

### FEATURES

- Ferrite core provides high withstand voltage and wide inductance range.
- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels.
- Closed magnetic circuit design reduces leakage flux and EMI.
- Metallization on core results in secure and reliable mounting.
- Operating temperature: -40°C ~ +125°C.



### APPLICATIONS

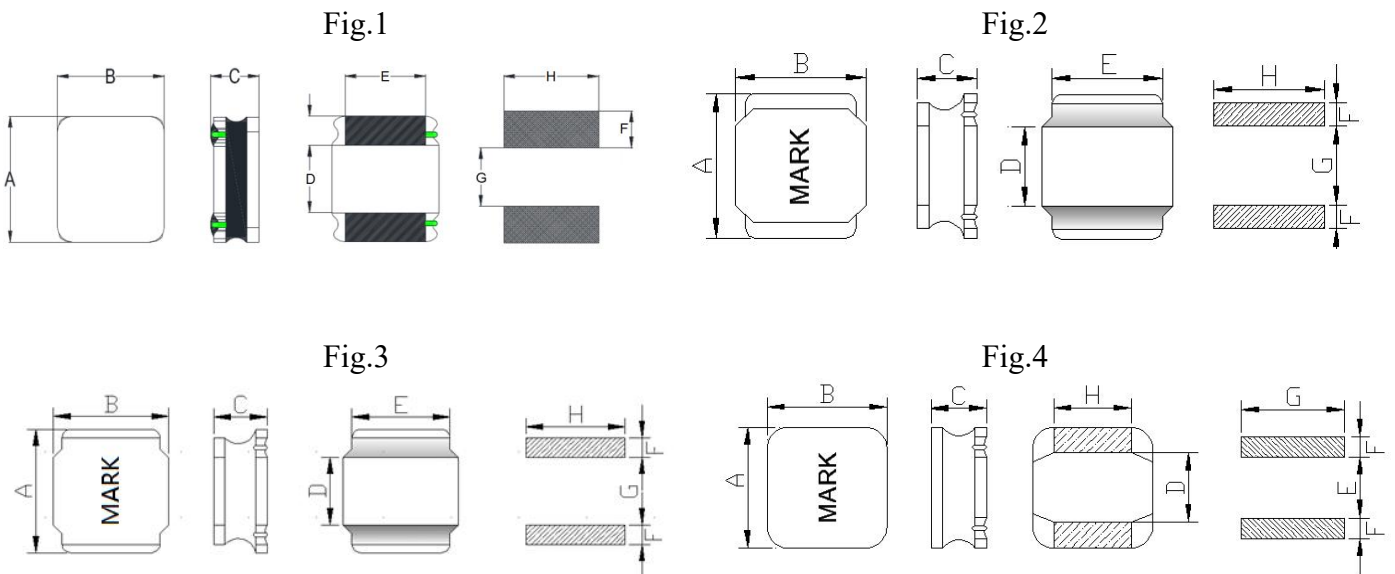
- Smart phone, Set top box, VR, AR.
- Notebooks, Desktop computers, Servers.
- Portable gaming devices, Personal navigation systems, Personal multimedia devices.
- LED lighting.

### PRODUCT IDENTIFICATION

ALNR 3015 S 101 M T  
 (1) (2) (3) (4) (5) (6)

- (1) 系列名称 Series name
- (2) 产品尺寸 Product dimensions
- (3) 特性类别 Feature Type (S:Standard 标准型)
- (4) 电感量 Inductance Value (1R0:1.0uH, 100:10uH, 101:100uH)
- (5) 电感公差 Inductance Tolerance (K:10%, M:20%, N:30%)
- (6) 包装 Package (T:Tape&Reel 卷盘编带)

### SHAPE AND DIMENSIONS



Series	Shape	A	B	C Max.	D	E	F	G	H
ALNR201610	Fig.1	2.1±0.2	1.7±0.2	1.05	0.70Ref	1.70Ref	0.70Ref	0.70Ref	1.70Ref
ALNR252010	Fig.1	2.6±0.2	2.1±0.2	1.05	1.00Ref	2.15Ref	0.85Ref	0.90Ref	2.20Ref
ALNR252012	Fig.1	2.6±0.2	2.1±0.2	1.25	1.00Ref	2.15Ref	0.85Ref	0.90Ref	2.20Ref
ALNR3010	Fig.2	3.0±0.2	3.0±0.2	1.00	1.50Ref	2.50Ref	1.00Ref	1.20Ref	2.70Ref
ALNR3012	Fig.2	3.0±0.2	3.0±0.2	1.20	1.50Ref	2.50Ref	1.00Ref	1.20Ref	2.70Ref
ALNR3015	Fig.3	3.0±0.2	3.0±0.2	1.50	1.50Ref	2.50Ref	1.00Ref	1.20Ref	2.70Ref
ALNR4010	Fig.2	4.0±0.2	4.0±0.2	1.10	1.80Ref	3.20Ref	1.30Ref	1.60Ref	3.70Ref
ALNR4012	Fig.2	4.0±0.2	4.0±0.2	1.20	1.80Ref	3.20Ref	1.30Ref	1.60Ref	3.70Ref
ALNR4018	Fig.3	4.0±0.2	4.0±0.2	1.80	1.80Ref	3.20Ref	1.30Ref	1.60Ref	3.70Ref
ALNR4020	Fig.3	4.0±0.2	4.0±0.2	2.00	1.80Ref	3.20Ref	1.30Ref	1.60Ref	3.70Ref
ALNR4030	Fig.3	4.0±0.2	4.0±0.2	3.00	1.80Ref	3.20Ref	1.30Ref	1.60Ref	3.70Ref
ALNR5012	Fig.2	5.0±0.2	5.0±0.2	1.20	2.50Ref	4.00Ref	1.50Ref	2.30Ref	4.70Ref
ALNR5020	Fig.3	5.0±0.2	5.0±0.2	2.00	2.50Ref	4.00Ref	1.50Ref	2.30Ref	4.70Ref
ALNR5030	Fig.3	5.0±0.2	5.0±0.2	3.00	2.50Ref	4.00Ref	1.50Ref	2.30Ref	4.70Ref
ALNR5040	Fig.3	5.0±0.2	5.0±0.2	4.00	2.50Ref	4.00Ref	1.50Ref	2.30Ref	4.70Ref
ALNR6020	Fig.3	6.0±0.3	6.0±0.3	2.00	2.50Ref	4.90Ref	2.00Ref	2.40Ref	5.70Ref
ALNR6028	Fig.3	6.0±0.3	6.0±0.3	2.80	2.50Ref	4.90Ref	2.00Ref	2.40Ref	5.70Ref
ALNR6045	Fig.3	6.0±0.3	6.0±0.3	4.50	2.90Ref	4.90Ref	2.00Ref	2.40Ref	5.70Ref
ALNR8040	Fig.3	8.0±0.3	8.0±0.3	4.20	3.60Ref	6.30Ref	2.50Ref	3.40Ref	7.50Ref
ALNR8060	Fig.3	8.0±0.3	8.0±0.3	6.00	3.60Ref	6.30Ref	2.50Ref	3.40Ref	7.50Ref
ALNR8065	Fig.3	8.0±0.3	8.0±0.3	6.50	3.60Ref	6.30Ref	2.50Ref	3.40Ref	7.50Ref
ALNR1050	Fig.4	10.0±0.3	10.0±0.3	5.00	6.40Ref	4.20Ref	2.00Ref	6.20Ref	5.50Ref

