

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

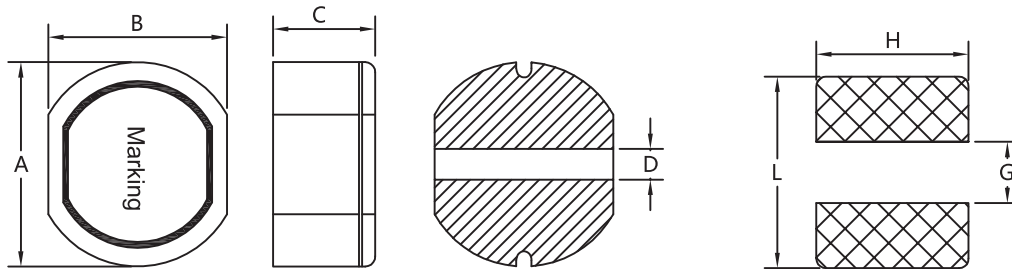
- Excellent as VTR, OA equipment, LCD television sets, notebook PC, portable communication equipment , DC/DC converters, etc.

PRODUCT IDENTIFICATION

MPI 1205 – 221 M – T
a b c d e

- a : Series name
b : Product dimensions
c : Inductance Value (1R0:1.0uH; 100: 10uH; 101:100uH)
d : Inductance Tolerance (K:10% ; M:20% ; N:30%)
e : Packaging style (T: Taping; B: bulk)

SHAPES AND DIMENSIONS Unit: mm



Series	Dimensions(mm)						
	A	B	C	D	L	G	H
MPI0502	5.80±0.3	5.20±0.3	2.80 Max.	1.50	6.7	1.3	5.5
MPI0603	6.20±0.3	5.60±0.3	3.50 Max.	1.70	7.5	1.5	6.0
MPI0704	7.80±0.3	7.00±0.3	4.90 Max.	1.90	9.0	1.5	7.5
MPI1005	10.0±0.4	9.00±0.4	5.90 Max.	2.50	11.2	2.0	9.5
MPI1205	12.5±0.5	11.5±0.5	5.90 Max.	3.00	13.5	2.5	12.0

ELECTRICAL CHARACTERISTICS

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
MPI0603-2R2NT	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

Note:

Rated current: The DC current at which the inductance decreases to 70 % of its initial value or when $\Delta t = 40^{\circ}\text{C}$, whichever is lower($T_a = 20^{\circ}\text{C}$)

ELECTRICAL CHARACTERISTICS

Part Number	L(μH)	Test Freq.(KHz)	DCR max.(Ω)	Rated Current(A)
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(μH)	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

Note:

Rated current: The DC current at which the inductance decreases to 70 % of its initial value or when $\Delta t = 40^{\circ}\text{C}$, whichever is lower($T_a = 20^{\circ}\text{C}$)

ELECTRICAL CHARACTERISTICS

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
MPI1005-470MT	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
MPI1205-390MT	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

Note:

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