductance drop 30% from its value without current.

* Irms: The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$. ($T_a = 25^{\circ}\text{C}$)