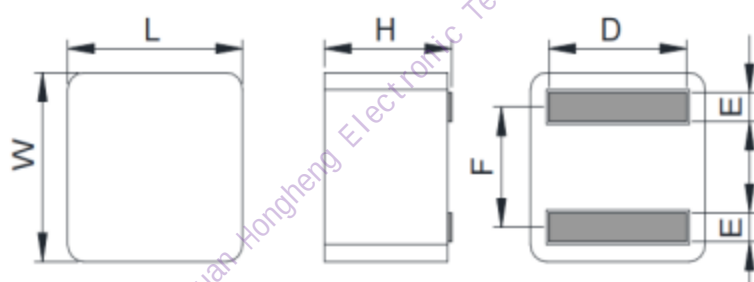
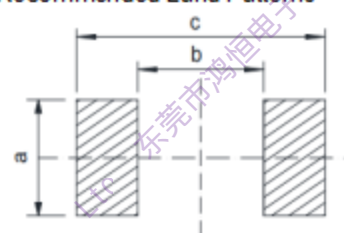


Features:

- Alloy powder DC-DC Converter shielded inductors.
- A wide range of product line up is available to meet the various requirements.
- High saturation current.
- Flat wire, Super low DCR, high efficiency.
- Very low acoustic noise and very low leakage flux noise.
- Ideally used in flat TV, LCD display, AV devices, car navigation, LED lighting, smart screen, power modules.
- RoHS compliant.

Appearance dimensions (mm, dimensions without tolerance are typical):

Recommended Land Patterns



Type	L	W	H	D	E	F	a	b	c	MPQ(pcs)
MTA0402	4.1	4.1	2.15	3.4	0.88	1.6	3.8	1.4	3.4	3000
MTA0403	4.1	4.1	3.1	3.4	0.88	1.6	3.8	1.4	3.4	2000
MTA0502	5.5	5.5	2.15	4.3	1.1	2.3	4.7	2.0	4.5	3000
MTA0503	5.5	5.5	3.1	4.3	1.1	2.3	4.7	2.0	4.5	2000
MTA0505	5.5	5.5	5.0	4.3	1.1	2.3	4.7	2.0	4.5	1500
MTA0603	6.6	6.4	3.1	5.3	1.4	2.6	5.6	2.5	5.6	1000
MTA0605	6.6	6.4	5.0	5.3	1.4	2.6	5.6	2.5	5.6	800
MTA0606	6.6	6.4	6.0	5.3	1.4	2.6	5.6	2.5	5.6	750
MTA0703	7.8	7.6	3.1	6.5	1.75	3.15	7.2	2.8	7.4	1500
MTA0707	7.8	7.6	7.0	6.5	1.75	3.15	7.2	2.8	7.4	700
MTA1010	11.9	11.0	10.0	9.0	2.4	6.6	11.0	3.7	10.5	300
MTA1508	16.5	15.5	8.0	13.2	3.2	7.4	15.0	6.0	15.0	200
MTA1510	16.5	15.5	10.0	13.2	3.2	7.4	15.0	6.0	15.0	150

MAT0402 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA0402-R10M	0.10	20%	2.42	28.10	33.00	15.30	18.00
MTA0402-R22M	0.22	20%	4.60	16.00	18.80	14.30	16.80
MTA0402-R36M	0.36	20%	6.30	12.80	15.00	12.30	14.50
MTA0402-R40M	0.40	20%	7.73	11.50	13.50	11.90	14.00
MTA0402-R47M	0.47	20%	8.58	11.10	13.00	10.60	12.50
MTA0402-R56M	0.56	20%	9.30	10.70	12.60	10.20	12.00
MTA0402-R60M	0.60	20%	9.52	10.50	12.30	9.90	11.70
MTA0402-R72M	0.72	20%	11.6	9.00	10.60	8.90	10.50
MTA0402-1R0M	1.00	20%	14.6	7.50	8.80	8.20	9.60
MTA0402-1R2M	1.20	20%	17.9	6.60	7.80	7.70	9.00
MTA0402-1R5M	1.50	20%	23.5	6.30	7.40	6.50	7.60
MTA0402-1R8M	1.80	20%	28.0	6.00	7.00	6.00	7.00
MTA0402-2R2M	2.20	20%	38.7	5.10	6.00	4.80	5.60

MAT0403 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA0403-R75M	0.75	20%	10.8	7.70	9.00	8.50	10.00
MTA0403-1R0M	1.00	20%	12.8	8.50	10.00	8.50	10.00
MTA0403-2R2M	2.20	20%	20.8	6.00	7.00	6.10	7.20
MTA0403-3R3M	3.30	20%	28.6	4.70	5.50	5.60	6.60
MTA0403-4R7M	4.70	20%	44.1	3.80	4.50	4.30	5.10
MTA0403-6R8M	6.80	20%	74.1	3.10	3.60	3.30	3.90

