■ Features

★ Metal magnetic particle forming one, the structure of the magnetic shielding

★ DC the paranoia current characteristics to cope with large current

★ Low DC resistance, loss of small gold low noise system

★ Operating frequency range up to 1MHz

★ Lead-free products, RoHS compliant

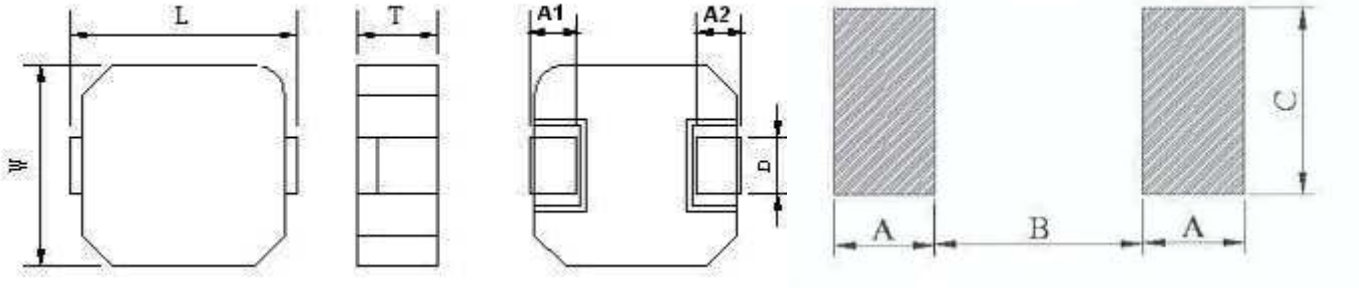
■ Application

★ PC and laptop CPU circuit DC / DC converter applications

★ Distributed power system DC / DC converter applications

★ Current point-of-load (POL) converter applications

■ Dimensions



Model	L	W	T	A1	A2	D	A	B	C
AMPLF0420	4.3 ± 0.3	4.0 ± 0.3	1.8 ± 0.2	0.8 ± 0.3	1.0 ± 0.2	1.5 ± 0.2	1.5	2.2	2.3
AMPLF0530	5.6 ± 0.3	5.0 ± 0.3	2.8 ± 0.2	1.2 ± 0.3	1.5 ± 0.2	2.3 ± 0.2	2.0	3.0	2.8
AMPLF0620	7.3 ± 0.3	6.7 ± 0.3	1.8 ± 0.2	1.5 ± 0.3	2.0 ± 0.2	3.0 ± 0.1	2.3	3.7	3.5
AMPLF0624	7.3 ± 0.3	6.7 ± 0.3	2.2 ± 0.2	1.5 ± 0.3	2.0 ± 0.2	3.0 ± 0.1	2.3	3.7	3.5
AMPLF0630	7.3 ± 0.3	6.7 ± 0.3	2.8 ± 0.2	1.5 ± 0.3	2.0 ± 0.2	3.0 ± 0.1	2.3	3.7	3.5
AMPLF0640	7.3 ± 0.3	6.7 ± 0.3	3.8 ± 0.2	1.5 ± 0.3	2.0 ± 0.2	3.0 ± 0.2	2.3	3.7	3.5
AMPLF0650	7.3 ± 0.5	6.7 ± 0.3	4.8 ± 0.2	1.5 ± 0.3	2.0 ± 0.2	3.0 ± 0.5	2.3	3.7	3.5

AMPLB/F1040	10.8 ± 0.5	10.0 ± 0.3	3.8 ± 0.2	2.2 ± 0.3	2.5 ± 0.3	3.0 ± 0.2	4.1	5.4	4.1
AMPLB/F1250	13.8 ± 0.5	12.6 ± 0.3	4.8 ± 0.3	2.5 ± 0.3	3.2 ± 0.2	3.7 ± 0.5	3.5	8.0	4.6
AMPLB/F1260	13.8 ± 0.5	12.6 ± 0.3	5.8 ± 0.3	2.5 ± 0.3	3.2 ± 0.2	3.7 ± 0.5	3.5	8.0	4.6

