

## FEATURES

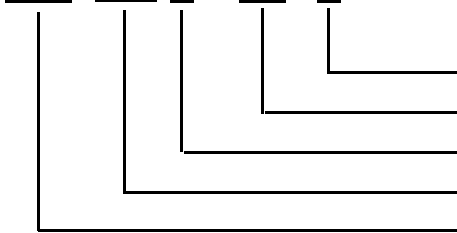
- Low profile, high current power supplies.
- Low loss realized with low DCR.
- Ultra low buzz noise, due to composite construction.
- Frequency up to 5MHz.
- Available for automatic mounting in tape and reel package.

## APPLICATIONS

- Excellent for power line DC-DC conversion application used in power switching, personal computer and other handheld electronic equipment.

## PRODUCT IDENTIFICATION

MJC - 0603 T -100 - M



Inductance Tolerance (K:10% ; M:20% ; N:30%)

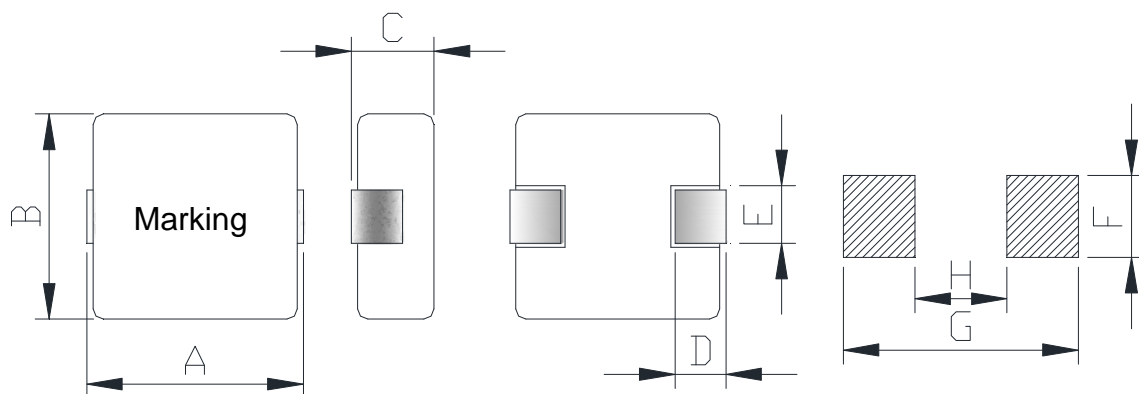
Inductance Value 4R7:4.7uH; 100: 10uH; 101:100uH

Thickness T  $\geq$ 3.0mm; D 2.4mm; H 1.8/2.0mm; E 1.5mm; B 1.2mm;

Product dimensions

Series name

## SHAPES AND DIMENSIONS



Note: Beyond the above specification also could satisfy the special requirement

Series	Dimensions(mm)							
	A	B	C	D	E	F	G	H
MJC0412B	4.45±0.25	4.00±0.25	1.00±0.2	0.80	1.80	2.50	5.20	2.20
MJC0402H	4.45±0.25	4.00±0.25	1.80±0.2	0.80	1.80	2.50	5.20	2.20
MJC0515E	5.40±0.3	5.20±0.2	1.30±0.2	1.20	2.20	2.50	6.00	2.20
MJC0518H	5.40±0.3	5.20±0.2	1.60±0.2	1.20	2.20	2.50	6.00	2.20
MJC0503T	5.40±0.3	5.20±0.2	2.80±0.2	1.20	2.20	2.50	6.00	2.20
MJC0618H	7.05±0.3	6.60±0.2	1.60±0.2	1.60	3.00	3.50	8.40	3.70
MJC0624D	7.05±0.3	6.60±0.2	2.20±0.2	1.60	3.00	3.50	8.40	3.70
MJC0603T	7.05±0.3	6.60±0.2	2.80±0.2	1.60	3.00	3.50	8.40	3.70
MJC1040T	11.50±1.0	10.5±0.5	3.80±0.2	2.50	3.00	4.10	13.6	5.40
MJC1205T	13.50±1.0	12.8±0.5	4.80±0.2	2.50	3.80	5.00	14.5	8.00

## ELECTRICAL CHARACTERISTICS

- **Isat:** DC current at which the inductance drops 30% from its value without current.
- **Irms:** Current that causes a 40°C temperature rise from 25°C ambient.

