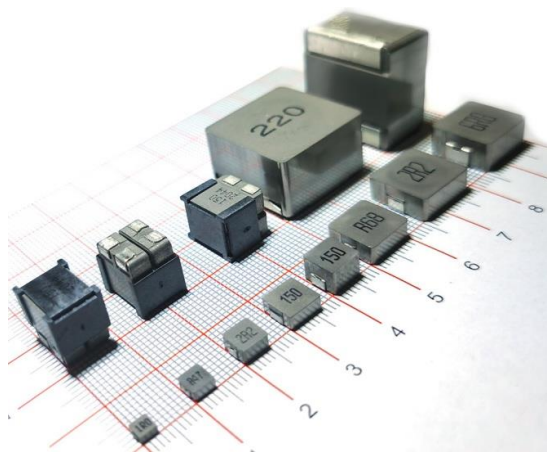


MTA Series

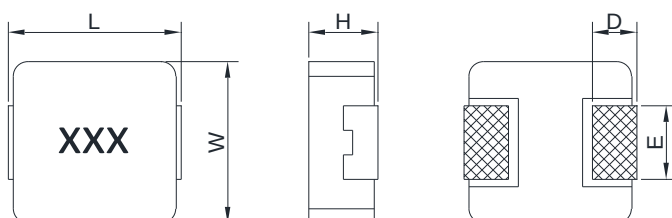
SMD Molding Power Inductors

Product Outline

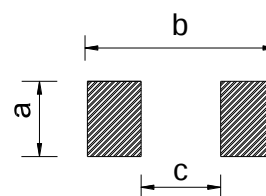
- Alloy powder DC-DC Converter shielded inductors.
- A wide range of product line up is available to meet the various requirements.
- High saturation current, low DCR, high efficiency.
- Very low acoustic noise and very low leakage flux noise.
- Ideally used in flat TV, LCD display, AV devices, car navigation,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



Dimensions(mm)



Recommended Patterns



Type	L	W	H	D	E	a	b	c	Packaging (pcs/reel)
MTA3015S	3.4±0.2	3.0±0.2	1.3±0.2	0.7	1.3	2.0	4.2	1.2	3000
MTA4012S	4.4±0.35	4.2±0.25	1.0±0.2	1.0	2.0	2.5	5.2	2.2	3000
MTA4020S	4.4±0.35	4.2±0.25	1.8±0.2	1.0	2.0	2.5	5.2	2.2	3000
MTA5018S	5.4±0.35	5.2±0.25	1.6±0.2	1.2	2.2	2.5	6.0	2.2	2000
MTA5030S	5.4±0.35	5.2±0.25	2.8±0.2	1.2	2.2	2.5	6.0	2.2	2000
MTA6018S	7.1±0.4	6.6±0.2	1.6±0.2	1.6	3.0	3.5	8.4	3.7	2000
MTA6020S	7.1±0.4	6.6±0.2	1.8±0.2	1.6	3.0	3.5	8.4	3.7	2000
MTA6024S	7.1±0.4	6.6±0.2	2.2±0.2	1.6	3.0	3.5	8.4	3.7	1500
MTA6030S	7.1±0.4	6.6±0.2	2.8±0.2	1.6	3.0	3.5	8.4	3.7	1000
MTA6040S	7.1±0.4	6.6±0.2	3.8±0.2	1.6	3.0	3.5	8.4	3.7	1000
MTA6050S	7.1±0.4	6.6±0.2	4.8±0.2	1.6	3.0	3.5	8.4	3.7	1000
MTA8040S	8.5±0.5	8.0±0.2	3.8±0.2	1.8	3.0	3.5	9.5	4.0	1000
MTA8050S	8.5±0.5	8.0±0.2	4.8±0.2	1.8	3.0	3.5	9.5	4.0	1000
MTA1030S	11.5 Max	10.0±0.3	2.8±0.2	2.0	3.0	3.5	13.6	5.4	1000
MTA1040S	11.5 Max	10.0±0.3	3.8±0.2	2.0	3.0	3.5	13.6	5.4	1000
MTA1050S	11.5 Max	10.0±0.3	4.8±0.2	2.0	3.0	3.5	13.6	5.4	800
MTA1240S	13.45±0.35	12.8±0.5	4.0 Max.	2.2	3.8	4.5	14.5	8.0	800
MTA1250S	13.45±0.35	12.6±0.5	4.8±0.2	2.2	3.8	4.5	14.5	8.0	500
MTA1260S	13.45±0.35	12.6±0.5	5.8±0.2	2.2	3.8	4.5	14.5	8.0	500
MTA1265S	13.45±0.35	12.6±0.5	6.5 Max.	2.2	3.8	4.5	14.5	8.0	500
MTA1707S	17.15±0.35	17.2 Max	7.0 Max	2.5	12.0	12.8	18.2	11.2	200

Dimensions without tolerance are typical.