■ **AMPLF0420 Series (Characteristics)**

Model	Inductance (μH)@0A	Tolerance	DC resistance m Ω (± 7%)	Saturation current Typical (A)	Heat rating current Typical (A)
AMPLF0420-R47	0.47	±20%	14	9.0	7.0
AMPLF0420-1R0	1.00	±20%	24	5.5	4.5
AMPLF0420-1R5	1.50	±20%	45	4.5	3.7
AMPLF0420-2R2	2.20	±20%	60	3.5	3.0
AMPLF0420-3R3	3.30	±20%	77	2.6	2.5
AMPLF0420-4R7	4.70	±20%	105	2.4	2.0

AMPLF0530 Series (Characteristics)

Model	Inductance (μH)@0A	Tolerance	DC resistance m Ω (± 7%)	Saturation current Typical (A)	Heat rating current Typical (A)
AMPLF0530-1R0	1.00	±20%	10	7.5	7.0
AMPLF0530-1R5	1.50	±20%	16.5	6.5	6.0
AMPLF0530-2R2	2.20	±20%	24.0	6.0	5.5
AMPLF0530-3R3	3.30	±20%	34.0	4.8	4.5
AMPLF0530-4R7	4.70	±20%	55.0	3.5	3.2
AMPLF0530-100	100	±20%	107.0	2.4	2.1

AMPLF0620 Series (Characteristics)

Model	Inductance (μH)@0A	Tolerance	DC resistance m Ω (± 7%)	Saturation current Typical (A)	Heat rating current Typical (A)
AMPLF0620-1R0	1.00	±20%	18	9.0	7.0
AMPLF0620-1R5	1.50	±20%	24	6.5	5.5
AMPLF0620-2R2	2.20	±20%	37	5.5	4.5
AMPLF0620-3R3	3.30	±20%	50	4.3	3.5

AMPLF0620-4R7	4.70	±20%	70	4.0	3.0
AMPLF0620-6R8	6.80	±20%	115	2.8	2.3

AMPLF0624 Series (Characteristics)

Model	Inductance (μH)@0A	Tolerance	DC resistance m Ω (± 7%)	Saturation current Typical (A)	Heat rating current Typical (A)
AMPLF0624-2R2	2.20	±20%	24	6.5	5.7
AMPLF0624-3R3	3.30	±20%	36	5.0	4.3
AMPLF0624-4R7	4.70	±20%	60	4.3	3.5
AMPLF0624-6R8	6.80	±20%	79	3.5	3.1
AMPLF0624-100	10	±20%	95	2.8	2.7

AMPLF0630 Series (Characteristics)

Model	Inductance (μH)@0A	Tolerance	DC resistance m Ω (± 7%)	Saturation current Typical (A)	Heat rating current Typical (A)
AMPLF0630-R20	0.20	±20%	1.9	24.0	20.0
AMPLF0630-R33	0.33	±20%	3.0	20.0	18.0
AMPLF0630-R47	0.47	±20%	4.0	18.0	16.0
AMPLF0630-R56	0.56	±20%	4.1	16.5	15.5
AMPLF0630-R68	0.68	±20%	5.0	15.5	12.0
AMPLF0630-1R0	1.00	±20%	7.0	12.5	11.5
AMPLF0630-1R5	1.50	±20%	11.5	10.9	9.2
AMPLF0630-2R2	2.20	±20%	14.0	8.2	8.0
AMPLF0630-3R3	3.30	±20%	25.5	7.6	6.1
AMPLF0630-4R7	4.70	±20%	36.0	6.3	5.0
AMPLF0630-6R8	6.80	±20%	53.0	4.9	4.3
AMPLF0630-8R2	8.20	±20%	59.5	3.8	3.6
AMPLF0630-100	10.0	±20%	69.5	3.6	3.6
AMPLF0630-150	15.0	±20%	110.0	2.9	2.7
AMPLF0630-220	22.0	±20%	150.0	2.5	2.3
AMPLF0630-330	33.0	±20%	220.0	2.2	1.8

