ARLITECH ELECTRONIC CORP.
TEL:886-2-2999-8313
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SMD POWER INDUCTORS / ATNR MH Type Series

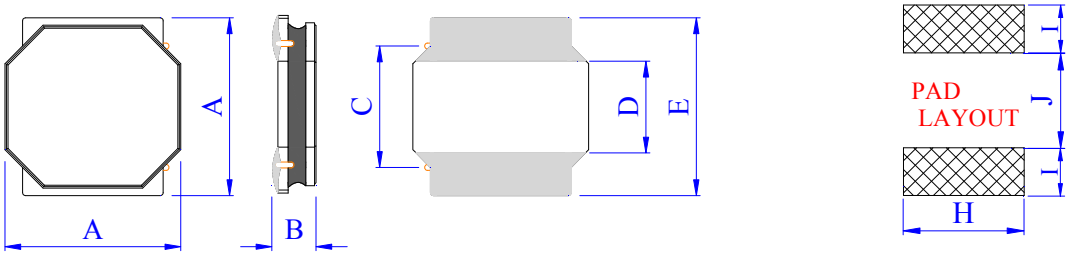
● Features

1. Small and Low profile inductor.
2. It corresponds to High current.
3. Simple and original magnetic shield structure.
4. Durable structure against dropping impact.

● Applications

1.LCD displays
2.STB
3.LCD Moniter / TV
4.Smart meter
5.Tablet PC and other Protable devices
6.DC/DC converters

● Shape & Dimensions



TYPE	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	H (Ref.)	I (Ref.)	J (Ref.)
ATNR3010MH	3.0±0.2	0.9±0.1	2.0±0.2	1.0±0.2	3.0±0.2	2.7	0.8	1.4
ATNR3012MH	3.0±0.2	1.1±0.1	2.0±0.2	1.0±0.2	3.0±0.2	2.7	0.8	1.4
ATNR4010MH	4.0±0.2	0.9±0.1	2.7±0.2	1.4±0.2	4.0±0.2	3.7	1.2	1.6
ATNR4012MH	4.0±0.2	1.1±0.1	2.7±0.2	1.4±0.2	4.0±0.2	3.7	1.2	1.6
ATNR4018MH	4.0±0.2	1.8 MAX.	2.7±0.2	1.4±0.2	4.0±0.2	3.7	1.2	1.6
ATNR5010MH	5.0±0.2	0.9±0.1	3.5±0.2	2.0±0.2	5.0±0.2	4.7	1.4	2.4
ATNR5020MH	5.0±0.2	2.0 MAX.	3.5±0.2	2.0±0.2	5.0±0.2	4.7	1.4	2.4
ATNR6010MH	6.0±0.2	$0.9^{+0.2}_{-0.1}$	4.325±0.2	2.65±0.2	6.0±0.2	5.7	1.6	3.1
ATNR6012MH	6.0±0.2	1.1±0.1	4.325±0.2	2.65±0.2	6.0±0.2	5.7	1.6	3.1

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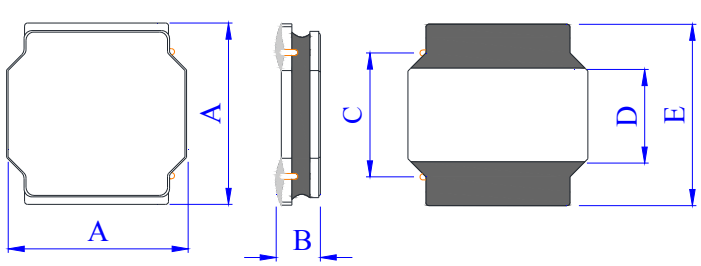

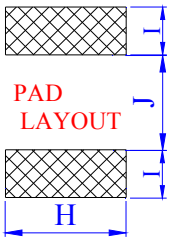

TYPE	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	H (Ref.)	I (Ref.)	J (Ref.)
ATNR6028MH	6.0±0.2	2.8 MAX.	4.325±0.2	2.65±0.2	6.0±0.2	5.7	1.6	3.1

■ PRODUCT IDENTIFICATION

A T N R 3 0 1 0 △ △ △ △ △ 1 0 0 M T △

① ② ③ ④ ⑤ ⑥ ⑦

Product
ATNR

Dimension
3010/3012
4010/4012/4018
5010/5020
6010/6012/6028

Type	
MH△:	Type Code

Inductance(uH)	
2R2	2.2
100	10
220	22

Tolerance	
M	±20%
N	±25%
Y	±30%

Special product
"A~"Z"