Unit:mm

## SPECIFICATIONS

### ALNR201610 Series

Part Number	Inductance ( $\mu$ H)	Tolerance (%)	Test Condition	DCR Max. (m $\Omega$ )	Isat(A)	Irms(A)
ALNR201610SR47NT	0.47	30	1MHz/1V	53	2.70	2.16
ALNR201610SR68NT	0.68	30	1MHz/1V	82	2.00	1.60
ALNR201610S1R0MT	1.0	20	1MHz/1V	115	2.00	1.60
ALNR201610S1R5MT	1.5	20	1MHz/1V	156	1.70	1.36
ALNR201610S2R2MT	2.2	20	1MHz/1V	174	1.26	1.01
ALNR201610S3R3MT	3.3	20	1MHz/1V	294	1.05	0.84
ALNR201610S4R7MT	4.7	20	1MHz/1V	432	0.85	0.68
ALNR201610S6R8MT	6.8	20	1MHz/1V	620	0.72	0.58
ALNR201610S100MT	10	20	1MHz/1V	864	0.60	0.48
ALNR201610S150MT	15	20	1MHz/1V	1680	0.55	0.39
ALNR201610S180MT	18	20	1MHz/1V	1700	0.40	0.32
ALNR201610S220MT	22	20	1MHz/1V	2000	0.38	0.30

### ALNR252010 Series

Part Number	Inductance ( $\mu$ H)	Tolerance (%)	Test Condition	DCR Max. (m $\Omega$ )	Isat(A)	Irms(A)
ALNR252010SR24NT	0.24	30	1MHz/1V	34	3.50	2.65
ALNR252010SR33NT	0.33	30	1MHz/1V	38	3.50	2.70
ALNR252010SR47NT	0.47	30	1MHz/1V	42	2.80	2.57
ALNR252010SR68NT	0.68	30	1MHz/1V	49	2.30	2.30
ALNR252010S1R0MT	1.0	20	1MHz/1V	66	2.05	2.05
ALNR252010S1R5MT	1.5	20	1MHz/1V	108	1.70	1.55
ALNR252010S2R2MT	2.2	20	1MHz/1V	145	1.55	1.50
ALNR252010S3R3MT	3.3	20	1MHz/1V	204	1.10	1.10
ALNR252010S4R7MT	4.7	20	1MHz/1V	300	0.95	0.95
ALNR252010S6R8MT	6.8	20	1MHz/1V	444	0.90	0.80
ALNR252010S100MT	10	20	1MHz/1V	564	0.65	0.60
ALNR252010S150MT	15	20	1MHz/1V	960	0.55	0.45
ALNR252010S220MT	22	20	1MHz/1V	1344	0.40	0.40

### ALNR252012 Series

Part Number	Inductance ( $\mu$ H)	Tolerance (%)	Test Condition	DCR Max. (m $\Omega$ )	Isat(A)	Irms(A)
ALNR252012SR24NT	0.24	30	1MHz/1V	28	4.05	3.50
ALNR252012SR33NT	0.33	30	1MHz/1V	40	4.00	3.00
ALNR252012SR47NT	0.47	30	1MHz/1V	40	3.60	2.90
ALNR252012SR56NT	0.56	30	1MHz/1V	40	3.30	2.80

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (mΩ)	Isat(A)	Irms(A)
ALNR252012SR68NT	0.68	30	1MHz/1V	45	3.28	2.60
ALNR252012SR82MT	0.82	20	1MHz/1V	60	2.60	2.45
ALNR252012S1R0MT	1.0	20	1MHz/1V	60	2.45	2.40
ALNR252012S1R5MT	1.5	20	1MHz/1V	84	2.05	1.90
ALNR252012S2R2MT	2.2	20	1MHz/1V	110	1.90	1.80
ALNR252012S3R3MT	3.3	20	1MHz/1V	155	1.50	1.40
ALNR252012S4R7MT	4.7	20	1MHz/1V	228	1.35	1.20
ALNR252012S6R8MT	6.8	20	1MHz/1V	325	1.00	0.90
ALNR252012S100MT	10	20	1MHz/1V	480	0.79	0.75
ALNR252012S150MT	15	20	1MHz/1V	625	0.65	0.55
ALNR252012S180MT	18	20	1MHz/1V	1000	0.55	0.50
ALNR252012S220MT	22	20	1MHz/1V	1020	0.50	0.45
ALNR252012S330MT	33	20	1MHz/1V	1400	0.38	0.37
ALNR252012S470MT	47	20	1MHz/1V	2000	0.30	0.29