AMPLF0640 Series (Characteristics)

Model	Inductance (μH)@0A	Tolerance	DC resistance m Ω (± 7%)	Saturation current Typical (A)	Heat rating current Typical (A)
AMPLF0640-1R5	1.50	±20%	7.7	11.0	10.0
AMPLF0640-2R2	2.20	±20%	11.5	9.5	8.5
AMPLF0640-3R3	3.30	±20%	19.0	9.0	8..0
AMPLF0640-4R7	4.70	±20%	32.0	7.0	6.0
AMPLF0640-100	10.0	±20%	62.0	4.0	4.0
AMPLF0640-150	15.0	±20%	92.0	3.5	3.1

AMPLF0650 Series (Characteristics)

Model	Inductance (μH)@0A	Tolerance	DC resistance m Ω (± 7%)	Saturation current Typical (A)	Heat rating current Typical (A)
AMPLF0650-1R0	1.00	±20%	5.8	15.0	12.5
AMPLF0650-1R5	1.50	±20%	7.5	12.0	11.0
AMPLF0650-2R2	2.20	±20%	10.5	11.0	10.0
AMPLF0650-3R3	3.30	±20%	17.0	9.0	8.0
AMPLF0650-4R7	4.70	±20%	22.5	8.0	6.5
AMPLF0650-5R6	5.60	±20%	31.0	7.0	6.0
AMPLF0650-6R8	6.80	±20%	36.0	6.0	5.5
AMPLF0650-8R2	8.20	±20%	40.0	5.5	5.0
AMPLF0650-100	10.0	±20%	48.0	5.2	4.5
AMPLF0650-150	15.0	±20%	75.0	4.5	3.3
AMPLF0650-180	18.0	±20%	95.0	4.0	3.0
AMPLF0650-220	22.0	±20%	115.0	3.4	2.6
AMPLF0650-330	33.0	±20%	170.0	2.8	2.2
AMPLF0650-470	47.0	±20%	230.0	2.1	1.5

AMPLF1040 Series (Characteristics)

Model	Inductance (μH)@0A	Tolerance	DC resistance mΩ (± 7% Typ.)	Saturation current Typical (A)	Heat Rating Current Typical (A)
AMPLB1040-R22	0.22	±20%	0.90	45	35
AMPLB1040-R33	0.33	±20%	1.0	38	30
AMPLB1040-R36	0.36	±20%	1.11	35	28
AMPLB1040-R47	0.47	±20%	1.20	28	24
AMPLB1040-R56	0.56	±20%	1.70	27	23
AMPLB1040-R68	0.68	±20%	2.10	25	22
AMPLB1040-1R0	1.00	±20%	3.00	23	20
AMPLF1040-1R5	1.50	±20%	4.70	18	15
AMPLF1040-2R2	2.20	±20%	6.50	13.5	12.0
AMPLF1040-3R3	3.30	±20%	11.0	12.0	10.0
AMPLF1040-4R7	4.70	±20%	14.0	10.5	9.0
AMPLF1040-6R8	6.80	±20%	20.7	8.5	7.2
AMPLF1040-8R2	8.20	±20%	25.0	6.5	6.0
AMPLF1040-100	10.0	±20%	30.0	6.0	5.3
AMPLF1040-150	15.0	±20%	45.0	5.4	4.5
AMPLF1040-220	22.0	±20%	62.0	4.5	4.0
AMPLF1040-330	33.0	±20%	95.0	4.0	3.5
AMPLF1040-470	47.0	±20%	150.0	3.0	2.5
AMPLF1040-680	47.0	±20%	190.0	2.3	2.0
AMPLF1040-101	100.0	±20%	300.0	1.5	1.2

AMPLF1250 Series (Characteristics)