Package	
T	Taping reel
B	Bulk

◆ ATNR3010MH Series Specification：

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
ATNR3010MH1R2□T	1.2	Y	100	78.0	1.70	1.48
ATNR3010MH1R5□T	1.5	Y	100	90.0	1.44	1.37
ATNR3010MH2R2□T	2.2	Y	100	105.0	1.30	1.30
ATNR3010MH3R3□T	3.3	Y	100	156.0	1.00	1.03
ATNR3010MH4R7□T	4.7	Y	100	204.0	0.85	0.90
ATNR3010MH6R8□T	6.8	M,N	100	300.0	0.70	0.75
ATNR3010MH100□T	10	M,N	100	420.0	0.60	0.62
ATNR3010MH150□T	15	M,N	100	660.0	0.45	0.48
ATNR3010MH220□T	22	M,N	100	924.0	0.38	0.41

NOTE：

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

* □ Tolerance M：±20%，N：±25%，Y：±30%

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

*Irms:The value of D.C current when the temperature rise is △T≦40℃.(Ta=25℃)

◆ ATNR3012MH Series Specification：

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
ATNR3012MH1R0□T	1.0	Y	100	57.6	2.20	1.71
ATNR3012MH2R2□T	2.2	Y	100	90.0	1.50	1.37
ATNR3012MH3R3□T	3.3	Y	100	120.0	1.20	1.21
ATNR3012MH4R7□T	4.7	Y	100	156.0	1.00	1.06
ATNR3012MH6R8□T	6.8	M,N	100	228.0	0.85	0.89
ATNR3012MH100□T	10	M,N	100	324.0	0.73	0.72
ATNR3012MH150□T	15	M,N	100	540.0	0.53	0.57
ATNR3012MH220□T	22	M,N	100	756.0	0.50	0.50

NOTE：

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

* □ Tolerance M：±20%，N：±25%，Y：±30%

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

*Irms:The value of D.C current when the temperature rise is △T≦40℃.(Ta=25℃)

◆ ATNR4010MH Series Specification：

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
ATNR4010MH1R0□T	1.0	Y	100	67.2	2.00	1.90
ATNR4010MH2R2□T	2.2	Y	100	102.0	1.20	1.50
ATNR4010MH3R3□T	3.3	Y	100	120.0	1.10	1.40
ATNR4010MH4R7□T	4.7	Y	100	168.0	0.95	1.20
ATNR4010MH6R8□T	6.8	M,N	100	240.0	0.80	1.00
ATNR4010MH100□T	10	M,N	100	360.0	0.62	0.75
ATNR4010MH150□T	15	M,N	100	516.0	0.54	0.60
ATNR4010MH220□T	22	M,N	100	684.0	0.45	0.50

NOTE：

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

* □ Tolerance M：±20%，N：±25%，Y：±30%

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

*Irms:The value of D.C current when the temperature rise is △T≦40℃.(Ta=25℃)

◆ ATNR4012MH Series Specification：

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
ATNR4012MH1R0□T	1.0	Y	100	50.4	2.80	2.20
ATNR4012MH2R2□T	2.2	Y	100	72.0	1.60	1.90
ATNR4012MH3R3□T	3.3	Y	100	84.0	1.40	1.70
ATNR4012MH4R7□T	4.7	Y	100	114.0	1.10	1.50
ATNR4012MH6R8□T	6.8	M,N	100	150.0	0.90	1.30
ATNR4012MH100□T	10	M,N	100	204.0	0.70	1.10
ATNR4012MH220□T	22	M,N	100	480.0	0.50	0.62

NOTE：

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

* □ Tolerance M：±20%，N：±25%，Y：±30%

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

*Irms:The value of D.C current when the temperature rise is △T≦40℃.(Ta=25℃)

◆ ATNR4018MH Series Specification：

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
ATNR4018MH1R0□T	1.0	Y	100	32.4	4.00	3.20
ATNR4018MH2R2□T	2.2	Y	100	50.4	3.00	2.20
ATNR4018MH3R3□T	3.3	Y	100	66.0	2.30	2.00
ATNR4018MH4R7□T	4.7	Y	100	84.0	2.00	1.70
ATNR4018MH6R8□T	6.8	M,N	100	117.6	1.60	1.45
ATNR4018MH100□T	10	M,N	100	180.0	1.30	1.20
ATNR4018MH150□T	15	M,N	100	252.0	1.10	0.85
ATNR4018MH220□T	22	M,N	100	348.0	0.90	0.72
ATNR4018MH330□T	33	M,N	100	552.0	0.70	0.55

NOTE：

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

* □ Tolerance M：±20%，N：±25%，Y：±30%

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

*Irms:The value of D.C current when the temperature rise is △T≦40℃.(Ta=25℃)