Product Identification

MTA **1040** **S** - **6R8** **M** **C** **S**

① ② ③ ④ ⑤ ⑥ ⑦

- ① Product Series No.
- ② Dimension symbol:1040=10.0 x 3.8 mm (W x H)
- ③ Internal control code.
- ④ Inductance value:100=10×10⁰ uH=10uH,6R8=6.8uH
- ⑤ Tolerance:M=±20%,N=±30%,P=±35%
- ⑥ Packing Style:T=Taping, B=Bulk
- ⑦ Characteristic parameter level.

MTA3015S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA3015S-R22MCS	0.22	±20%	13	11.2	14.0	8.8	11.0
MTA3015S-R33MCS	0.33	±20%	18	9.2	11.5	6.8	8.5
MTA3015S-R47MCS	0.47	±20%	22	7.2	9.0	5.6	7.0
MTA3015S-1R0MCS	1.0	±20%	42	4.96	6.2	3.6	4.5
MTA3015S-1R5MCS	1.5	±20%	60	4.64	5.8	3.04	3.8
MTA3015S-2R2MCS	2.2	±20%	85	4.0	5.0	2.56	3.2
MTA3015S-3R3MCS	3.3	±20%	110	2.8	3.5	1.76	2.2
MTA3015S-100MCS	10.0	±20%	360	1.6	2.0	0.96	1.2

MTA4012S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA4012S-R15MCS	0.15	±20%	9.0	12.0	15.0	6.8	7.5
MTA4012S-R22MCS	0.22	±20%	11	8.8	11.0	6.5	7.0
MTA4012S-R33MCS	0.33	±20%	19	6.7	8.4	5.7	6.5
MTA4012S-R47MCS	0.47	±20%	21	5.4	6.8	5.2	6.0
MTA4012S-R68MCS	0.68	±20%	36	4.8	6.0	4.2	4.7
MTA4012S-1R0MCS	1.0	±20%	47	4.4	5.5	3.8	4.5
MTA4012S-1R5MCS	1.5	±20%	75	3.2	4.0	2.7	3.25
MTA4012S-2R2MCS	2.2	±20%	83.5	2.4	3.0	2.2	2.75
MTA4012S-4R7MCS	4.7	±20%	195	1.8	2.2	1.45	1.8

- ① Inductance tested at 100kHz, 0.5 Vrms using an Agilent/HP 4192A or equivalent.
- ② DCR measured on a micro-ohmmeter.
- ③ Isat: The DC current at which the inductance decreases by 30% of it's initial value.
- ④ Irms: The DC current at which Δt=40℃.

All specifications are subject to change without notice.

MTA Series

SMD Molding Power Inductors

MTA4020S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA4020S-R10MCS	0.10	±20%	4.0	17.6	22.0	11.2	13.0
MTA4020S-R22MCS	0.22	±20%	6.6	10.0	12.5	9.0	10.5
MTA4020S-R33MCS	0.33	±20%	11	9.6	12.0	8.6	10.0
MTA4020S-R47MCS	0.47	±20%	14	7.6	9.5	6.65	7.5
MTA4020S-R56MCS	0.56	±20%	16	7.2	9.0	6.1	7.0
MTA4020S-R68MCS	0.68	±20%	18	6.4	8.0	6.15	7.0
MTA4020S-1R0MCS	1.0	±20%	27	5.6	7.0	5.4	6.0
MTA4020S-1R2MCS	1.2	±20%	27	5.2	6.5	5.4	6.0
MTA4020S-1R5MCS	1.5	±20%	46	4.4	5.5	4.3	5.0
MTA4020S-2R2MCS	2.2	±20%	58	4.0	5.0	3.8	4.5
MTA4020S-3R3MCS	3.3	±20%	87	2.8	3.5	2.8	3.3
MTA4020S-4R7MCS	4.7	±20%	105	2.4	3.0	2.2	2.8
MTA4020S-6R8MCS	6.8	±20%	175	2.0	2.5	1.9	2.4
MTA4020S-100MCS	10	±20%	282	1.6	2.0	1.3	1.6
MTA4020S-220MCS	22	±20%	363	1.12	1.4	0.9	1.2