### ALNR3010 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR (Ω) ±30%	Isat(A)	Irms(A)
ALNR3010S1R0NT	1.0	30	1MHz/1V	0.070	2.30	1.20
ALNR3010S1R5NT	1.5	30	1MHz/1V	0.085	2.10	1.10
ALNR3010S2R2MT	2.2	20	1MHz/1V	0.120	1.60	0.95
ALNR3010S3R3MT	3.3	20	1MHz/1V	0.160	1.40	0.82
ALNR3010S4R7MT	4.7	20	1MHz/1V	0.240	1.15	0.63
ALNR3010S6R8MT	6.8	20	1MHz/1V	0.330	1.00	0.60
ALNR3010S100MT	10	20	1MHz/1V	0.430	0.70	0.47
ALNR3010S150MT	15	20	1MHz/1V	0.730	0.60	0.40
ALNR3010S220MT	22	20	1MHz/1V	0.920	0.55	0.32
ALNR3010S330MT	33	20	1MHz/1V	1.400	0.43	0.25
ALNR3010S390MT	39	20	1MHz/1V	1.600	0.40	0.23
ALNR3010S470MT	47	20	1MHz/1V	1.950	0.38	0.20

### ALNR3012 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)
ALNR3012SR24NT	0.24	30	1MHz/1V	0.035	4.00
ALNR3012SR47NT	0.47	30	1MHz/1V	0.046	3.50
ALNR3012SR56NT	0.56	30	1MHz/1V	0.046	3.50
ALNR3012SR68NT	0.68	30	1MHz/1V	0.052	3.20
ALNR3012S1R0NT	1.0	30	1MHz/1V	0.068	1.87
ALNR3012S1R5NT	1.5	30	1MHz/1V	0.110	1.62

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)
ALNR3012S2R2MT	2.2	20	1MHz/1V	0.148	1.20
ALNR3012S3R3MT	3.3	20	1MHz/1V	0.196	1.05
ALNR3012S3R9MT	3.9	20	1MHz/1V	0.286	1.00
ALNR3012S4R7MT	4.7	20	1MHz/1V	0.321	0.90
ALNR3012S6R8MT	6.8	20	1MHz/1V	0.445	0.75
ALNR3012S100MT	10	20	1MHz/1V	0.579	0.60
ALNR3012S120MT	12	20	1MHz/1V	0.793	0.55
ALNR3012S150MT	15	20	1MHz/1V	0.910	0.45
ALNR3012S220MT	22	20	1MHz/1V	1.240	0.42
ALNR3012S330MT	33	20	1MHz/1V	1.920	0.36
ALNR3012S470MT	47	20	1MHz/1V	2.760	0.32
ALNR3012S680MT	68	20	1MHz/1V	3.840	0.30

### ALNR3015 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR3015SR47NT	0.47	30	100KHz/1V	0.027	2.50	2.35
ALNR3015S1R0NT	1.0	30	100KHz/1V	0.039	2.32	2.10
ALNR3015S1R5NT	1.5	30	100KHz/1V	0.065	2.00	1.70
ALNR3015S2R2NT	2.2	30	100KHz/1V	0.078	1.60	1.60
ALNR3015S2R7MT	2.7	20	100KHz/1V	0.098	1.52	1.43
ALNR3015S3R3MT	3.3	20	100KHz/1V	0.104	1.32	1.36
ALNR3015S4R7MT	4.7	20	100KHz/1V	0.163	1.10	1.09
ALNR3015S6R8MT	6.8	20	100KHz/1V	0.260	0.85	0.85
ALNR3015S100MT	10	20	100KHz/1V	0.325	0.72	0.77
ALNR3015S150MT	15	20	100KHz/1V	0.455	0.66	0.65
ALNR3015S220MT	22	20	100KHz/1V	0.598	0.52	0.57
ALNR3015S330MT	33	20	100KHz/1V	1.066	0.40	0.36
ALNR3015S470MT	47	20	100KHz/1V	1.625	0.30	0.28
ALNR3015S101MT	100	20	100KHz/1V	4.043	0.23	0.21
ALNR3015S151MT	150	20	100KHz/1V	4.940	0.18	0.19

### ALNR4010 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR4010S2R2MT	2.2	20	100KHz/1V	0.143	1.20	1.40
ALNR4010S3R3MT	3.3	20	100KHz/1V	0.169	1.10	1.30
ALNR4010S4R7MT	4.7	20	100KHz/1V	0.230	0.95	1.20
ALNR4010S6R8MT	6.8	20	100KHz/1V	0.338	0.80	1.00
ALNR4010S100MT	10	20	100KHz/1V	0.529	0.62	0.75

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR4010S150MT	15	20	100KHz/1V	0.884	0.54	0.60
ALNR4010S220MT	22	20	100KHz/1V	1.040	0.45	0.50
ALNR4010S470MT	47	20	100KHz/1V	1.950	0.40	0.32