MAT0502 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA0502-R15M	0.15	20%	4.60	23.00	27.00	16.00	18.80
MTA0502-R33M	0.33	20%	7.00	20.40	24.00	12.20	14.40
MTA0502-R47M	0.47	20%	8.10	17.00	20.00	12.00	14.10
MTA0502-R56M	0.56	20%	9.50	13.60	16.00	11.80	13.90
MTA0502-R68M	0.68	20%	10.2	11.90	14.00	11.40	13.40
MTA0502-R82M	0.82	20%	12.7	11.10	13.00	10.20	12.00
MTA0502-1R0M	1.00	20%	13.8	10.90	12.80	8.90	10.50
MTA0502-1R2M	1.20	20%	16.3	10.40	12.20	8.00	9.40

MAT0503 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA0503-R15M	0.15	20%	2.31	27.60	32.50	18.90	22.20
MTA0503-R33M	0.33	20%	3.52	22.10	26.00	16.30	19.20
MTA0503-R47M	0.47	20%	4.13	20.40	24.00	15.60	18.40
MTA0503-R56M	0.56	20%	4.52	17.20	20.20	15.00	17.70
MTA0503-R60M	0.60	20%	4.52	17.00	20.00	15.00	17.70
MTA0503-R82M	0.82	20%	5.78	15.00	17.60	11.00	12.90
MTA0503-1R0M	1.00	20%	7.60	12.20	14.30	10.40	12.20
MTA0503-1R2M	1.20	20%	9.70	11.50	13.50	9.40	11.00
MTA0503-1R5M	1.50	20%	11.2	10.60	12.50	8.90	10.50
MTA0503-1R8M	1.80	20%	12.7	9.60	11.30	8.60	10.10
MTA0503-2R2M	2.20	20%	14.5	7.70	9.00	8.20	9.70
MTA0503-3R3M	3.30	20%	23.1	7.40	8.70	6.90	8.10
MTA0503-4R7M	4.70	20%	36.3	6.00	7.00	5.00	5.90

MAT0505 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA0505-5R6M	5.60	20%	24.2	6.10	7.20	6.10	7.20
MTA0505-6R8M	6.80	20%	28.6	5.60	6.60	5.40	6.40
MTA0505-8R2M	8.20	20%	32.5	5.20	6.10	5.20	6.10
MTA0505-100M	10.0	20%	43.0	4.60	5.40	4.30	5.00

MAT0603 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA0603-R18M	0.18	20%	1.75	33.20	39.00	27.20	32.00
MTA0603-R33M	0.33	20%	2.50	25.50	30.00	21.30	25.00
MTA0603-R56M	0.56	20%	3.31	24.70	29.00	18.70	22.00
MTA0603-R68M	0.68	20%	5.17	21.30	25.00	17.00	20.00
MTA0603-1R0M	1.00	20%	6.05	19.60	23.00	15.30	18.00
MTA0603-1R2M	1.20	20%	7.40	18.70	22.00	13.60	16.00
MTA0603-1R5M	1.50	20%	9.13	17.00	20.00	12.80	15.00
MTA0603-1R8M	1.80	20%	10.2	15.50	18.20	11.90	14.00
MTA0603-2R2M	2.20	20%	12.2	13.50	15.90	8.50	10.00
MTA0603-3R3M	3.30	20%	20.8	10.40	12.20	6.80	8.00
MTA0603-4R5M	4.50	20%	25.3	8.50	10.00	6.00	7.00
MTA0603-4R7M	4.70	20%	26.0	7.70	9.00	5.10	6.00

MAT0605 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA0605-R82M	0.82	20%	4.18	17.00	20.00	17.90	21.00
MTA0605-1R0M	1.00	20%	4.52	15.30	18.00	17.00	20.00
MTA0605-1R2M	1.20	20%	5.83	13.60	16.00	15.30	18.00
MTA0605-1R5M	1.50	20%	6.30	12.30	14.50	14.50	17.00
MTA0605-1R8M	1.80	20%	7.10	11.50	13.50	13.60	16.00
MTA0605-2R2M	2.20	20%	8.50	10.20	12.00	11.10	13.00
MTA0605-3R3M	3.30	20%	12.5	8.50	10.00	9.40	11.00
MTA0605-4R3M	4.30	20%	16.2	7.20	8.50	7.70	9.00
MTA0605-4R7M	4.70	20%	18.4	6.80	8.00	7.20	8.50
MTA0605-5R6M	5.60	20%	22.0	7.10	8.30	6.00	7.00
MTA0605-6R8M	6.80	20%	25.4	6.00	7.00	5.60	6.60
MTA0605-8R2M	8.20	20%	31.5	5.80	6.80	5.30	6.20