◆ ATNR5010MH Series Specification：

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
ATNR5010MH1R0□T	1.0	Y	100	50	2.20	2.20
ATNR5010MH1R5□T	1.5	Y	100	65	1.70	2.15
ATNR5010MH2R2□T	2.2	Y	100	85	1.40	1.70
ATNR5010MH3R3□T	3.3	Y	100	102	1.10	1.40
ATNR5010MH4R7□T	4.7	Y	100	136	1.00	1.15
ATNR5010MH6R8□T	6.8	M,N	100	183	0.85	1.00
ATNR5010MH100□T	10	M,N	100	236	0.65	0.85
ATNR5010MH150□T	15	M,N	100	402	0.55	0.65

NOTE：

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

* □ Tolerance M：±20%，N：±25%，Y：±30%

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

*Irms:The value of D.C current when the temperature rise is △T≦40℃.(Ta=25℃)

◆ ATNR5020MH Series Specification：

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
ATNR5020MH1R0□T	1.0	Y	100	25.2	4.00	3.60
ATNR5020MH1R5□T	1.5	Y	100	31.2	3.35	3.20
ATNR5020MH2R2□T	2.2	Y	100	42.0	2.90	2.90
ATNR5020MH3R3□T	3.3	Y	100	57.6	2.40	2.40
ATNR5020MH4R7□T	4.7	Y	100	72.0	2.00	2.00
ATNR5020MH6R8□T	6.8	M,N	100	108.0	1.60	1.65
ATNR5020MH100□T	10	M,N	100	144.0	1.30	1.45
ATNR5020MH150□T	15	M,N	100	198.0	1.10	1.20
ATNR5020MH220□T	22	M,N	100	312.0	0.90	1.00

NOTE：

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

* □ Tolerance M：±20%，N：±25%，Y：±30%

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

*Irms:The value of D.C current when the temperature rise is △T≦40℃.(Ta=25℃)

◆ ATNR6010MH Series Specification：

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
ATNR6010MH1R5□T	1.5	Y	100	100	2.40	1.90
ATNR6010MH2R2□T	2.2	Y	100	120	1.90	1.70
ATNR6010MH3R3□T	3.3	Y	100	135	1.60	1.50
ATNR6010MH4R7□T	4.7	Y	100	165	1.30	1.40
ATNR6010MH6R8□T	6.8	M,N	100	260	1.20	1.20
ATNR6010MH100□T	10	M,N	100	300	1.00	1.10
ATNR6010MH220□T	22	M,N	100	670	0.65	0.70

NOTE：

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

* □ Tolerance M：±20%，N：±25%，Y：±30%

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

*Irms:The value of D.C current when the temperature rise is △T≦40℃.(Ta=25℃)

◆ ATNR6012MH Series Specification：

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
ATNR6012MH2R5□T	2.5	Y	100	110	2.10	1.73
ATNR6012MH3R3□T	3.3	Y	100	125	1.80	1.65
ATNR6012MH4R7□T	4.7	Y	100	155	1.60	1.55
ATNR6012MH5R3□T	5.3	M,N	100	160	1.50	1.40
ATNR6012MH6R8□T	6.8	M,N	100	165	1.30	1.18
ATNR6012MH100□T	10	M,N	100	250	1.00	1.00
ATNR6012MH150□T	15	M,N	100	355	0.80	0.79
ATNR6012MH220□T	22	M,N	100	530	0.76	0.63
ATNR6012MH330□T	33	M,N	100	780	0.59	0.53
ATNR6012MH470□T	47	M,N	100	1110	0.52	0.46
ATNR6012MH680□T	68	M,N	100	1440	0.44	0.41
ATNR6012MH101□T	100	M,N	100	2190	0.35	0.32

NOTE：

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

* □ Tolerance M：±20%，N：±25%，Y：±30%

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

*Irms:The value of D.C current when the temperature rise is △T≦40℃.(Ta=25℃)

◆ ATNR6028MH Series Specification：

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (mΩ) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
ATNR6028MH0R9□T	0.9	Y	100	16.9	6.70	4.60
ATNR6028MH1R5□T	1.5	Y	100	20.8	5.10	4.20
ATNR6028MH2R2□T	2.2	Y	100	26.0	4.20	3.70
ATNR6028MH3R0□T	3.0	Y	100	29.9	3.60	3.40
ATNR6028MH4R7□T	4.7	Y	100	40.3	2.70	3.00
ATNR6028MH6R0□T	6.0	M,N	100	52.0	2.50	2.50
ATNR6028MH100□T	10	M,N	100	84.5	1.90	1.90
ATNR6028MH150□T	15	M,N	100	123.5	1.60	1.80
ATNR6028MH220□T	22	M,N	100	175.5	1.30	1.40
ATNR6028MH330□T	33	M,N	100	286.0	1.10	1.10
ATNR6028MH470□T	47	M,N	100	390.0	1.00	0.92
ATNR6028MH680□T	68	M,N	100	546.0	0.80	0.77
ATNR6028MH101□T	100	M,N	100	780.0	0.65	0.66

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