

SMD POWER INDUCTORS / AHNR Type Series

• Features

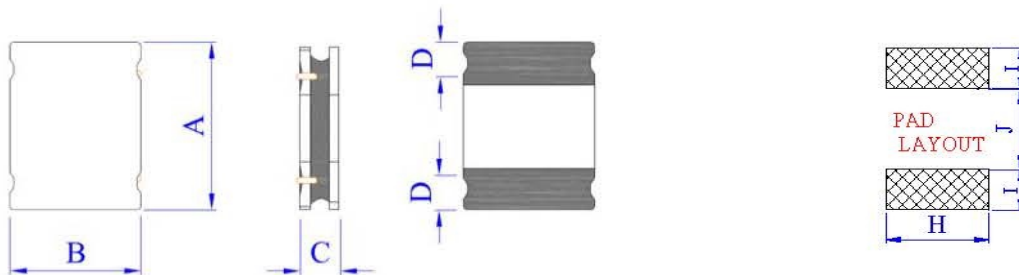
1. Fe base metal core provides large saturation current.
2. Metallization on ferrite core results in excellent shock resistance and damage-free durability.
3. Closed magnetic circuit reduces leakage flux and Electro Magnetic Interference(EMI).
4. Low DCR decreases power loss, small take up less PCB real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



• Applications

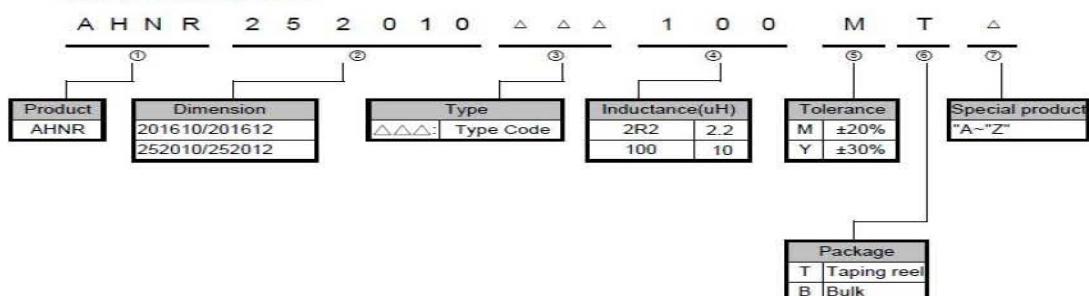
1. Smart phone
2. Blue-ray disc recorders, set top box.
3. Notebook, desktop computers, servers.
4. Portable gaming devices, personal navigation systems, personal multimedia devices.

• Shape & Dimensions



TYPE	A (mm)	B (mm)	C (mm)	D (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AHNR201610	2.1 ± 0.25	1.7 ± 0.25	1.0 MAX.	0.6	1.8	0.80	0.8
AHNR201612	2.1 ± 0.25	1.7 ± 0.25	1.2 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



◆ AHNR201610 Series Specification :

Part Number	Inductance	Inductance	Test Freq. (MHz)	DCR	Saturation Current	Temp. Rise current
	(uH)	Tolerance		(mΩ) Max.	(A) Max.	(A) Max.
AHNR201610R24□T	0.24	Y	1.0	45	4.90	3.25
AHNR201610R47□T	0.47	Y	1.0	55	4.00	2.60
AHNR201610R68□T	0.68	Y	1.0	65	3.60	2.50
AHNR2016101R0□T	1.0	M,Y	1.0	90	2.90	1.90
AHNR2016101R5□T	1.5	M,Y	1.0	130	2.00	1.65
AHNR2016102R2□T	2.2	M,Y	1.0	170	1.90	1.45
AHNR2016103R3□T	3.3	M,Y	1.0	259	1.35	1.25
AHNR2016104R7□T	4.7	M,Y	1.0	315	1.30	1.16
AHNR2016106R8□T	6.8	M,Y	1.0	499	1.10	0.83
AHNR201610100□T	10	M,Y	1.0	826	0.80	0.65

NOTE :

* The operating temperature range is -40°C to +125°C (Including self-temperature rise)

* □ Tolerance M : ±20% , Y : ±30%

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

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

◆ AHNR201612 Series Specification :

Part Number	Inductance	Inductance	Test Freq. (MHz)	DCR	Saturation Current	Temp. Rise current
	(uH)	Tolerance		(mΩ) Max.	(A) Max.	(A) Max.
AHNR201612R24□T	0.24	Y	1.0	23	5.60	4.50
AHNR201612R33□T	0.33	Y	1.0	31	5.00	3.85
AHNR201612R47□T	0.47	Y	1.0	41	3.95	3.40
AHNR2016121R0□T	1.0	M,Y	1.0	70	2.90	2.50
AHNR2016121R5□T	1.5	M,Y	1.0	115	2.10	2.10
AHNR2016122R2□T	2.2	M,Y	1.0	140	1.90	1.80
AHNR2016123R3□T	3.3	M,Y	1.0	210	1.40	1.46
AHNR2016124R7□T	4.7	M,Y	1.0	302	1.30	1.18
AHNR2016126R8□T	6.8	M,Y	1.0	485	1.15	0.98
AHNR201612100□T	10	M,Y	1.0	726	0.85	0.71

NOTE :

* The operating temperature range is -40°C to +125°C (Including self-temperature rise)

* □ Tolerance M : ±20% , Y : ±30%

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

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

◆ AHNR252010 Series Specification :

Part Number	Inductance	Inductance	Test Freq. (MHz)	DCR	Saturation Current	Temp. Rise current
	(uH)	Tolerance		(mΩ) Max.	(A) Max.	(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	0.70	0.60

NOTE :

* The operating temperature range is -40°C to +125°C(Including self-temperature rise)

* □ Tolerance M : ±20% , Y : ±30%

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

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

◆ AHNR252012 Series Specification :

Part Number	Inductance	Inductance	Test Freq. (MHz)	DCR	Saturation Current	Temp. Rise current
	(uH)	Tolerance		(mΩ) Max.	(A) Max.	(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°C(Including self-temperature rise)

* □ Tolerance M : ±20% , Y : ±30%

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

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