

Surface Mount shielded Power Inductors MPI Series



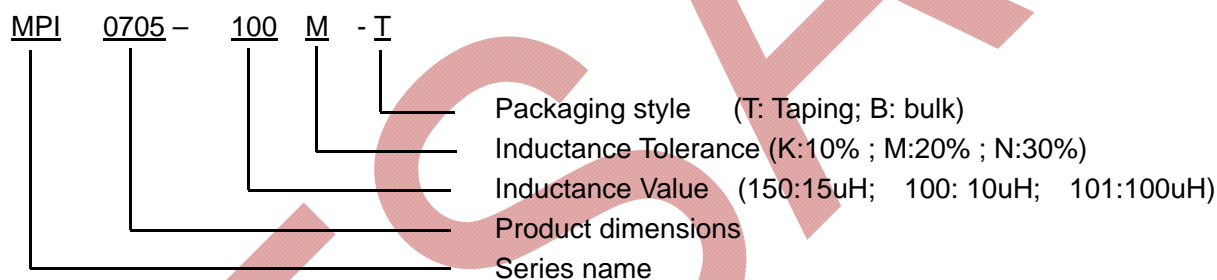
FEATURES

- To be high saturation for surface mounting.
- Surface mount inductor with high current rating.
- Low resistance to keep power loss minimum.
- Packed in embossed carrier tape and can be used by automatic mounting machine.

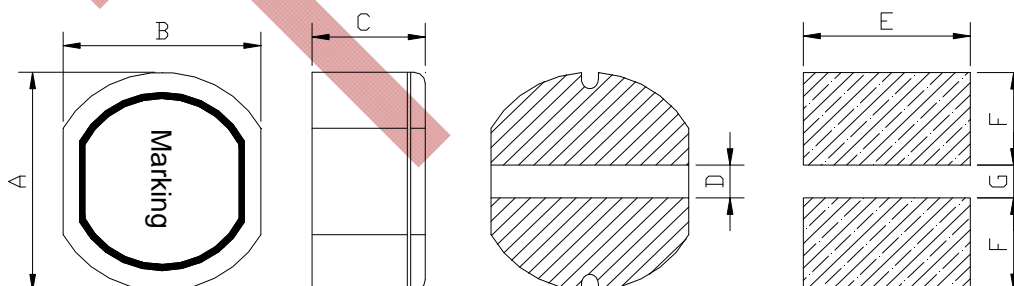
APPLICATIONS

- Excellent as VTR, OA equipment, LCD television sets, notebook PC, portable communication equipment, DC/DC converters, etc.

PRODUCT IDENTIFICATION



SHAPES AND DIMENSIONS



Series	Dimensions(mm)						
	A	B	C	D	E	F	G
MPI0502	5.80±0.3	5.20±0.3	2.80 Max.	1.50	5.50	2.35	1.30
MPI0603	6.20±0.3	5.60±0.3	3.50 Max.	1.70	6.00	3.50	1.50
MPI0704	7.80±0.3	7.00±0.3	4.90 Max.	1.90	7.50	3.50	1.50
MPI1005	10.0±0.4	9.00±0.4	5.90 Max.	2.50	9.00	4.00	2.00
MPI1205	12.5±0.5	11.5±0.5	5.90 Max.	3.00	12.0	5.00	2.50

ELECTRICAL CHARACTERISTICS

- **Rated Current:** DC current at which the inductance drops 30% from its value without current.

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Rated Current(A)
MPI0502-1R0NT	1.0	100	0.050	1.70
MPI0502-1R8NT	1.8	100	0.060	1.20
MPI0502-2R2NT	2.2	100	0.070	1.10
MPI0502-3R3NT	3.3	100	0.080	0.90
MPI0502-5R6NT	5.6	100	0.100	0.75
MPI0502-6R8NT	6.8	100	0.110	0.70
MPI0502-8R2NT	8.2	100	0.130	0.60
MPI0502-100MT	10	100	0.150	0.54
MPI0502-150MT	15	100	0.200	0.46
MPI0502-220MT	22	100	0.280	0.42
MPI0502-330MT	33	100	0.450	0.35
MPI0502-390MT	39	100	0.550	0.32
MPI0502-470MT	47	100	0.600	0.28
MPI0502-560MT	56	100	0.760	0.25
MPI0502-680MT	68	100	0.920	0.23