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)
MJC-0412B-R33-M	0.33	100	0.019	8.40	6.50
MJC-0412B-R47-M	0.47	100	0.021	6.80	6.00
MJC-0412B-R68-M	0.68	100	0.036	6.00	4.70
MJC-0412B-1R0-M	1.0	100	0.047	5.50	4.50
MJC-0412B-1R5-M	1.5	100	0.075	4.00	3.25
MJC-0412B-2R2-M	2.2	100	0.083	3.50	2.75
MJC-0412B-4R7-M	4.7	100	0.195	2.80	1.80

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)
MJC-0402H-R10-M	0.10	100	0.004	22.0	13.0
MJC-0402H-R22-M	0.22	100	0.007	12.5	9.50
MJC-0402H-R47-M	0.47	100	0.014	10.0	7.50
MJC-0402H-R56-M	0.56	100	0.016	9.50	7.00
MJC-0420H-R68-M	0.68	100	0.018	9.00	7.00
MJC-0402H-1R0-M	1.0	100	0.027	7.00	6.00
MJC-0402H-1R2-M	1.2	100	0.027	7.00	6.00
MJC-0402H-1R5-M	1.5	100	0.046	6.00	5.00
MJC-0402H-2R2-M	2.2	100	0.058	5.00	4.50
MJC-0402H-3R3-M	3.3	100	0.087	4.00	3.30
MJC-0402H-4R7-M	4.7	100	0.105	3.00	2.80
MJC-0402H-6R8-M	6.8	100	0.175	2.50	2.40
MJC-0402H-100-M	10	100	0.282	2.20	1.60

Note: Beyond the above specification also could satisfy the special requirement

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)
MJC-0515E-1R0-M	1.0	100	0.023	9.00	8.00
MJC-0515E-2R2-M	2.2	100	0.064	6.00	5.00
MJC-0515E-3R3-M	3.3	100	0.072	5.00	4.00
MJC-0515E-4R7-M	4.7	100	0.106	4.00	3.50
MJC-0515E-6R8-M	6.8	100	0.130	3.20	3.00
MJC-0515E-100-M	10.0	100	0.170	3.00	2.50

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)
MJC-0518H-R47-M	0.47	100	0.009	15.50	11.50
MJC-0518H-R56-M	0.56	100	0.010	15.00	10.50
MJC-0518H-1R0-M	1.0	100	0.017	9.00	8.50
MJC-0518H-1R2-M	1.2	100	0.020	8.00	7.50
MJC-0518H-2R2-M	2.2	100	0.035	6.50	6.00
MJC-0518H-3R3-M	3.3	100	0.058	5.00	4.50
MJC-0518H-4R7-M	4.7	100	0.085	4.00	3.80
MJC-0518H-6R8-M	6.8	100	0.120	3.40	3.20
MJC-0518H-100-M	10	100	0.155	3.00	2.80

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)
MJC-0503T-R20-M	0.20	100	0.004	14.50	14.00
MJC-0503T-R47-M	0.47	100	0.008	12.00	11.00
MJC-0503T-R68-M	0.68	100	0.012	11.50	9.00
MJC-0503T-1R0-M	1.0	100	0.014	11.00	8.50
MJC-0503T-1R2-M	1.2	100	0.016	11.00	8.50
MJC-0503T-1R5-M	1.5	100	0.025	8.50	8.20
MJC-0503T-2R2-M	2.2	100	0.029	7.50	7.00
MJC-0503T-3R3-M	3.3	100	0.038	6.00	5.50
MJC-0503T-4R7-M	4.7	100	0.060	5.00	4.50
MJC-0503T-6R8-M	6.8	100	0.090	4.00	3.50
MJC-0503T-100-M	10	100	0.125	3.50	3.20

Note: Beyond the above specification also could satisfy the special requirement

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)
MJC-0618H-R68-M	0.68	100	0.012	14.00	9.50
MJC-0618H-1R0-M	1.0	100	0.016	9.50	9.00
MJC-0618H-2R2-M	2.2	100	0.035	6.00	7.00
MJC-0618H-3R3-M	3.3	100	0.050	5.50	5.00
MJC-0618H-4R7-M	4.7	100	0.062	5.00	4.50
MJC-0618H-6R8-M	6.8	100	0.110	3.50	3.30