MTA5018S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA5018S-R47MCS	0.47	±20%	9.0	9.6	12.0	9.5	10.5
MTA5018S-R56MCS	0.56	±20%	10	8.8	11.0	8.2	8.5
MTA5018S-1R0MCS	1.0	±20%	17	7.2	9.0	7.2	8.0
MTA5018S-1R5MCS	1.5	±20%	26	6.4	8.0	6.6	7.5
MTA5018S-2R2MCS	2.2	±20%	35	4.8	6.0	4.2	5.0
MTA5018S-3R3MCS	3.3	±20%	58	3.84	4.8	3.8	4.5
MTA5018S-4R7MCS	4.7	±20%	85	3.2	4.0	3.0	3.5
MTA5018S-6R8MCS	6.8	±20%	120	2.72	3.4	2.4	2.8
MTA5018S-100MCS	10	±20%	155	2.0	2.5	2.2	2.5

MTA5030S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA5030S-R10MCS	0.10	±20%	3.0	24.0	30.0	23.0	25.0
MTA5030S-R20MCS	0.20	±20%	3.9	16.0	20.0	13.0	14.0
MTA5030S-R33MCS	0.33	±20%	5.5	14.4	18.0	13.1	14.0
MTA5030S-R47MCS	0.47	±20%	8.5	12.0	15.0	10.0	11.0
MTA5030S-R68MCS	0.68	±20%	12	9.2	11.5	8.2	9.0
MTA5030S-1R0MCS	1.0	±20%	14	8.0	10.0	7.8	8.5
MTA5030S-1R2MCS	1.2	±20%	16	7.6	9.5	7.85	8.5
MTA5030S-1R5MCS	1.5	±20%	25	7.2	9.0	7.6	8.2
MTA5030S-2R2MCS	2.2	±20%	29	5.6	7.0	6.4	7.0
MTA5030S-3R3MCS	3.3	±20%	38	4.8	6.0	5.5	5.5
MTA5030S-4R7MCS	4.7	±20%	60	3.68	4.6	4.0	4.5
MTA5030S-6R8MCS	6.8	±20%	90	2.88	3.6	2.9	3.5
MTA5030S-100MCS	10	±20%	125	2.8	3.5	2.8	3.2

All specifications are subject to change without notice.

MTA Series

SMD Molding Power Inductors

MTA6018S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA6018S-R10MCS	0.10	±20%	2.3	30.4	38.0	23.0	25.0
MTA6018S-R22MCS	0.22	±20%	3.5	19.2	24.0	20.0	22.0
MTA6018S-R47MCS	0.47	±20%	8.4	14.4	18.0	10.0	11.5
MTA6018S-R68MCS	0.68	±20%	12	13.2	16.5	8.4	9.5
MTA6018S-1R0MCS	1.0	±20%	16	9.6	12.0	7.6	8.5
MTA6018S-1R5MCS	1.5	±20%	26	7.36	9.2	7.1	8.0
MTA6018S-2R2MCS	2.2	±20%	35	6.4	8.0	6.2	7.0
MTA6018S-3R3MCS	3.3	±20%	50	4.8	6.0	3.8	4.5
MTA6018S-4R7MCS	4.7	±20%	62	4.0	5.0	3.5	4.0
MTA6018S-6R8MCS	6.8	±20%	110	3.6	4.5	2.4	3.0
MTA6018S-100MCS	10	±20%	155	3.2	4.0	1.95	2.3
MTA6018S-220MCS	22	±20%	350	1.84	2.3	1.4	1.8

MTA6020S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA6020S-4R7MCS	4.7	±20%	60	4.4	5.5	3.44	4.3
MTA6020S-100MCS	10	±20%	145	3.2	4.0	2.24	2.8

