

Magnetic Epoxy Coating Inductors

Operating temperature range: -40°C~+125°C (Including self-heating)

Features:

- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels.
- Metallization on ferrite core results in excellent shock resistance and damage-free durability.
- 30% higher Current rating than conventional inductors of equal size.
- RoHS compliant.

Applications:

- LED Lighting
- Flat-screen TVs, blue-ray disc recorders, set top box, movie cameras, smart phone
- Notebooks, desktop computers, servers, graphic cards
- Portable gaming devices, personal navigation systems, personal multimedia devices
- Telecomm base stations
- DC/DC converters

Product Identification:

①	②	③	-	④	⑤	⑥	-	⑦
LNR	2512A	A	-	1R0	M	R	-	03

①	Type
LNR	Power inductors

②	(L×W×H) [mm] External Dimensions
2512A	2.5×2.0×1.2
3015A	3.0×3.0×1.5
4012A	4.0×4.0×1.2
4018A	4.0×4.0×1.8
5020A	5.0×5.0×2.0
5040A	5.0×5.0×4.0
6028A	6.0×6.0×2.8
6045A	6.0×6.0×4.5

③	Electrical specification Code
A	A Type
B	B Type

④	Nominal Inductance
1R0	1.0μH
100	10.0μH

⑤	Inductance Tolerance
K	±10%
M	±20%
N	±30%

⑥	Packing
Standard	Tape Reel Package

⑦	Internal code
01	
03	

Shape And Dimensions [Unit: mm]