**ALNR4012 Series**

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR4012SR68NT	0.68	30	100KHz/1V	0.058	3.20	1.72
ALNR4012S1R0NT	1.0	30	100KHz/1V	0.065	2.61	1.65
ALNR4012S1R5NT	1.5	30	100KHz/1V	0.094	2.50	1.46
ALNR4012S2R2MT	2.2	20	100KHz/1V	0.105	2.10	1.32
ALNR4012S3R3MT	3.3	20	100KHz/1V	0.149	1.70	1.12
ALNR4012S4R7MT	4.7	20	100KHz/1V	0.163	1.20	1.05
ALNR4012S6R8MT	6.8	20	100KHz/1V	0.286	1.18	0.84
ALNR4012S100MT	10	20	100KHz/1V	0.442	0.95	0.77
ALNR4012S150MT	15	20	100KHz/1V	0.651	0.80	0.64
ALNR4012S220MT	22	20	100KHz/1V	1.010	0.65	0.49
ALNR4012S330MT	33	20	100KHz/1V	1.280	0.55	0.42
ALNR4012S470MT	47	20	100KHz/1V	2.210	0.45	0.37

**ALNR4018 Series**

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR4018SR24NT	0.24	30	100KHz/1V	0.018	6.00	4.30
ALNR4018SR33NT	0.33	30	100KHz/1V	0.018	6.00	4.30
ALNR4018SR47NT	0.47	30	100KHz/1V	0.025	5.00	3.30
ALNR4018SR56NT	0.56	30	100KHz/1V	0.025	5.00	3.30
ALNR4018S1R0NT	1.0	30	100KHz/1V	0.033	4.80	2.00
ALNR4018S1R5NT	1.5	30	100KHz/1V	0.039	3.35	1.80
ALNR4018S1R8NT	1.8	30	100KHz/1V	0.044	3.00	2.00
ALNR4018S2R0NT	2.0	30	100KHz/1V	0.059	2.70	1.65
ALNR4018S2R2MT	2.2	20	100KHz/1V	0.059	2.70	1.65
ALNR4018S3R3MT	3.3	20	100KHz/1V	0.091	2.45	1.23
ALNR4018S4R7MT	4.7	20	100KHz/1V	0.117	1.70	1.20
ALNR4018S5R6MT	5.6	20	100KHz/1V	0.130	1.60	1.12
ALNR4018S6R8MT	6.8	20	100KHz/1V	0.143	1.45	1.06
ALNR4018S8R2MT	8.2	20	100KHz/1V	0.188	1.38	0.93
ALNR4018S100MT	10	20	100KHz/1V	0.234	1.30	0.84
ALNR4018S150MT	15	20	100KHz/1V	0.325	0.94	0.65
ALNR4018S220MT	22	20	100KHz/1V	0.468	0.80	0.59

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR4018S330MT	33	20	100KHz/1V	0.689	0.65	0.49
ALNR4018S470MT	47	20	100KHz/1V	0.845	0.57	0.42

**ALNR4020 Series**

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR4020S1R0NT	1.0	30	100KHz/1V	0.038	4.78	2.15
ALNR4020S1R5NT	1.5	30	100KHz/1V	0.046	4.45	1.98
ALNR4020S2R2NT	2.2	30	100KHz/1V	0.052	3.40	1.85
ALNR4020S3R3MT	3.3	20	100KHz/1V	0.091	3.20	1.40
ALNR4020S4R7MT	4.7	20	100KHz/1V	0.098	2.35	1.34
ALNR4020S5R6MT	5.6	20	100KHz/1V	0.117	2.20	1.22
ALNR4020S6R8MT	6.8	20	100KHz/1V	0.163	2.20	1.04
ALNR4020S100MT	10	20	100KHz/1V	0.215	1.60	0.90
ALNR4020S120MT	12	20	100KHz/1V	0.228	1.50	0.88
ALNR4020S150MT	15	20	100KHz/1V	0.299	1.35	0.77
ALNR4020S220MT	22	20	100KHz/1V	0.455	1.05	0.62
ALNR4020S270MT	27	20	100KHz/1V	0.611	1.02	0.50
ALNR4020S330MT	33	20	100KHz/1V	0.715	0.85	0.49
ALNR4020S470MT	47	20	100KHz/1V	0.923	0.74	0.44
ALNR4020S680MT	68	20	100KHz/1V	1.380	0.61	0.36
ALNR4020S820MT	82	20	100KHz/1V	1.520	0.50	0.34
ALNR4020S101MT	100	20	100KHz/1V	2.020	0.48	0.31
ALNR4020S221MT	220	20	100KHz/1V	5.340	0.30	0.24

**ALNR4030 Series**

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR4030SR24NT	0.24	30	100KHz/1V	0.012	8.00	5.10
ALNR4030SR47NT	0.47	30	100KHz/1V	0.013	7.50	4.82
ALNR4030SR68NT	0.68	30	100KHz/1V	0.013	6.80	4.56
ALNR4030S1R0NT	1.0	30	100KHz/1V	0.018	5.26	4.15
ALNR4030S1R5NT	1.5	30	100KHz/1V	0.026	4.84	3.34
ALNR4030S2R2MT	2.2	20	100KHz/1V	0.039	4.10	2.95
ALNR4030S3R3MT	3.3	20	100KHz/1V	0.052	3.30	2.40
ALNR4030S4R7MT	4.7	20	100KHz/1V	0.078	2.90	2.00
ALNR4030S5R6MT	5.6	20	100KHz/1V	0.085	2.75	1.95
ALNR4030S6R8MT	6.8	20	100KHz/1V	0.117	2.60	1.60
ALNR4030S8R2MT	8.2	20	100KHz/1V	0.123	2.10	1.60
ALNR4030S100MT	10	20	100KHz/1V	0.130	1.95	1.50



Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR4030S120MT	12	20	100KHz/1V	0.175	1.70	1.30
ALNR4030S150MT	15	20	100KHz/1V	0.247	1.65	1.11
ALNR4030S220MT	22	20	100KHz/1V	0.292	1.30	1.00
ALNR4030S330MT	33	20	100KHz/1V	0.429	1.10	0.84
ALNR4030S470MT	47	20	100KHz/1V	0.579	0.95	0.72
ALNR4030S560MT	56	20	100KHz/1V	0.722	0.85	0.65
ALNR4030S680MT	68	20	100KHz/1V	1.128	0.72	0.52
ALNR4030S820MT	82	20	100KHz/1V	1.378	0.66	0.47
ALNR4030S101MT	100	20	100KHz/1V	1.495	0.60	0.45
ALNR4030S151MT	150	20	100KHz/1V	2.340	0.50	0.30
ALNR4030S181MT	180	20	100KHz/1V	3.055	0.45	0.26
ALNR4030S221MT	220	20	100KHz/1V	3.250	0.40	0.35
ALNR4030S331MT	330	20	100KHz/1V	5.200	0.30	0.25
ALNR4030S471MT	470	20	100KHz/1V	6.890	0.28	0.20
ALNR4030S561MT	560	20	100KHz/1V	8.060	0.25	0.15
ALNR4030S102MT	1000	20	100KHz/1V	14.950	0.18	0.09
ALNR4030S222MT	2200	20	100KHz/1V	31.200	0.13	0.05

### ALNR5012 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR5012SR47NT	0.47	30	100KHz/1V	0.065	4.50	2.20
ALNR5012S1R0NT	1.0	30	100KHz/1V	0.085	4.00	1.90
ALNR5012S1R5NT	1.5	30	100KHz/1V	0.104	3.20	1.70
ALNR5012S2R2NT	2.2	30	100KHz/1V	0.140	2.80	1.45
ALNR5012S3R3MT	3.3	20	100KHz/1V	0.188	2.30	1.20
ALNR5012S4R7MT	4.7	20	100KHz/1V	0.240	1.90	1.10
ALNR5012S6R8MT	6.8	20	100KHz/1V	0.364	1.60	0.90
ALNR5012S100MT	10	20	100KHz/1V	0.480	1.20	0.75
ALNR5012S150MT	15	20	100KHz/1V	0.650	1.00	0.70
ALNR5012S220MT	22	20	100KHz/1V	1.027	0.95	0.55
ALNR5012S330MT	33	20	100KHz/1V	1.560	0.85	0.45

### ALNR5020 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR5020SR22NT	0.22	30	100KHz/1V	0.017	9.00	5.30
ALNR5020SR24NT	0.24	30	100KHz/1V	0.017	8.00	5.30
ALNR5020SR47NT	0.47	30	100KHz/1V	0.017	6.50	4.60
ALNR5020SR56NT	0.56	30	100KHz/1V	0.022	6.50	4.20



Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR5020SR68NT	0.68	30	100KHz/1V	0.022	5.10	4.00
ALNR5020S1R0NT	1.0	30	100KHz/1V	0.029	4.25	3.80
ALNR5020S1R5NT	1.5	30	100KHz/1V	0.034	4.10	3.20
ALNR5020S2R2NT	2.2	30	100KHz/1V	0.042	3.85	2.90
ALNR5020S3R3MT	3.3	20	100KHz/1V	0.056	3.25	2.40
ALNR5020S4R7MT	4.7	20	100KHz/1V	0.074	2.50	2.10
ALNR5020S5R6MT	5.6	20	100KHz/1V	0.083	2.30	2.00
ALNR5020S6R8MT	6.8	20	100KHz/1V	0.119	2.10	1.70
ALNR5020S8R2MT	8.2	20	100KHz/1V	0.127	1.90	1.60
ALNR5020S100MT	10	20	100KHz/1V	0.163	1.80	1.50
ALNR5020S150MT	15	20	100KHz/1V	0.215	1.44	1.25
ALNR5020S220MT	22	20	100KHz/1V	0.294	1.18	1.10
ALNR5020S330MT	33	20	100KHz/1V	0.507	0.92	0.90
ALNR5020S470MT	47	20	100KHz/1V	0.680	0.77	0.70
ALNR5020S680MT	68	20	100KHz/1V	0.962	0.65	0.60
ALNR5020S101MT	100	20	100KHz/1V	1.430	0.53	0.48
ALNR5020S121MT	120	20	100KHz/1V	1.495	0.42	0.40
ALNR5020S151MT	150	20	100KHz/1V	1.950	0.40	0.37
ALNR5020S201MT	200	20	100KHz/1V	2.600	0.35	0.32
ALNR5020S221MT	220	20	100KHz/1V	2.990	0.33	0.26
ALNR5020S471MT	470	20	100KHz/1V	6.630	0.20	0.16
ALNR5020S561MT	560	20	100KHz/1V	7.150	0.18	0.13
ALNR5020S681MT	680	20	100KHz/1V	7.410	0.17	0.11
ALNR5020S122MT	1200	20	100KHz/1V	14.690	0.10	0.07

### ALNR5030 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR5030SR47NT	0.47	30	100KHz/1V	0.013	8.00	4.90
ALNR5030SR56NT	0.56	30	100KHz/1V	0.013	7.50	4.50
ALNR5030S1R0NT	1.0	30	100KHz/1V	0.020	7.00	3.90
ALNR5030S1R5NT	1.5	30	100KHz/1V	0.024	5.50	3.30
ALNR5030S2R2NT	2.2	30	100KHz/1V	0.031	4.50	3.00
ALNR5030S3R3NT	3.3	30	100KHz/1V	0.039	4.00	2.60
ALNR5030S4R7NT	4.7	30	100KHz/1V	0.065	3.00	2.20
ALNR5030S5R6MT	5.6	20	100KHz/1V	0.070	3.00	2.10
ALNR5030S6R8MT	6.8	20	100KHz/1V	0.075	2.80	1.90
ALNR5030S100MT	10	20	100KHz/1V	0.100	2.10	1.70
ALNR5030S150MT	15	20	100KHz/1V	0.156	1.70	1.40
ALNR5030S220MT	22	20	100KHz/1V	0.260	1.40	1.20
ALNR5030S330MT	33	20	100KHz/1V	0.351	1.20	1.00