MTA6024S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA6024S-R22MCS	0.22	±20%	3.0	24.0	30.0	19.0	21.0
MTA6024S-R33MCS	0.33	±20%	4.1	19.6	24.5	16.0	18.0
MTA6024S-R47MCS	0.47	±20%	5.1	16.0	20.0	13.5	15.0
MTA6024S-R56MCS	0.56	±20%	6.5	13.6	17.0	11.5	13.0
MTA6024S-R68MCS	0.68	±20%	7.0	12.8	16.0	10.5	12.0
MTA6024S-1R0MCS	1.0	±20%	13.5	12.0	15.0	8.0	9.0
MTA6024S-1R5MCS	1.5	±20%	20	10.8	13.5	7.0	8.2
MTA6024S-2R2MCS	2.2	±20%	28	8.0	10.0	6.2	7.0
MTA6024S-3R3MCS	3.3	±20%	39	6.4	8.0	4.8	5.5
MTA6024S-4R7MCS	4.7	±20%	50	5.2	6.5	4.3	5.0
MTA6024S-6R8MCS	6.8	±20%	70	4.8	6.0	3.2	4.0
MTA6024S-100MCS	10	±20%	101	3.2	4.0	2.4	3.1
MTA6024S-150MCS	15	±20%	160	2.64	3.3	2.0	2.5
MTA6024S-220MCS	22	±20%	230	2.0	2.5	1.6	2.0

MTA6030S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA6030S-R22MCS	0.22	±20%	3.0	27.2	34.0	21.0	24.0
MTA6030S-R33MCS	0.33	±20%	3.5	20.0	25.0	19.0	21.0
MTA6030S-R47MCS	0.47	±20%	4.1	16.0	20.0	16.5	18.0
MTA6030S-R56MCS	0.56	±20%	4.5	14.4	18.0	15.0	16.5

All specifications are subject to change without notice.

MTA Series

SMD Molding Power Inductors

MTA6030S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ) max.	I sat ③ (A) max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
MTA6030S-R68MCS	0.68	±20%	5.3	13.6	17.0	14.5	16.0
MTA6030S-R82MCS	0.82	±20%	6.0	12.8	16.0	12.5	14.0
MTA6030S-1R0MCS	1.0	±20%	7.4	12.0	15.0	10.5	12.0
MTA6030S-1R5MCS	1.5	±20%	12	9.6	12.0	10.5	12.0
MTA6030S-2R2MCS	2.2	±20%	15	8.0	10.0	8.5	9.5
MTA6030S-3R3MCS	3.3	±20%	22	7.6	9.5	7.5	8.5
MTA6030S-4R7MCS	4.7	±20%	33	7.2	9.0	5.0	6.0
MTA6030S-5R6MCS	5.6	±20%	42	5.2	6.5	4.8	5.5
MTA6030S-6R8MCS	6.8	±20%	48	4.8	6.0	4.2	5.0
MTA6030S-8R2MCS	8.2	±20%	60	4.4	5.5	4.2	5.0
MTA6030S-100MCS	10	±20%	68	4.4	5.5	3.8	4.5
MTA6030S-150MCS	15	±20%	113	3.2	4.0	2.3	3.0
MTA6030S-220MCS	22	±20%	170	2.4	3.0	2.0	2.5
MTA6030S-330MCS	33	±20%	270	2.0	2.5	1.6	2.0
MTA6030S-470MCS	47	±20%	385	1.6	2.0	1.2	1.5

MTA6040S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA6040S-R68MCS	0.68	±20%	4.8	15.2	19.0	13.6	17.0
MTA6040S-1R0MCS	1.0	±20%	6.6	12.8	16.0	10.8	13.5
MTA6040S-1R5MCS	1.5	±20%	10	10.0	12.5	9.92	12.4
MTA6040S-2R2MCS	2.2	±20%	14	8.8	11.0	7.8	10.0
MTA6040S-3R3MCS	3.3	±20%	20	7.6	9.5	6.8	8.5
MTA6040S-4R7MCS	4.7	±20%	30	7.2	9.0	6.0	6.5
MTA6040S-6R8MCS	6.8	±20%	45	5.2	6.5	4.4	5.5
MTA6040S-100MCS	10	±20%	65	4.8	6.0	3.84	4.8
MTA6040S-150MCS	15	±20%	95	3.6	4.5	2.8	3.7
MTA6040S-220MCS	22	±20%	125	3.2	4.0	2.64	3.3
MTA6040S-330MCS	33	±20%	240	2.4	3.0	1.76	2.2
MTA6040S-470MCS	47	±20%	320	2.0	2.5	1.44	1.8

