

NR-H Series

Features

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

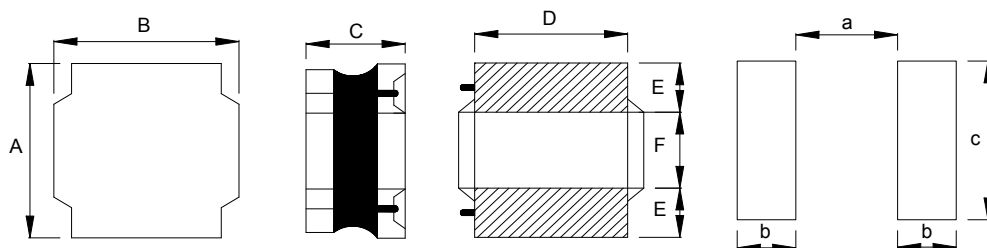
Applications

- LED Lighting & Smart phone.
- Blue -ray disc recorders, set top box.
- Next-generation mobile devices with multifunction such as adding color TV and digital movie cameras.
- Flat-screen TVs,blue-ray disc recorders set top box.
- Notebooks,desktop computers,servers,graphic cards
- Portable gaming devices,personal navigation systems,personal multimedia devices.

Test Equipment and Conditions

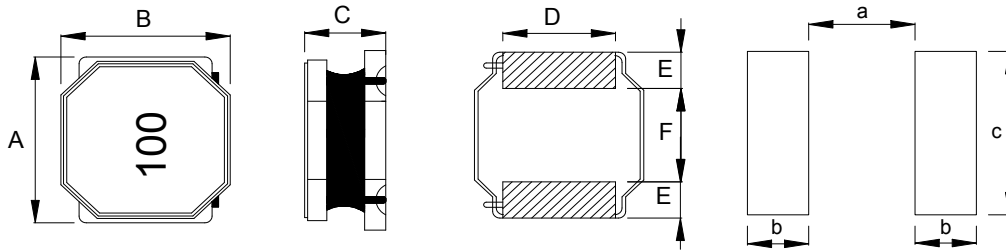
- Inductance is measured with IM3536 LCR meter or equivalent.
- Operating temperature range -40°C to $+125^{\circ}\text{C}$.(Including self - temperature rise).
- DC current(Irms)that will cause an approximate ΔT of 40°C .
- DC current(Isat)that will cause L0 to drop approximately 35%.
- For NR20 & NR25 size inductors, absolute maximum voltage: DC 25V;
- For NR30 & NR40 size inductors, absolute maximum voltage: DC 40V;

External Dimensions (Unit:mm)



TYPE	A	B	C	D typ	E typ	F typ	a typ	b typ	c typ	Q'TY/Reel
NR201610	2.1±0.3	1.7±0.3	1.05Max	1.7	0.7	0.7	0.4	1.0	2.0	2000
NR252010	2.5±0.3	2.2±0.3	1.05Max	1.65	0.8	0.9	0.6	1.1	1.95	2000
NR252012	2.5±0.3	2.2±0.3	1.25Max	1.65	0.8	0.9.	0.6	1.1	1.95	2000

External Dimensions (Unit:mm)



TYPE	A	B	C	D typ	E typ	F typ	a typ	b typ	c typ	Q'TY/Reel
NR3012	3.0±0.2	3.0±0.2	1.35Max	2.55	0.9	1.2	1.1	1	3.4	2000
NR4012	4.0±0.2	4.0±0.2	1.35Max	3.5	1.3	1.4	1.1	1.6	3.8	4500
NR4020	4.0±0.2	4.0±0.2	2.0Max	3.5	1	2	1.3	1.5	3.8	3000

2. Part Number Code

NR	201610	M	100	H
Series Name	Dimensions: L*W*H	Tolerance M:20% N:30%	Inductance	Internal control