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)
MJC-0624D-R22-M	0.22	100	0.003	34.00	21.00
MJC-0624D-R33-M	0.33	100	0.004	24.50	18.00
MJC-0624D-R47-M	0.47	100	0.005	22.00	15.00
MJC-0624D-R56-M	0.56	100	0.006	17.00	13.00
MJC-0624D-R68-M	0.68	100	0.007	16.00	12.00
MJC-0624D-1R0-M	1.0	100	0.014	16.00	9.00
MJC-0624D-1R5-M	1.5	100	0.020	15.00	9.00
MJC-0624D-2R2-M	2.2	100	0.028	14.00	7.00
MJC-0624D-3R3-M	3.3	100	0.039	13.00	5.50
MJC-0624D-4R7-M	4.7	100	0.050	10.00	5.00
MJC-0624D-6R8-M	6.8	100	0.070	6.00	4.00
MJC-0624D-100-M	10	100	0.101	4.00	3.10
MJC-0624D-150-M	15	100	0.160	3.30	2.50

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)
MJC-0603T-R12-M	0.12	100	0.002	46.00	40.00
MJC-0603T-R22-M	0.22	100	0.003	34.00	24.00
MJC-0603T-R33-M	0.33	100	0.004	25.00	19.00
MJC-0603T-R47-M	0.47	100	0.004	20.00	18.00
MJC-0603T-R56-M	0.56	100	0.005	18.00	16.50
MJC-0603T-R68-M	0.68	100	0.005	17.00	16.00
MJC-0603T-R82-M	0.82	100	0.006	16.00	15.50
MJC-0603T-1R0-M	1.0	100	0.007	15.00	12.00
MJC-0603T-1R5-M	1.5	100	0.012	14.00	12.00
MJC-0603T-2R2-M	2.2	100	0.015	10.00	9.50
MJC-0603T-3R3-M	3.3	100	0.022	9.50	8.50
MJC-0603T-4R7-M	4.7	100	0.033	6.50	6.00
MJC-0603T-6R8-M	6.8	100	0.048	6.00	5.50
MJC-0603T-8R2-M	8.2	100	0.060	6.00	5.50
MJC-0603T-100-M	10	100	0.067	5.50	4.80
MJC-0603T-150-M	15	100	0.115	4.50	3.00
MJC-0603T-220-M	22	100	0.200	3.00	2.30
MJC-0603T-330-M	33	100	0.310	2.50	2.00

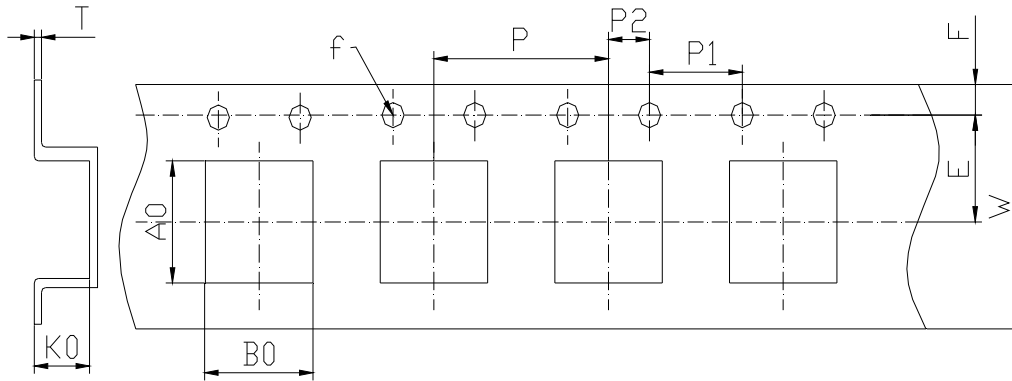
Note: Beyond the above specification also could satisfy the special requirement

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)
MJC-1040T-R22-M	0.22	100	0.001	60.00	35.00
MJC-1040T-R33-M	0.33	100	0.001	50.00	35.00
MJC-1040T-R47-M	0.47	100	0.002	40.00	27.00
MJC-1040T-R56-M	0.56	100	0.002	33.00	25.00
MJC-1040T-R68-M	0.68	100	0.002	30.00	23.00
MJC-1040T-R82-M	0.82	100	0.003	30.00	23.00
MJC-1040T-1R0-M	1.0	100	0.003	28.00	22.00
MJC-1040T-1R5-M	1.5	100	0.004	26.00	16.00
MJC-1040T-2R2-M	2.2	100	0.007	18.00	12.00
MJC-1040T-3R3-M	3.3	100	0.012	16.00	11.00
MJC-1040T-4R7-M	4.7	100	0.020	15.00	9.00
MJC-1040T-6R8-M	6.8	100	0.025	12.00	8.50
MJC-1040T-8R2-M	8.2	100	0.027	9.00	8.00
MJC-1040T-100-M	10	100	0.030	8.50	7.80
MJC-1040T-150-M	15	100	0.045	7.00	6.50
MJC-1040T-220-M	22	100	0.066	5.50	5.00
MJC-1040T-330-M	33	100	0.092	5.00	4.40
MJC-1040T-470-M	47	100	0.145	3.50	3.30
MJC-1040T-560-M	56	100	0.170	2.80	2.60
MJC-1040T-680-M	68	100	0.195	2.60	2.50