MTA6050S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA6050S-R47MCS	0.47	±20%	3.9	16.8	21.0	17.0	20.0
MTA6050S-R68MCS	0.68	±20%	4.5	14.4	18.0	14.5	16.5
MTA6050S-1R0MCS	1.0	±20%	6.6	12.8	16.0	10.0	12.0
MTA6050S-1R5MCS	1.5	±20%	10	10.4	13.0	8.2	9.5
MTA6050S-2R2MCS	2.2	±20%	12.5	8.8	11.0	8.0	9.0
MTA6050S-3R3MCS	3.3	±20%	22	8.0	10.0	7.6	8.5
MTA6050S-4R7MCS	4.7	±20%	29	6.4	8.0	5.0	6.0
MTA6050S-6R8MCS	6.8	±20%	41	5.04	6.3	4.0	5.8
MTA6050S-8R2MCS	8.2	±20%	48	4.4	5.5	4.8	5.5
MTA6050S-100MCS	10	±20%	60	4.24	5.3	3.8	4.5

All specifications are subject to change without notice.

MTA Series

SMD Molding Power Inductors

MTA6050S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ) max	I sat ③ (A) max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
MTA6050S-150MCS	15	±20%	90	3.2	4.0	2.6	3.1
MTA6050S-220MCS	22	±20%	140	2.8	3.5	2.0	2.6
MTA6050S-330MCS	33	±20%	190	2.4	3.0	1.8	2.3
MTA6050S-470MCS	47	±20%	230	2.08	2.6	1.5	2.0
MTA6050S-680MCS	68	±20%	400	1.76	2.2	1.35	1.8

MTA8040S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA8040S-1R0MCS	1.0	±20%	6.5	17.0	18.0	12.8	14.0
MTA8040S-2R2MCS	2.2	±20%	10.5	13.0	15.0	11.5	12.8
MTA8040S-3R3MCS	3.3	±20%	15	11.5	12.5	9.5	10.5
MTA8040S-4R7MCS	4.7	±20%	26	10.7	11.5	7.0	8.0
MTA8040S-100MCS	10	±20%	55	7.2	8.0	5.2	5.8
MTA8040S-150MCS	15	±20%	70	5.8	7.0	4.6	5.4
MTA8040S-220MCS	22	±20%	110	4.6	5.2	3.6	4.2
MTA8040S-330MCS	33	±20%	150	3.2	3.8	2.9	3.3
MTA8040S-470MCS	47	±20%	220	2.8	3.2	1.7	2.0
MTA8040S-680MCS	68	±20%	310	2.5	3.0	1.55	1.8

MTA8050S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA8050S-1R0MCS	1.0	±20%	6.2	17.5	19.0	13.5	14.5
MTA8050S-2R2MCS	2.2	±20%	10.0	13.2	15.5	12.0	13.0
MTA8050S-3R3MCS	3.3	±20%	14.5	12.0	14.0	10.0	11.0
MTA8050S-4R7MCS	4.7	±20%	21.5	11.5	13.0	7.5	8.5
MTA8050S-100MCS	10	±20%	38	8.2	9.5	5.5	6.0
MTA8050S-150MCS	15	±20%	50	6.2	7.5	4.7	5.5
MTA8050S-220MCS	22	±20%	80	5.5	6.5	3.8	4.5
MTA8050S-330MCS	33	±20%	140	4.7	5.5	3.0	3.5
MTA8050S-470MCS	47	±20%	190	3.3	3.8	1.9	2.2
MTA8050S-680MCS	68	±20%	295	3.0	3.5	1.7	2.0
MTA8050S-101MCS	100	±20%	400	2.15	2.6	1.3	1.5

MTA1030S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA1030S-R22MCS	0.22	±20 %	1.2	40.0	50.0	28.1	33.0
MTA1030S-R33MCS	0.33	±20 %	1.6	25.6	32.0	19.6	23.0
MTA1030S-R36MCS	0.36	±20 %	1.6	22.4	28.0	19.6	23.0
MTA1030S-R47MCS	0.47	±20 %	2.5	20.8	26.0	18.7	22.0
MTA1030S-R82MCS	0.82	±20 %	3.7	18.4	23.0	15.3	18.0
MTA1030S-1R0MCS	1.0	±20 %	6	16.8	21.0	12.8	15.0

All specifications are subject to change without notice.