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Rated Current(A)
MPI0603-1R0NT	1.0	100	0.070	3.00
MPI0603-1R5NT	1.5	100	0.090	2.85
MPI0603-2R2NT	2.2	100	0.120	2.60
MPI0603-3R3NT	3.3	100	0.140	2.45
MPI0603-4R7NT	4.7	100	0.160	2.30
MPI0603-5R6NT	5.6	100	0.180	2.00
MPI0603-6R8NT	6.8	100	0.240	1.80
MPI0603-8R2NT	8.2	100	0.280	1.60
MPI0603-100MT	10	100	0.370	1.50
MPI0603-120MT	12	100	0.430	1.30
MPI0603-150MT	15	100	0.470	1.20
MPI0603-180MT	18	100	0.640	1.10
MPI0603-220MT	22	100	0.710	1.00
MPI0603-270MT	27	100	0.960	0.94
MPI0603-330MT	33	100	1.110	0.85
MPI0603-390MT	39	100	1.260	0.78
MPI0603-470MT	47	100	1.770	0.72
MPI0603-560MT	56	100	1.960	0.66
MPI0603-680MT	68	100	2.500	0.58
MPI0603-820MT	82	100	3.100	0.51
MPI0603-101MT	100	100	3.500	0.49

MPI0603-121MT	120	100	4.100	0.42
MPI0603-151MT	150	100	4.600	0.40
MPI0603-181MT	180	100	5.200	0.36
MPI0603-221MT	220	100	5.950	0.34
MPI0603-271MT	270	100	6.300	0.30
MPI0603-331MT	330	100	6.950	0.25
MPI0603-471MT	470	100	8.200	0.18

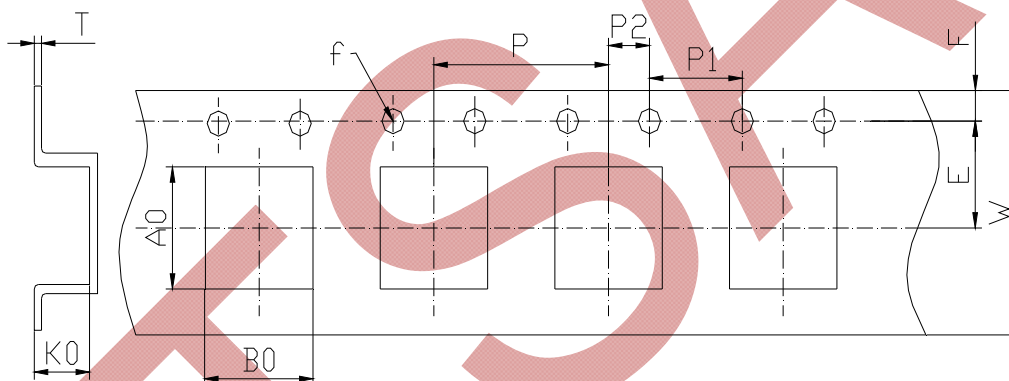
Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Rated Current(A)
MPI0704-1R0NT	1.0	100	0.035	3.50
MPI0704-1R5NT	1.5	100	0.045	3.15
MPI0704-2R2NT	2.2	100	0.050	3.00
MPI0704-3R3NT	3.3	100	0.060	2.85
MPI0704-4R7NT	4.7	100	0.065	2.60
MPI0704-5R6NT	5.6	100	0.070	2.50
MPI0704-6R8NT	6.8	100	0.075	2.45
MPI0704-8R2NT	8.2	100	0.080	2.40
MPI0704-100MT	10	100	0.090	2.30
MPI0704-120MT	12	100	0.100	2.00
MPI0704-150MT	15	100	0.110	1.80
MPI0704-180MT	18	100	0.120	1.60
MPI0704-220MT	22	100	0.130	1.50
MPI0704-330MT	33	100	0.180	1.20
MPI0704-390MT	39	100	0.240	1.10
MPI0704-470MT	47	100	0.280	1.00
MPI0704-560MT	56	100	0.370	0.94
MPI0704-680MT	68	100	0.430	0.85
MPI0704-820MT	82	100	0.470	0.78
MPI0704-101MT	100	100	0.640	0.72
MPI0704-151MT	150	100	0.960	0.58
MPI0704-181MT	180	100	1.110	0.51
MPI0704-221MT	220	100	1.260	0.49
MPI0704-331MT	330	100	1.960	0.40
MPI0704-471MT	470	100	3.100	0.30