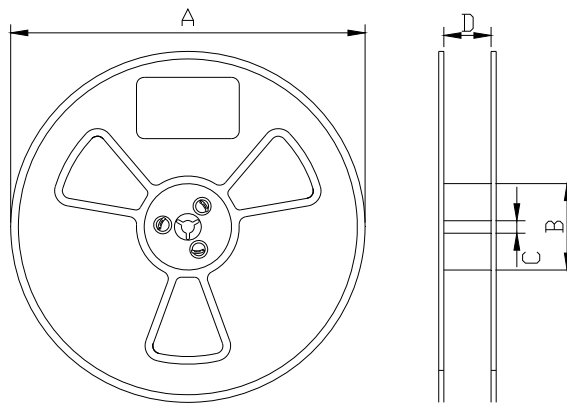
Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)
MJC-1205T-R36-M	0.36	100	0.001	50.00	43.00
MJC-1205T-R47-M	0.47	100	0.001	48.00	40.00
MJC-1205T-R68-M	0.68	100	0.002	46.00	35.00
MJC-1205T-1R0-M	1.00	100	0.002	35.00	27.00
MJC-1205T-1R5-M	1.50	100	0.003	33.00	24.00
MJC-1205T-2R2-M	2.20	100	0.005	24.00	18.00
MJC-1205T-3R3-M	3.30	100	0.007	22.00	16.00
MJC-1205T-100-M	10	100	0.022	12.00	11.00
MJC-1205T-220-M	22	100	0.058	7.00	6.00
MJC-1205T-330-M	33	100	0.084	6.00	4.50
MJC-1205T-470-M	47	100	0.130	5.00	3.80

Note: Beyond the above specification also could satisfy the special requirement

## Packaging



SIZE	A0	B0	E	F	f	P	P1	P2	W	T	K0
MJC0412B	4.80	4.80	5.50	1.75	1.50	8.00	4.00	2.00	12.0	0.35	2.0
MJC0402H	4.80	4.80	5.50	1.75	1.50	8.00	4.00	2.00	12.0	0.35	3.0
MJC0515E	5.90	5.70	5.50	1.75	1.50	8.00	4.00	2.00	12.0	0.35	2.0
MJC0518H	5.90	5.70	5.50	1.75	1.50	8.00	4.00	2.00	12.0	0.35	2.3
MJC0503T	5.90	5.70	5.50	1.75	1.50	8.00	4.00	2.00	12.0	0.35	3.4
MJC0618H	7.60	6.90	7.50	1.75	1.50	12.0	4.00	2.00	16.0	0.35	2.2
MJC0624D	7.60	6.90	7.50	1.75	1.50	12.0	4.00	2.00	16.0	0.35	2.9
MJC0603T	7.60	6.90	7.50	1.75	1.50	12.0	4.00	2.00	16.0	0.35	3.4
MJC1040T	12.20	10.40	11.50	1.75	1.50	16.0	4.00	2.00	24.0	0.35	4.2
MJC1205T	14.00	13.00	11.50	1.75	1.50	16.0	4.00	2.00	24.0	0.35	5.4



SIZE	A	B	C	D	Reel/PCS
MJC0412B	330	100	13	12.5	3000
MJC0402H	330	100	13	12.5	2000
MJC0515E	330	100	13	12.5	2000
MJC0518H	330	100	13	12.5	2000
MJC0503T	330	100	13	12.5	2000
MJC0618H	330	100	13	16.5	1500
MJC0624D	330	100	13	16.5	1500
MJC0603T	330	100	13	16.5	1500
MJC1040T	330	100	13	24.5	800
MJC1205T	330	100	13	24.5	500

Note: Beyond the above specification also could satisfy the special requirement