MTA Series

SMD Molding Power Inductors

MTA1030S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ) max.	I sat ③ (A) max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
MTA1030S-2R2MCS	2.2	±20 %	9.0	11.2	14.0	9.4	11.0
MTA1030S-3R3MCS	3.3	±20 %	16	9.6	12.0	7.7	9.0
MTA1030S-4R7MCS	4.7	±20 %	24	8.0	10.0	6.0	7.0
MTA1030S-8R2MCS	8.2	±20 %	45	5.6	7.0	4.3	5.0
MTA1030S-330MCS	33.0	±20 %	160	3.2	4.0	2.2	2.6

MTA1040S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA1040S-R15MCS	0.15	±20%	0.7	60.0	75.0	40.0	45.0
MTA1040S-R22MCS	0.22	±20%	1.0	48.0	60.0	30.0	35.0
MTA1040S-R30MCS	0.30	±20%	1.1	36.0	45.0	30.0	35.0
MTA1040S-R36MCS	0.36	±20%	1.2	36.0	45.0	25.0	30.0
MTA1040S-R45MCS	0.45	±20%	1.5	34.0	43.0	25.0	30.0
MTA1040S-R47MCS	0.47	±20%	1.7	32.0	40.0	25.0	30.0
MTA1040S-R56MCS	0.56	±20%	1.8	26.4	33.0	20.0	25.0
MTA1040S-R68MCS	0.68	±20%	2.4	24.0	30.0	19.0	23.0
MTA1040S-R80MCS	0.80	±20%	2.7	23.2	29.0	19.0	23.0
MTA1040S-1R0MCS	1.0	±20%	3.3	22.4	28.0	16.0	19.0
MTA1040S-1R5MCS	1.5	±20%	4.2	19.2	24.0	14.0	16.0
MTA1040S-2R2MCS	2.2	±20%	7.0	13.2	16.5	10.0	12.0
MTA1040S-3R3MCS	3.3	±20%	11.8	12.8	16.0	9.5	11.0
MTA1040S-4R7MCS	4.7	±20%	20	10.4	13.0	7.5	9.0
MTA1040S-6R8MCS	6.8	±20%	25	9.6	12.0	7.0	8.5
MTA1040S-8R2MCS	8.2	±20%	27	7.2	9.0	6.8	8.0
MTA1040S-100MCS	10	±20%	30	6.8	8.5	6.9	7.8
MTA1040S-150MCS	15	±20%	45	5.6	7.0	5.6	6.5
MTA1040S-220MCS	22	±20%	66	4.4	5.5	4.2	5.0
MTA1040S-330MCS	33	±20%	92	3.84	4.8	3.8	4.4
MTA1040S-470MCS	47	±20%	145	3.1	3.5	2.8	3.3
MTA1040S-680MCS	68	±20%	195	2.4	3.0	2.0	2.5
MTA1040S-101MCS	100	±20%	315	2.3	2.8	1.7	2.0

MTA1050S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA1050S-R22MCS	0.22	±20 %	0.8	52.0	65.0	31.5	37.0
MTA1050S-1R0MCS	1.0	±20 %	3.0	24.0	30.0	19.6	23.0
MTA1050S-1R5MCS	1.5	±20 %	3.8	20.0	25.0	17.9	21.0
MTA1050S-2R2MCS	2.2	±20 %	6.0	15.2	19.0	12.8	15.0
MTA1050S-3R3MCS	3.3	±20 %	10	12.8	16.0	11.1	13.0
MTA1050S-4R7MCS	4.7	±20 %	14	12.0	15.0	9.4	11.0
MTA1050S-5R6MCS	5.6	±20 %	17	11.2	14.0	8.1	9.5
MTA1050S-6R8MCS	6.8	±20 %	18.5	11.2	14.0	7.7	9.0
MTA1050S-100MCS	10	±20 %	28	8.0	10.0	6.8	8.0

All specifications are subject to change without notice.