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Rated Current(A)
MPI1005-100MT	10	100	0.060	2.06
MPI1005-120MT	12	100	0.070	1.94
MPI1005-150MT	15	100	0.074	1.72
MPI1005-180MT	18	100	0.080	1.58
MPI1005-220MT	22	100	0.083	1.42
MPI1005-270MT	27	100	0.100	1.32
MPI1005-330MT	33	100	0.110	1.16
MPI1005-390MT	39	100	0.120	1.10
MPI1005-470MT	47	100	0.140	1.00
MPI1005-560MT	56	100	0.190	0.93
MPI1005-680MT	68	100	0.210	0.85
MPI1005-820MT	82	100	0.280	0.79
MPI1005-101MT	100	100	0.340	0.72
MPI1005-121MT	120	100	0.370	0.63
MPI1005-151MT	150	100	0.510	0.55
MPI1005-181MT	180	100	0.570	0.50
MPI1005-221MT	220	100	0.780	0.47
MPI1005-271MT	270	100	0.870	0.41
MPI1005-331MT	330	100	1.200	0.37
MPI1005-391MT	390	100	1.340	0.35
MPI1005-471MT	470	100	1.500	0.33
MPI1005-561MT	560	100	1.700	0.25

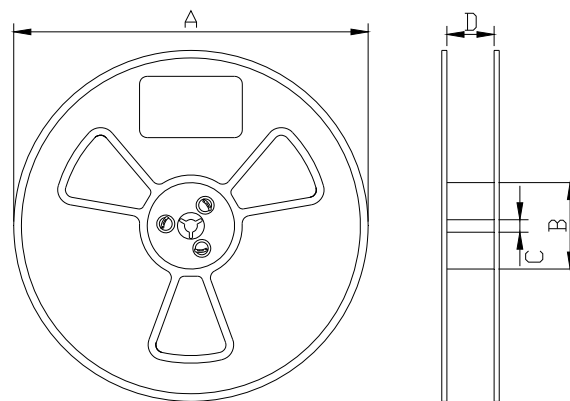
Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Rated Current(A)
MPI1205-4R7NT	4.7	100	0.030	3.50
MPI1205-8R2NT	8.2	100	0.040	2.95
MPI1205-100MT	10	100	0.050	2.65
MPI1205-120MT	12	100	0.055	2.50
MPI1205-150MT	15	100	0.060	2.45
MPI1205-180MT	18	100	0.065	2.40
MPI1205-220MT	22	100	0.070	2.20
MPI1205-270MT	27	100	0.080	2.00
MPI1205-330MT	33	100	0.100	1.80
MPI1205-390MT	39	100	0.110	1.65
MPI1205-470MT	47	100	0.120	1.50
MPI1205-560MT	56	100	0.150	1.38
MPI1205-680MT	68	100	0.170	1.26
MPI1205-820MT	82	100	0.200	1.14
MPI1205-101MT	100	100	0.250	1.05
MPI1205-121MT	120	100	0.280	0.95

MPI1205-151MT	150	100	0.400	0.85
MPI1205-181MT	180	100	0.480	0.77
MPI1205-221MT	220	100	0.520	0.70
MPI1205-271MT	270	100	0.700	0.63
MPI1205-331MT	330	100	0.800	0.57
MPI1205-391MT	390	100	1.080	0.52
MPI1205-471MT	470	100	1.200	0.48
MPI1205-561MT	560	100	1.340	0.44
MPI1205-681MT	680	100	1.780	0.40
MPI1205-821MT	820	100	2.000	0.36
MPI1205-102MT	1000	100	2.500	0.32

MPI Series Packaging



SIZE	A0	B0	E	F	f	P	P1	P2	W	T	K0
MPI0502	6.2	5.5	5.5	1.75	1.5	12.0	4.0	2.0	16.0	0.35	3.1
MPI0603	6.5	6.2	5.5	1.75	1.5	12.0	4.0	2.0	16.0	0.35	3.5
MPI0704	8.3	7.8	7.5	1.75	1.5	12.0	4.0	2.0	16.0	0.35	5.0
MPI1005	10.5	10.0	11.5	1.75	1.5	16.0	4.0	2.0	24.0	0.35	5.5
MPI1205	13.0	11.6	11.5	1.75	1.5	16.0	4.0	2.0	24.0	0.35	5.8



SIZE	A	B	C	D	Reel/PCS
MPI0502	330	100	13	16.5	1500
MPI0603	330	100	13	16.5	1500
MPI0704	330	100	13	16.5	1000
MPI1005	330	100	13	24.5	1000
MPI1205	330	100	13	24.5	700

TSA