MAT0606 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA0606-4R7M	4.70	20%	14.4	8.90	10.50	9.40	11.00
MTA0606-5R6M	5.60	20%	15.9	8.40	9.90	8.50	10.00
MTA0606-6R8M	6.80	20%	20.8	7.80	9.20	7.70	9.00
MTA0606-8R2M	8.20	20%	26.4	7.10	8.40	6.80	8.00
MTA0606-100M	10.0	20%	29.8	6.50	7.60	6.00	7.00
MTA0606-150M	15.0	20%	43.8	4.90	5.80	5.10	6.00
MTA0606-220M	22.0	20%	60.6	4.80	5.60	4.30	5.00

MAT0703 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA0703-1R0M	1.00	20%	5.00	23.80	28.00	18.50	21.80
MTA0703-1R5M	1.50	20%	8.25	20.00	23.50	13.00	15.30
MTA0703-2R2M	2.20	20%	13.7	14.50	17.00	11.10	13.00
MTA0703-2R7M	2.70	20%	15.4	11.50	13.50	9.70	11.40
MTA0703-3R3M	3.30	20%	18.0	11.10	13.00	8.50	10.00
MTA0703-4R7M	4.70	20%	26.7	10.40	12.20	7.70	9.00
MTA0703-5R6M	5.60	20%	33.2	9.80	11.50	6.20	7.30
MTA0703-6R8M	6.80	20%	42.5	9.40	11.00	5.80	6.80
MTA0703-8R2M	8.20	20%	48.7	7.70	9.00	5.00	5.90

MAT0707 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA0707-3R3M	3.30	20%	9.42	16.50	19.40	12.80	15.10
MTA0707-4R7M	4.70	20%	14.3	12.90	15.20	11.60	13.60
MTA0707-6R8M	6.80	20%	19.6	10.90	12.80	7.80	9.20
MTA0707-3R3M	3.30	20%	9.42	16.50	19.40	12.80	15.10
MTA0707-4R7M	4.70	20%	14.3	12.90	15.20	11.60	13.60
MTA0707-6R8M	6.80	20%	19.6	10.90	12.80	7.80	9.20

MAT1010 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA1010-1R0M	1.00	20%	1.20	42.50	50.00	34.00	40.00
MTA1010-2R2M	2.20	20%	2.80	28.90	34.00	27.20	32.00
MTA1010-3R3M	3.30	20%	4.10	23.30	27.40	21.30	25.00
MTA1010-4R7M	4.70	20%	5.70	21.60	25.40	20.40	24.00
MTA1010-5R6M	5.60	20%	7.20	20.10	23.60	18.00	21.20
MTA1010-6R8M	6.80	20%	8.90	18.50	21.80	15.70	18.50
MTA1010-8R2M	8.20	20%	12.4	15.60	18.30	14.50	17.10
MTA1010-100M	10.0	20%	13.8	14.90	17.50	13.20	15.50
MTA1010-150M	15.0	20%	19.3	13.20	15.50	11.70	13.80

MAT1508 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA1508-2R0M	2.00	20%	2.20	44.20	52.00	34.00	40.00
MTA1508-2R2M	2.20	20%	2.50	41.70	49.00	31.50	37.00
MTA1508-3R0M	3.00	20%	3.00	34.90	41.00	29.30	34.50
MTA1508-4R2M	4.20	20%	4.70	28.10	33.00	23.00	27.00
MTA1508-4R7M	4.70	20%	5.20	27.20	32.00	22.50	26.50
MTA1508-5R3M	5.30	20%	5.30	26.40	31.00	22.10	26.00
MTA1508-6R2M	6.20	20%	6.50	26.40	31.00	19.60	23.00
MTA1508-7R2M	7.20	20%	7.20	24.70	29.00	17.90	21.00
MTA1508-8R2M	8.20	20%	7.90	21.30	25.00	16.20	19.00

MAT1510 Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (%)	DCR (mΩ)Max.	Isat (A)Max.	Isat (A)Typ.	Irms (A)Max.	Irms (A)Typ.
MTA1510-4R7M	4.70	20%	3.80	33.20	39.00	24.70	29.00
MTA1510-5R6M	5.60	20%	4.20	31.50	37.00	23.80	28.00
MTA1510-6R8M	6.80	20%	4.60	30.60	36.00	22.10	26.00
MTA1510-8R2M	8.20	20%	7.20	25.50	30.00	20.40	24.00
MTA1510-100M	10.0	20%	8.60	22.50	26.50	18.70	22.00
MTA1510-150M	15.0	20%	11.5	19.60	23.00	15.30	18.00
MTA1510-220M	22.0	20%	15.8	15.90	18.70	11.90	14.00
MTA1510-330M	33.0	20%	20.0	14.20	16.70	10.20	12.00

Remarks:

- * All test data is referenced to 25°C ambient temperature .
- * Test equipment: VC4092B, TH2516B, HP4284/HP4284A ,HP4285 or equivalent.
- * Inductance: at 100kHz/1.0Vrms.
- * Isat: DC current at which the inductance drops 30% from its initial value without current.
- * I rms: DC current that causes the temperature rise ($\Delta T=40^{\circ}\text{C}$) from 25°C.