MTA Series

SMD Molding Power Inductors

MTA1050S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ) max.	I sat ③ (A) max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
MTA1050S-150MCS	15	±20 %	42	6.0	7.5	5.5	6.5
MTA1050S-220MCS	22	±20 %	50	4.8	6.0	4.7	5.5
MTA1050S-330MCS	33	±20 %	86	4.2	5.2	4.1	4.8
MTA1050S-470MCS	47	±20 %	127	3.6	4.5	3.1	3.7
MTA1050S-101MCS	100	±20 %	290	2.2	2.8	1.8	2.1

MTA1240S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA1240S-R22MCS	0.22	±20%	0.9	40.0	50.0	38.0	42.0
MTA1240S-R47MCS	0.47	±20%	2.0	38.4	48.0	29.0	33.0
MTA1240S-R68MCS	0.68	±20%	3.5	37.6	47.0	24.0	28.0
MTA1240S-R82MCS	0.82	±20%	4.5	32.0	40.0	24.0	28.0
MTA1240S-1R0MCS	1.0	±20%	7.5	28.0	35.0	20.0	24.0
MTA1240S-1R5MCS	1.5	±20%	9.5	24.4	30.5	17.0	20.0
MTA1240S-2R2MCS	2.2	±20%	11.5	20.8	26.0	15.0	18.0
MTA1240S-3R3MCS	3.3	±20%	13	16.8	21.0	13.0	15.0
MTA1240S-4R7MCS	4.7	±20%	14.5	14.4	18.0	11.0	13.0
MTA1240S-6R8MCS	6.8	±20%	20	11.2	14.0	8.0	9.0
MTA1240S-100MCS	10	±20%	25	8.0	10.0	7.0	8.0
MTA1240S-150MCS	15	±20%	39	6.0	7.5	5.8	6.5
MTA1240S-220MCS	22	±20%	51	4.8	6.0	3.8	4.5

MTA1250S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA1250S-R22MCS	0.22	±20%	0.7	60.0	75.0	45.0	50.0
MTA1250S-R36MCS	0.36	±20%	0.85	40.0	50.0	37.0	42.0
MTA1250S-R50MCS	0.50	±20%	1.15	38.4	48.0	33.0	38.0
MTA1250S-R68MCS	0.68	±20%	1.55	36.8	46.0	29.0	33.0
MTA1250S-R82MCS	0.82	±20%	1.67	31.2	39.0	26.0	30.0
MTA1250S-1R0MCS	1.0	±20%	2.2	28.0	35.0	22.0	26.0
MTA1250S-1R5MCS	1.5	±20%	3.2	26.4	33.0	19.0	23.0
MTA1250S-2R2MCS	2.2	±20%	5.0	19.2	24.0	13.0	15.0
MTA1250S-3R3MCS	3.3	±20%	7.0	17.6	22.0	12.0	14.0
MTA1250S-4R7MCS	4.7	±20%	9.0	16.0	20.0	11.0	13.0
MTA1250S-6R8MCS	6.8	±20%	18	12.8	16.0	10.0	12.0
MTA1250S-100MCS	10	±20%	22	9.6	12.0	8.0	9.0
MTA1250S-150MCS	15	±20%	30	8.0	10.0	7.0	8.0
MTA1250S-220MCS	22	±20%	58	5.2	6.5	3.8	4.5
MTA1250S-330MCS	33	±20%	84	4.8	6.0	2.8	3.5
MTA1250S-470MCS	47	±20%	130	4.0	5.0	2.6	3.0

All specifications are subject to change without notice.