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR5030S470MT	47	20	100KHz/1V	0.468	0.90	0.75
ALNR5030S101MT	100	20	100KHz/1V	0.988	0.75	0.60
ALNR5030S151MT	150	20	100KHz/1V	1.470	0.55	0.45
ALNR5030S181MT	180	20	100KHz/1V	1.820	0.48	0.40
ALNR5030S221MT	220	20	100KHz/1V	2.080	0.45	0.35
ALNR5030S331MT	330	20	100KHz/1V	3.500	0.35	0.28
ALNR5030S471MT	470	20	100KHz/1V	4.700	0.30	0.19
ALNR5030S102MT	1000	20	100KHz/1V	10.800	0.20	0.15

**ALNR5040 Series**

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR5040S1R0NT	1.0	30	100KHz/1V	0.017	7.35	4.90
ALNR5040S1R2NT	1.2	30	100KHz/1V	0.021	6.50	4.15
ALNR5040S1R5NT	1.5	30	100KHz/1V	0.021	6.30	4.30
ALNR5040S2R2NT	2.2	30	100KHz/1V	0.025	4.90	3.80
ALNR5040S3R3MT	3.3	20	100KHz/1V	0.031	3.95	3.40
ALNR5040S3R9MT	3.9	20	100KHz/1V	0.035	3.55	3.20
ALNR5040S4R7MT	4.7	20	100KHz/1V	0.039	3.50	3.00
ALNR5040S5R6MT	5.6	20	100KHz/1V	0.046	3.00	2.80
ALNR5040S6R8MT	6.8	20	100KHz/1V	0.056	2.90	2.50
ALNR5040S8R2MT	8.2	20	100KHz/1V	0.062	2.70	2.30
ALNR5040S100MT	10	20	100KHz/1V	0.083	2.35	2.10
ALNR5040S150MT	15	20	100KHz/1V	0.112	2.00	2.00
ALNR5040S220MT	22	20	100KHz/1V	0.168	1.60	1.50
ALNR5040S330MT	33	20	100KHz/1V	0.244	1.30	1.20
ALNR5040S470MT	47	20	100KHz/1V	0.354	1.10	1.00
ALNR5040S560MT	56	20	100KHz/1V	0.494	1.00	0.80
ALNR5040S680MT	68	20	100KHz/1V	0.520	0.90	0.80
ALNR5040S101MT	100	20	100KHz/1V	0.728	0.75	0.70
ALNR5040S151MT	150	20	100KHz/1V	0.975	0.65	0.60
ALNR5040S181MT	180	20	100KHz/1V	1.690	0.60	0.50
ALNR5040S201MT	200	20	100KHz/1V	1.760	0.55	0.45
ALNR5040S221MT	220	20	100KHz/1V	1.820	0.48	0.40
ALNR5040S331MT	330	20	100KHz/1V	2.730	0.42	0.40
ALNR5040S471MT	470	20	100KHz/1V	3.900	0.37	0.35
ALNR5040S561MT	560	20	100KHz/1V	4.920	0.33	0.31
ALNR5040S681MT	680	20	100KHz/1V	5.070	0.30	0.25
ALNR5040S102MT	1000	20	100KHz/1V	7.800	0.25	0.20
ALNR5040S152MT	1500	20	100KHz/1V	13.300	0.20	0.16

**ALNR6020 Series**

Part Number	Inductance ( $\mu$ H)	Tolerance (%)	Test Condition	DCR Max. ( $\Omega$ )	Isat(A)	Irms(A)
ALNR6020S1R0NT	1.0	30	100KHz/1V	0.026	4.30	3.50
ALNR6020S1R5NT	1.5	30	100KHz/1V	0.032	4.25	3.20
ALNR6020S2R2NT	2.2	30	100KHz/1V	0.045	3.75	2.75
ALNR6020S3R3NT	3.3	30	100KHz/1V	0.058	3.15	2.60
ALNR6020S4R7NT	4.7	30	100KHz/1V	0.075	3.00	2.00
ALNR6020S5R6NT	5.6	30	100KHz/1V	0.091	2.40	1.90
ALNR6020S6R8NT	6.8	30	100KHz/1V	0.110	2.20	1.80
ALNR6020S100MT	10	20	100KHz/1V	0.156	1.75	1.40
ALNR6020S150MT	15	20	100KHz/1V	0.208	1.50	1.20
ALNR6020S220MT	22	20	100KHz/1V	0.312	1.25	1.00
ALNR6020S330MT	33	20	100KHz/1V	0.440	0.90	0.80
ALNR6020S470MT	47	20	100KHz/1V	0.650	0.75	0.70
ALNR6020S680MT	68	20	100KHz/1V	0.960	0.68	0.55
ALNR6020S101MT	100	20	100KHz/1V	1.450	0.50	0.35
ALNR6020S221MT	220	20	100KHz/1V	3.120	0.35	0.30
ALNR6020S331MT	330	20	100KHz/1V	4.650	0.28	0.20
ALNR6020S102MT	1000	20	100KHz/1V	14.350	0.18	0.10