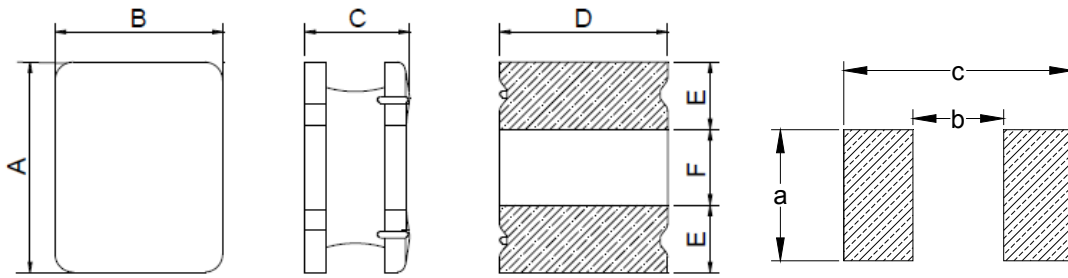


Figure 1

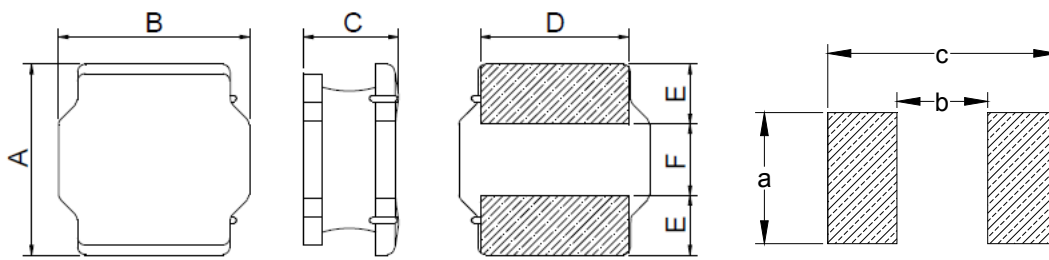


Figure 2

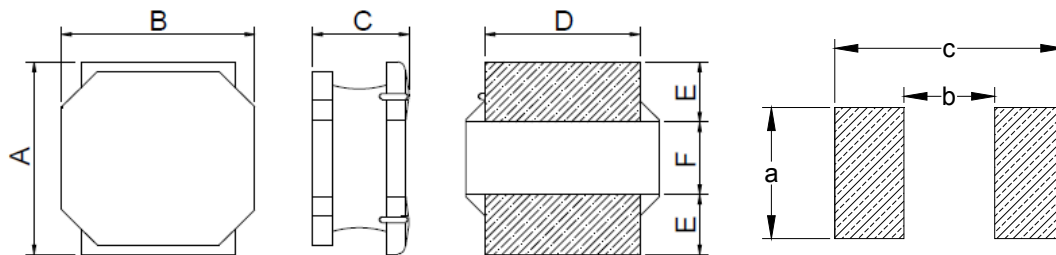


Figure 3

	A	B	C	D (Ref.)	E (Ref.)	F (Ref.)	a (Ref.)	b (Ref.)	c (Ref.)	Figure
LNR2512AA	2.5±0.1	2.0±0.1	1.2 Max.	2.0	0.8	0.8	2.0	0.8	2.5	1
LNR3015AA	3.0±0.2	3.0±0.2	1.5 Max.	2.5	0.75	1.5	2.7	1.5	3.1	2
LNR4012AA	4.0±0.2	4.0±0.2	1.2 Max.	3.3	0.95	2.1	3.7	1.9	4.1	2
LNR4018AA	4.0±0.2	4.0±0.2	1.8 Max.	3.3	0.95	2.1	3.7	1.9	4.1	2
LNR5020AA	5.0±0.2	5.0±0.2	2.0 Max.	4.0	1.25	2.5	4.2	2.3	5.1	3
LNR5040AA	5.0±0.2	5.0±0.2	4.0 Max.	4.0	1.25	2.5	4.2	2.3	5.1	3
LNR6028AA	6.0±0.3	6.0±0.3	2.8 Max.	4.9	1.55	2.9	5.7	2.8	6.2	2
LNR6045AA	6.0±0.3	6.0±0.3	4.5 Max.	4.9	1.55	2.9	5.7	2.8	6.2	2

Electrical Characteristics

LNR2512AA Series						
P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance (\pm %)	DCR (m Ω) Max.	Isat (A) Typ.	Irms (A) Typ.
LNR2512AA-R33NR-03	0.33	100	30	48	4.0	2.34
LNR2512AA-R47NR-03	0.47	100	30	61	4.27	2.34
LNR2512AA-R68NR-03	0.68	100	30	74	3.68	2.13
LNR2512AA-1R0NR-03	1.0	100	30	90	2.90	2.1
LNR2512AA-1R5NR-03	1.5	100	30	147	2.51	1.53
LNR2512AA-2R2MR-03	2.2	100	20	216	2.07	1.25
LNR2512AA-3R3MR-03	3.3	100	20	264	1.8	1.13
LNR2512AA-4R7MR-03	4.7	100	20	377	1.25	0.92
LNR2512AA-6R8MR-03	6.8	100	20	581	1.09	0.75
LNR2512AA-100MR-03	10	100	20	690	0.88	0.68
LNR2512AA-150MR-03	15	100	20	1591	0.77	0.46
LNR2512AA-220MR-03	22	100	20	1976	0.59	0.41

LNR3015AA Series						
P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance (\pm %)	DCR (m Ω) Max.	Isat (A) Typ.	Irms (A) Typ.
LNR3015AA-1R0NR-03	1.0	100	30	39	2.8	2.5
LNR3015AA-1R5NR-03	1.5	100	30	65	2.7	2.2
LNR3015AA-2R2NR-03	2.2	100	30	78	2.0	2.0
LNR3015AA-3R3MR-03	3.3	100	20	104	1.81	1.6
LNR3015AA-4R7MR-03	4.7	100	20	163	1.4	1.3
LNR3015AA-6R8MR-03	6.8	100	20	260	1.1	1.1
LNR3015AA-100MR-03	10	100	20	325	0.92	0.9
LNR3015AA-150MR-03	15	100	20	455	0.88	0.72
LNR3015AA-220MR-03	22	100	20	598	0.68	0.69

LNR4012AA Series						
P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance (\pm %)	DCR (m Ω) Max.	Isat (A)Typ.	Irms (A) Typ.
LNR4012AA-1R0NR-03	1.0	100	30	65	3.2	2.5
LNR4012AA-1R5NR-03	1.5	100	30	85	2.7	2.2
LNR4012AA-2R2NR-03	2.2	100	30	104	2.3	1.9
LNR4012AA-3R3NR-03	3.3	100	30	143	2.1	1.6
LNR4012AA-4R7NR-03	4.7	100	30	163	1.8	1.5
LNR4012AA-6R8MR-03	6.8	100	20	257	1.4	1.2
LNR4012AA-100MR-03	10	100	20	345	1.1	1.0