MTA Series

SMD Molding Power Inductors

MTA1260S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA1260S-1R5MCS	1.5	±20%	2.9	23.2	29.0	22.6	27.5
MTA1260S-2R2MCS	2.2	±20%	4.2	22.4	28.0	18.0	22.0
MTA1260S-3R3MCS	3.3	±20%	7.1	16.8	21.0	14.0	17.0
MTA1260S-4R7MCS	4.7	±20%	9.0	19.2	24.0	12.0	15.0
MTA1260S-5R6MCS	5.6	±20%	11	18.0	22.5	11.0	13.0
MTA1260S-6R8MCS	6.8	±20%	13.5	15.2	19.0	10.0	12.0
MTA1260S-8R2MCS	8.2	±20%	16	10.8	13.5	9.0	11.0
MTA1260S-100MCS	10	±20%	20.7	11.1	12.5	8.5	10.0
MTA1260S-120MCS	12	±20%	23	8.0	10.0	7.8	9.0
MTA1260S-150MCS	15	±20%	29.	7.2	9.0	7.5	8.5
MTA1260S-180MCS	18	±20%	35	6.4	8.0	6.5	7.5
MTA1260S-220MCS	22	±20%	39.5	6.0	7.5	6.0	7.0
MTA1260S-270MCS	27	±20%	56	5.2	6.5	5.0	6.0
MTA1260S-330MCS	33	±20%	75	4.8	6.0	4.8	5.5
MTA1260S-470MCS	47	±20%	90	4.4	5.5	4.2	5.0
MTA1260S-680MCS	68	±20%	140	3.6	4.5	3.2	4.0
MTA1260S-101MCS	100	±20%	200	2.8	3.5	2.5	3.0
MTA1260S-121MCS	120	±20%	235	2.56	3.2	1.7	2.0
MTA1260S-151MCS	150	±20%	350	2.16	2.7	1.2	1.5

MTA1265S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA1265S-4R7MCS	4.7	±20%	8.5	19.2	24.0	12.8	16.0
MTA1265S-5R6MCS	5.6	±20%	10.5	18.0	22.5	11.2	14.0
MTA1265S-6R8MCS	6.8	±20%	12	15.2	19.0	10.4	13.0
MTA1265S-8R2MCS	8.2	±20%	14	12.8	16.0	9.6	12.0
MTA1265S-100MCS	10	±20%	16.5	12.0	15.0	8.8	11.0
MTA1265S-150MCS	15	±20%	26	8.8	11.0	7.6	9.5
MTA1265S-220MCS	22	±20%	36	7.2	9.0	6.4	8.0
MTA1265S-330MCS	33	±20%	65	6.4	8.0	5.2	6.5
MTA1265S-470MCS	47	±20%	70	5.44	6.8	4.4	5.5
MTA1265S-680MCS	68	±20%	120	4.16	5.2	3.84	4.8
MTA1265S-820MCS	82	±20%	135	3.6	4.5	3.2	4.0
MTA1265S-101MCS	100	±20%	170	3.2	4.0	2.8	3.5

① Inductance tested at 100kHz, 0.5 Vrms using an Agilent/HP 4192A or equivalent.

② DCR measured on a micro-ohmmeter.

③ Isat: The DC current at which the inductance decreases by 30% of it's initial value.

④ Irms: The DC current at which $\Delta t=40^{\circ}\text{C}$.

MTA Series

SMD Molding Power Inductors

MTA1707S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance Tolerance	DCR ② (m Ω) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MTA1707S-2R2MCS	2.2	$\pm 20\%$	2.5	27.2	34.0	23.2	29.0
MTA1707S-3R3MCS	3.3	$\pm 20\%$	4.0	24.0	30.0	19.2	24.0
MTA1707S-4R7MCS	4.7	$\pm 20\%$	4.8	19.2	24.0	16.8	21.0
MTA1707S-6R8MCS	6.8	$\pm 20\%$	7.5	17.6	22.0	13.6	17.0
MTA1707S-8R2MCS	8.2	$\pm 20\%$	8.7	16.0	20.0	10.4	13.0
MTA1707S-100MCS	10	$\pm 20\%$	9.9	15.2	19.0	9.6	12.0
MTA1707S-150MCS	15	$\pm 20\%$	17	11.6	14.5	8.8	11.0
MTA1707S-220MCS	22	$\pm 20\%$	23	9.2	11.5	6.8	8.5
MTA1707S-330MCS	33	$\pm 20\%$	37	8.0	10.0	6.4	8.0
MTA1707S-470MCS	47	$\pm 20\%$	47	6.0	7.5	4.8	6.0
MTA1707S-680MCS	68	$\pm 20\%$	85	5.2	6.5	4.16	5.2
MTA1707S-101MCS	100	$\pm 20\%$	130	4.0	5.0	2.96	3.7

- ① Inductance tested at 100kHz, 0.5 Vrms using an Agilent/HP 4192A or equivalent.
- ② DCR measured on a micro-ohmmeter.
- ③ Isat: The DC current at which the inductance decreases by 30% of its initial value.
- ④ Irms: The DC current at which $\Delta t = 40^\circ\text{C}$.