**ALNR6028 Series**

Part Number	Inductance ( $\mu$ H)	Tolerance (%)	Test Condition	DCR Max. ( $\Omega$ )	Isat(A)	Irms(A)
ALNR6028S1R0NT	1.0	30	100KHz/1V	0.012	6.70	4.50
ALNR6028S1R5NT	1.5	30	100KHz/1V	0.015	6.00	4.20
ALNR6028S2R2NT	2.2	30	100KHz/1V	0.020	5.10	3.75
ALNR6028S3R3NT	3.3	30	100KHz/1V	0.025	3.63	3.45
ALNR6028S4R7NT	4.7	30	100KHz/1V	0.030	3.20	3.00
ALNR6028S5R6NT	5.6	30	100KHz/1V	0.043	3.00	2.45
ALNR6028S6R8MT	6.8	20	100KHz/1V	0.047	2.60	2.40
ALNR6028S8R2MT	8.2	20	100KHz/1V	0.055	2.40	2.25
ALNR6028S100MT	10	20	100KHz/1V	0.072	2.20	1.95
ALNR6028S120MT	12	20	100KHz/1V	0.080	1.95	1.70
ALNR6028S150MT	15	20	100KHz/1V	0.110	1.85	1.50
ALNR6028S220MT	22	20	100KHz/1V	0.140	1.55	1.40
ALNR6028S330MT	33	20	100KHz/1V	0.185	1.35	1.10
ALNR6028S470MT	47	20	100KHz/1V	0.280	1.15	1.05
ALNR6028S560MT	56	20	100KHz/1V	0.340	1.05	0.89
ALNR6028S680MT	68	20	100KHz/1V	0.360	0.95	0.85
ALNR6028S820MT	82	20	100KHz/1V	0.500	0.85	0.70
ALNR6028S101MT	100	20	100KHz/1V	0.550	0.75	0.60
ALNR6028S681MT	680	20	100KHz/1V	3.900	0.28	0.26

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR6028S102MT	1000	20	100KHz/1V	5.700	0.25	0.23
ALNR6028S122MT	1200	20	100KHz/1V	8.300	0.24	0.22

**ALNR6045 Series**

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR6045SR68NT	0.68	30	100KHz/1V	0.011	9.50	5.70
ALNR6045S1R0NT	1.0	30	100KHz/1V	0.014	9.00	5.10
ALNR6045S1R2NT	1.2	30	100KHz/1V	0.014	8.35	4.90
ALNR6045S1R5NT	1.5	30	100KHz/1V	0.016	7.50	4.75
ALNR6045S2R2NT	2.2	30	100KHz/1V	0.022	6.50	4.10
ALNR6045S3R3NT	3.3	30	100KHz/1V	0.026	5.30	3.20
ALNR6045S3R6NT	3.6	30	100KHz/1V	0.027	5.00	3.10
ALNR6045S4R7NT	4.7	30	100KHz/1V	0.034	4.50	3.00
ALNR6045S5R6NT	5.6	30	100KHz/1V	0.040	3.70	2.80
ALNR6045S6R8MT	6.8	20	100KHz/1V	0.043	3.30	2.70
ALNR6045S8R2MT	8.2	20	100KHz/1V	0.055	3.10	2.60
ALNR6045S100MT	10	20	100KHz/1V	0.067	3.00	2.50
ALNR6045S120MT	12	20	100KHz/1V	0.075	2.80	2.20
ALNR6045S150MT	15	20	100KHz/1V	0.100	2.50	1.90
ALNR6045S180MT	18	20	100KHz/1V	0.105	2.20	1.65
ALNR6045S220MT	22	20	100KHz/1V	0.116	2.05	1.50
ALNR6045S270MT	27	20	100KHz/1V	0.165	1.90	1.45
ALNR6045S330MT	33	20	100KHz/1V	0.195	1.65	1.40
ALNR6045S360MT	36	20	100KHz/1V	0.225	1.62	1.30
ALNR6045S390MT	39	20	100KHz/1V	0.234	1.58	1.25
ALNR6045S470MT	47	20	100KHz/1V	0.286	1.40	1.20
ALNR6045S560MT	56	20	100KHz/1V	0.338	1.30	1.10
ALNR6045S680MT	68	20	100KHz/1V	0.377	1.20	0.90
ALNR6045S820MT	82	20	100KHz/1V	0.495	1.05	0.85
ALNR6045S101MT	100	20	100KHz/1V	0.559	1.00	0.74
ALNR6045S121MT	120	20	100KHz/1V	0.629	0.85	0.66
ALNR6045S151MT	150	20	100KHz/1V	0.884	0.80	0.60
ALNR6045S181MT	180	20	100KHz/1V	1.150	0.75	0.54
ALNR6045S102MT	1000	20	100KHz/1V	5.900	0.32	0.30