NR-H Series

Part Number	Inductance (μH) @1MHz/1V	DC Resistance (Ω) Max.	Self-resonant Frequency (MHz) Min.	Heat Rating Current Irms (A) Max.	Saturation Current Isat (A) Max.
NR201610NR24H	0.24	0.039	145	3.02	4.54
NR201610NR39H	0.39	0.053	104	4.1	4.1
NR201610NR47H	0.47	0.055	102	2.72	4.03
NR201610NR68H	0.68	0.064	77	2.53	3.53
NR201610M1R0H	1	0.089	70	2.07	3.38
NR201610M1R5H	1.5	0.128	45	1.72	1.97
NR201610M2R2H	2.2	0.192	39	1.46	1.92
NR201610M4R7H	4.7	0.423	25	0.91	1.21
NR201610M5R6H	5.6	0.5	17	0.9	1
NR201610M6R8H	6.8	0.54	16	0.53	0.73
NR201610M100H	10	0.824	15	0.65	0.81
NR252010NR33H	0.33	0.038	117	3.52	4.83
NR252010NR47H	0.47	0.044	80	3.23	4.43
NR252010NR56H	0.56	0.055	66	2.5	3.8
NR252010NR68H	0.68	0.058	65	2.77	3.23
NR252010M1R0H	1	0.075	46	2.51	3.12
NR252010M1R5H	1.5	0.105	40	2.02	2.62

NR-H Series

Part Number	Inductance (μ H) @1MHz/1V	DC Resistance (Ω) Max.	Self-resonant Frequency (MHz) Min.	Heat Rating Current Irms (A) Max.	Saturation Current Isat (A) Max.
NR252010M2R2H	2.2	0.153	26	1.51	1.91
NR252010M3R3H	3.3	0.233	24	1.2	1.6
NR252010M4R7H	4.7	0.3	19	1.11	1.31
NR252010M100H	10	0.53	12	0.85	0.93
NR252012NR24H	0.24	0.029	117	4.1	6.55
NR252012NR33H	0.33	0.036	104	3.4	5.41
NR252012NR47H	0.47	0.04	89	3	5
NR252012NR68H	0.68	0.05	67	3.18	3.73
NR252012M1R0H	1	0.06	52	3.03	3.7
NR252012M1R5H	1.5	0.09	35	2.4	2.92
NR252012M2R2H	2.2	0.117	32	1.96	2.6
NR252012M3R3H	3.3	0.19	25	1.82	1.77
NR252012M4R7H	4.7	0.256	23	1.26	1.66
NR252012M6R8H	6.8	0.364	16	0.97	1.2
NR252012M100H	10	0.48	12	0.85	1.15
NR252012M220H	22	1.08	10	0.7	0.7
NR3012NR33H	0.33	0.027	107	4.1	7.2
NR3012NR47H	0.47	0.033	86	4	6.1
NR3012NR68H	0.68	0.04	63	3.8	5.8
NR3012M1R0H	1	0.054	51	2.8	4
NR3012M1R5H	1.5	0.074	37	2	3.2
NR3012M2R2H	2.2	0.108	28	1.9	2.2
NR3012M3R3H	3.3	0.15	25	1.6	1.7
NR3012M4R7H	4.7	0.23	20	1.4	1.5
NR3012M6R8H	6.8	0.34	16	1.1	1.4
NR3012M100H	10	0.46	12	0.9	1
NR4012NR33H	0.33	0.032	113	4.5	8
NR4012NR47H	0.47	0.04	96	4.2	7.5
NR4012NR68H	0.68	0.04	70	4.1	5
NR4012M1R0H	1	0.058	55	3.5	4.5
NR4012M1R2H	1.2	0.064	48	3.2	4
NR4012M1R5H	1.5	0.07	38	2.6	3.9
NR4012M2R2H	2.2	0.079	28	2.5	2.8
NR4012M3R3H	3.3	0.125	23	1.9	2

NR-H Series

Part Number	Inductance (μ H) @1MHz/1V	DC Resistance (Ω) Max.	Self-resonant Frequency (MHz) Min.	Heat Rating Current Irms (A) Max.	Saturation Current Isat (A) Max.
NR4012M4R7H	4.7	0.166	19	1.7	1.8
NR4012M6R8H	6.8	0.226	17	1.5	1.6
NR4012M100H	10	0.335	12	1.3	1.5
NR4012M220H	22	0.679	7	0.85	0.9
NR4020NR47H	0.47	0.022	72	7	10
NR4020NR68H	0.68	0.035	57	5	8.7
NR4020M1R0H	1	0.026	37	5.1	8.5
NR4020M1R5H	1.5	0.036	30	4.5	7.2
NR4020M2R2H	2.2	0.048	25	4.2	6.1
NR4020M3R3H	3.3	0.072	19	3.5	4.2
NR4020M4R7H	4.7	0.108	17	2.5	4
NR4020M6R8H	6.8	0.156	13	2.1	3
NR4020M100H	10	0.216	11	1.7	2.8