Model	Inductance (μH)@0A	Tolerance	DC resistance mΩ (± 7% Typ.)	Saturation current Typical (A)	Heat Rating Current Typical (A)
AMPLB1250-R36	0.36	±20%	0.80	38.0	32.0
AMPLB1250-R47	0.47	±20%	1.10	35.0	27.0
AMPLB1250-R68	0.68	±20%	1.40	30.0	25.0
AMPLB1250-R82	0.82	±20%	1.60	29.0	23.5
AMPLB1250-1R0	1.00	±20%	1.80	24.0	23.0
AMPLB1250-1R5	1.50	±20%	2.70	20.0	17.0
AMPLB1250-2R2	2.20	±20%	3.70	17.0	14.0
AMPLF1250-3R3	3.30	±20%	7.50	15.0	13.0
AMPLF1250-4R7	4.70	±20%	8.8	12.5	11.5
AMPLF1250-6R8	6.80	±20%	15.0	10.0	8.0
AMPLF1250-100	10.00	±20%	21.0	7.0	6.0

AMPLF1260 Series (Characteristics)

Model	Inductance (μH)@0A	Tolerance	DC resistance mΩ (± 7%)	Saturation current Typical (A)	Heat Rating Current Typical (A)
AMPLB1260-R44	0.44	±20%	0.80	40.0	38.0
AMPLB1260-R68	0.68	±20%	1.25	38.0	32.0
AMPLB1260-1R0	1.00	±20%	1.75	25.0	24.0
AMPLB1260-1R5	1.50	±20%	2.45	21.0	18.0
AMPLB1260-2R2	2.20	±20%	3.4	18.0	16.0
AMPLF1260-3R3	3.30	±20%	7.0	15	14.0
AMPLF1260-4R7	4.70	±20%	8.5	13	12.0
AMPLF1260-5R6	5.60	±20%	10.0	12	10.0
AMPLF1260-6R8	6.80	±20%	12.0	11.0	9.0
AMPLF1260-8R0	8.00	±20%	14.0	9.5	8.0
AMPLF1260-100	10.0	±20%	17.5	8.0	7.5
AMPLF1260-120	12.0	±20%	23.0	8.0	6.0
AMPLF1260-150	15.0	±20%	30.0	7.5	6.0
AMPLF1260-220	22.0	±20%	38.0	6.0	5.0
AMPLF1260-330	33.0	±20%	53.0	5.0	4.0
AMPLF1260-470	47.0	±20%	82.0	4.3	3.5
AMPLF1260-680	68.0	±20%	120.0	3.5	3.0
AMPLF1260-101	100	±20%	185.0	3.0	2.5
AMPLF1260-121	120	±20%	220.0	2.5	2.0
AMPLF1260-151	150	±20%	340.0	2.3	2.0

■ Part Number and Ordering

Part Number Code	Model
Ordering Code	Power inductor + Coil code+ Dimensions+ Product Height + Normal Inductance + Inductance Tolerance + Package
Example	AMPLF0620-1R0+M+R1

■ Code Description.

Code	Description
Power Inductor	AMPL
Coil Code	A / B/ F
Dimension.	
12 / 10/ 06/ 05/ 04	13.8 X 12.6 / 10.8 X 10.0 / 7.3 X 6.7/ 5.6 X 5.0/ 4.3X4.0
Product Height	
50/ 40/ 30/ 20	5.0 / 4.0 /3.0 / 2.0
Normal Inductance.	
R10 /1R0/ 100 /101 / 102/ 103	0.1uH / 1.0uH / 10uH / 1000uH / 10000uH
Inductance Tolerance	
J/ K/ L/ M/ N	±5% / ±10% / ±15% / ±20% / ±30%
Package	
R1 / T1	Tape and Reel / Tray

Note:

- Inductance is measured with a Q meter, LCR meter or an impedance analyzer, Test Frequency: 100KHz
- DC resistance is measured with a digital DCR analyzer.
- Saturation current Isat that will cause L0 to approximately drop 20%.
- Heat rating current (Irms) that will cause a temperature rise △T of 40℃ approximately.
- Operating temperature range -55℃ to -155℃.
- Withstanding voltage: 30V DC max.