**ALNR8040 Series**

Part Number	Inductance ( $\mu$ H)	Tolerance (%)	Test Condition	DCR Max. ( $\Omega$ )	Isat(A)	Irms(A)
ALNR8040S1R0NT	1.0	30	100KHz/1V	0.011	9.80	6.30
ALNR8040S1R5NT	1.5	30	100KHz/1V	0.014	7.70	5.65
ALNR8040S2R2NT	2.2	30	100KHz/1V	0.016	7.10	5.15
ALNR8040S3R3NT	3.3	30	100KHz/1V	0.022	6.50	4.40
ALNR8040S4R7NT	4.7	30	100KHz/1V	0.026	5.90	4.00
ALNR8040S5R6NT	5.6	30	100KHz/1V	0.031	5.50	3.80
ALNR8040S6R8MT	6.8	20	100KHz/1V	0.036	4.50	3.60
ALNR8040S8R2MT	8.2	20	100KHz/1V	0.046	4.20	3.40
ALNR8040S100MT	10	20	100KHz/1V	0.048	3.60	3.10
ALNR8040S120MT	12	20	100KHz/1V	0.065	3.40	2.70
ALNR8040S150MT	15	20	100KHz/1V	0.073	2.90	2.50
ALNR8040S180MT	18	20	100KHz/1V	0.092	2.70	2.20
ALNR8040S220MT	22	20	100KHz/1V	0.096	2.40	2.00
ALNR8040S330MT	33	20	100KHz/1V	0.130	2.00	1.70
ALNR8040S470MT	47	20	100KHz/1V	0.177	1.70	1.50
ALNR8040S680MT	68	20	100KHz/1V	0.255	1.40	1.20
ALNR8040S820MT	82	20	100KHz/1V	0.345	1.30	1.10
ALNR8040S101MT	100	20	100KHz/1V	0.384	1.15	1.00
ALNR8040S121MT	120	20	100KHz/1V	0.421	1.10	0.90
ALNR8040S151MT	150	20	100KHz/1V	0.611	1.05	0.80
ALNR8040S181MT	180	20	100KHz/1V	0.806	0.95	0.75
ALNR8040S221MT	220	20	100KHz/1V	0.858	0.85	0.70
ALNR8040S331MT	330	20	100KHz/1V	1.261	0.68	0.60
ALNR8040S471MT	470	20	100KHz/1V	1.625	0.60	0.50
ALNR8040S681MT	680	20	100KHz/1V	2.670	0.52	0.40
ALNR8040S102MT	1000	20	100KHz/1V	3.800	0.40	0.30

**ALNR8060 Series**

Part Number	Inductance ( $\mu$ H)	Tolerance (%)	Test Condition	DCR Max. ( $\Omega$ )	Isat(A)	Irms(A)
ALNR8060S2R2NT	2.2	30	100KHz/1V	0.022	8.00	5.70
ALNR8060S3R3NT	3.3	30	100KHz/1V	0.025	7.50	5.00
ALNR8060S4R7MT	4.7	20	100KHz/1V	0.032	7.00	4.65
ALNR8060S6R8MT	6.8	20	100KHz/1V	0.037	5.90	4.20
ALNR8060S100MT	10	20	100KHz/1V	0.042	5.80	3.80
ALNR8060S150MT	15	20	100KHz/1V	0.071	4.50	3.10
ALNR8060S220MT	22	20	100KHz/1V	0.100	4.30	2.70
ALNR8060S330MT	33	20	100KHz/1V	0.162	3.00	2.10
ALNR8060S470MT	47	20	100KHz/1V	0.188	2.85	1.80
ALNR8060S680MT	68	20	100KHz/1V	0.248	2.50	1.60

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR8060S101MT	100	20	100KHz/1V	0.380	2.00	1.25
ALNR8060S221MT	220	20	100KHz/1V	0.884	1.20	0.82
ALNR8060S331MT	330	20	100KHz/1V	1.260	1.05	0.68
ALNR8060S471MT	470	20	100KHz/1V	1.760	0.90	0.55
ALNR8060S681MT	680	20	100KHz/1V	2.800	0.80	0.50
ALNR8060S821MT	820	20	100KHz/1V	3.400	0.68	0.43
ALNR8060S102MT	1000	20	100KHz/1V	3.870	0.60	0.37

**ALNR1050 Series**

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR Max. (Ω)	Isat(A)	Irms(A)
ALNR1050S1R0NT	1.0	30	100KHz/1V	0.018	14.20	6.40
ALNR1050S1R5NT	1.5	30	100KHz/1V	0.020	12.80	6.00
ALNR1050S2R2NT	2.2	30	100KHz/1V	0.025	12.10	5.50
ALNR1050S3R3NT	3.3	30	100KHz/1V	0.027	11.20	5.00
ALNR1050S4R7NT	4.7	30	100KHz/1V	0.030	10.30	4.60
ALNR1050S6R8MT	6.8	20	100KHz/1V	0.037	9.00	4.20
ALNR1050S100MT	10	20	100KHz/1V	0.048	7.20	3.70
ALNR1050S150MT	15	20	100KHz/1V	0.059	6.00	3.20
ALNR1050S220MT	22	20	100KHz/1V	0.085	4.30	2.70
ALNR1050S330MT	33	20	100KHz/1V	0.104	4.00	2.30
ALNR1050S470MT	47	20	100KHz/1V	0.163	3.30	2.00
ALNR1050S680MT	68	20	100KHz/1V	0.235	3.00	1.80
ALNR1050S101MT	100	20	100KHz/1V	0.338	2.50	1.40
ALNR1050S151MT	150	20	100KHz/1V	0.438	2.00	1.20
ALNR1050S221MT	220	20	100KHz/1V	0.675	1.80	1.00
ALNR1050S271MT	270	20	100KHz/1V	0.858	1.50	0.90
ALNR1050S331MT	330	20	100KHz/1V	1.100	1.40	0.85
ALNR1050S471MT	470	20	100KHz/1V	1.430	1.20	0.73
ALNR1050S561MT	560	20	100KHz/1V	1.750	1.10	0.68
ALNR1050S681MT	680	20	100KHz/1V	1.980	1.00	0.65
ALNR1050S821MT	820	20	100KHz/1V	2.730	0.90	0.55
ALNR1050S102MT	1000	20	100KHz/1V	3.420	0.80	0.50

**Note:**

Rated current: Isat or Irms, whichever is smaller.

Isat: DC current at which the inductance drops approximate 30% from its value without current.

Irms: DC current that causes the temperature rise( $\Delta T=40^{\circ}\text{C}$ ) from  $25^{\circ}\text{C}$  ambient.