LNR4018AA Series						
P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance (\pm %)	DCR (m Ω) Max.	Isat (A)Typ.	Irms (A) Typ.
LNR4018AA-1R0NR-03	1.0	100	30	33	5.2	3.3
LNR4018AA-1R5NR-03	1.5	100	30	39	4.0	3.2
LNR4018AA-2R2MR-03	2.2	100	20	59	3.2	2.6
LNR4018AA-3R3MR-03	3.3	100	20	91	2.9	2.1
LNR4018AA-4R7MR-03	4.7	100	20	117	2.2	1.8
LNR4018AA-6R8MR-03	6.8	100	20	143	2.0	1.5
LNR4018AA-100MR-03	10	100	20	234	1.6	1.2
LNR4018AA-220MR-03	22	100	20	468	0.88	0.85

LNR5020AA Series						
P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance (\pm %)	DCR (m Ω) Max.	Isat (A)Typ.	Irms (A) Typ.
LNR5020AA-1R0NR-03	1.0	100	30	26	5.0	4.1
LNR5020AA-1R5NR-03	1.5	100	30	34	4.5	3.5
LNR5020AA-2R2NR-03	2.2	100	30	42	4.0	3.1
LNR5020AA-3R3NR-03	3.3	100	30	56	3.0	2.7
LNR5020AA-4R7MR-03	4.7	100	20	74	2.7	2.4
LNR5020AA-6R8MR-03	6.8	100	20	108	2.2	1.9
LNR5020AA-100MR-03	10	100	20	143	1.8	1.7
LNR5020AA-150MR-03	15	100	20	215	1.4	1.3
LNR5020AA-220MR-03	22	100	20	294	1.2	1.2

LNR5040AA Series						
P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance (\pm %)	DCR (m Ω) Max.	Isat (A)Typ.	Irms (A) Typ.
LNR5040AA-1R0NR-03	1.0	100	30	16	8.0	5.0
LNR5040AA-1R5NR-03	1.5	100	30	20	6.8	4.85
LNR5040AA-2R2NR-03	2.2	100	30	25	5.5	4.2
LNR5040AA-3R3NR-03	3.3	100	30	31	4.45	3.9
LNR5040AA-4R7MR-03	4.7	100	20	39	3.8	3.3
LNR5040AA-6R8MR-03	6.8	100	20	56	3.4	2.8
LNR5040AA-100MR-03	10	100	20	83	2.7	2.35
LNR5040AA-150MR-03	15	100	20	112	2.2	2.05
LNR5040AA-220MR-03	22	100	20	168	1.8	1.6

LNR6028AA Series						
P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance (\pm %)	DCR (m Ω) Max.	Isat (A)Typ.	Irms (A) Typ.
LNR6028AA-1R0NR-03	1.0	100	30	13	7.0	5.7
LNR6028AA-1R5NR-03	1.5	100	30	17	6.6	5.0
LNR6028AA-2R2NR-03	2.2	100	30	26	5.6	4.1
LNR6028AA-3R3NR-03	3.3	100	30	33	4.5	3.8
LNR6028AA-4R7NR-03	4.7	100	30	39	3.3	3.4
LNR6028AA-6R8MR-03	6.8	100	20	61	3.0	2.6
LNR6028AA-100MR-03	10	100	20	94	2.5	2.4
LNR6028AA-150MR-03	15	100	20	163	1.9	1.6
LNR6028AA-220MR-03	22	100	20	182	1.8	1.6

LNR6045AA Series						
P/N	Inductance (μ H)	Test Freq. (KHz/1.0V)	Tolerance (\pm %)	DCR (m Ω) Max.	Isat (A)Typ.	Irms (A) Typ.
LNR6045AA-1R0NR-03	1.0	100	30	14	10	5.6
LNR6045AA-1R5NR-03	1.5	100	30	16	9.7	5.4
LNR6045AA-2R2NR-03	2.2	100	30	18	7.4	5.0
LNR6045AA-3R3NR-03	3.3	100	30	27	6.2	4.0
LNR6045AA-4R7MR-03	4.7	100	20	34	5.5	3.6
LNR6045AA-6R8MR-03	6.8	100	20	40	4.3	3.3
LNR6045AA-100MR-03	10	100	20	62	3.5	2.7
LNR6045AA-150MR-03	15	100	20	88	2.7	2.2
LNR6045AA-220MR-03	22	100	20	116	2.2	2.0

NOTE :

- ◎ Typical Heat Rating DC Current (Irms) would cause NR approximately Δ T of 40°C
- ◎ Typical Saturation DC Current (Isat) would cause Lo to drop approximately 30%