



SMD Power Inductors MTP Series

Features

- * High current type
- * Ferrite bobbin core and compact size
- * Low core loss for high frequency power application
- * Large terminal surface for good PCB bonding

Applications

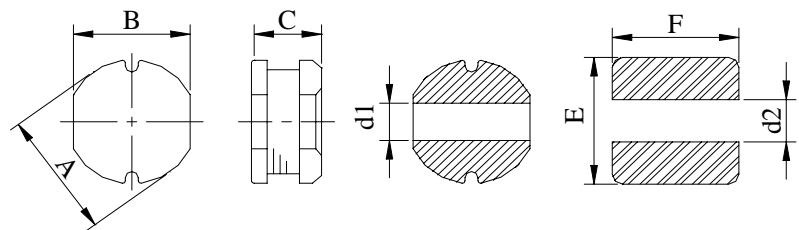
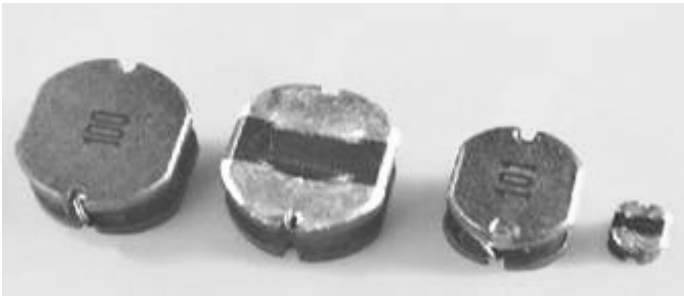
- * Portable communication equipment
- * Notebook PC, digital camera, LCD television set
- * Power supply for VTR, OA equipment
- * DC / DC converters

Product Identifications

$\frac{\text{MTP}}{(1)}$ $\frac{\square\square\square\square}{(2)}$ - $\frac{\square\square\square}{(3)}$ $\frac{\square}{(4)}$

- (1) Type
- (2) Dimensions
- (3) Inductance
- (4) Tolerance

Shapes and Dimensions



Land Pattern

TYPE	A	B	C	d1	d2	E	F
MTP03011	3.50 ±0.30	3.00±0.30	1.3MAX	1.0TYP	1.2REF	3.6REF	3.5REF
MTP03015	3.30 ±0.30	3.00±0.30	1.50±0.30	1.0TYP	1.2REF	3.6REF	3.5REF
MTP0302	3.50 ±0.20	3.10±0.20	2.20±0.20	1.0TYP	1.2REF	3.6REF	3.5REF
MTP0403	4.50 ±0.30	4.00±0.30	3.20±0.30	1.3REF	1.5REF	4.7REF	4.2REF
MTP0502	5.80 ±0.30	5.20±0.30	2.00±0.20	1.3REF	1.5REF	6.0REF	5.5REF
MTP0504	5.80 ±0.30	5.20±0.30	4.50±0.35	1.3REF	1.5REF	6.0REF	5.5REF
MTP0703	7.80 ±0.30	7.00±0.30	3.50±0.40	2.1REF	2.3REF	8.0REF	7.5REF
MTP0705	7.80 ±0.30	7.00±0.30	5.00±0.40	2.1REF	2.3REF	8.0REF	7.5REF
MTP1004	10.0 ±0.30	9.00±0.30	4.00±0.40	2.1REF	2.5REF	10.0REF	9.5REF
MTP1005	10.0 ±0.40	9.00±0.40	5.40±0.40	2.1REF	2.5REF	10.0REF	9.5REF



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Electrical Characteristics

MTP 03011

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTP03011-4R7□	4.7 \pm 20%	2.52MHz	0.26	1.0
MTP03011-100□	10 \pm 20%	2.52MHz	0.60	0.6
MTP03011-220□	22 \pm 20%	2.52MHz	1.20	0.5
MTP03011-101□	100 \pm 20%	1KHz	6.90	0.1

Electrical Characteristics

MTP 03015

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTP03015-100□	10 \pm 20%	1MHz	0.50	0.80
MTP03015-220□	22 \pm 20%	1MHz	0.70	0.25
MTP03015-270□	27 \pm 20%	1MHz	1.05	0.20
MTP03015-152□	1500 \pm 20%	1KHz	56	0.06
MTP03015-222□	2200 \pm 20%	1KHz	70	0.05

Electrical Characteristics

MTP 0302

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTP0302-R82□	0.82 \pm 20%	5.0MHz	0.049	2.80
MTP0302-1R0□	1.0 \pm 20%	5.0MHz	0.055	2.56
MTP0302-1R5□	1.5 \pm 20%	5.0MHz	0.070	2.00
MTP0302-2R2□	2.2 \pm 20%	5.0MHz	0.100	1.60
MTP0302-3R3□	3.3 \pm 20%	5.0MHz	0.131	1.50
MTP0302-4R7□	4.7 \pm 20%	5.0MHz	0.158	1.30
MTP0302-5R6□	5.6 \pm 20%	5.0MHz	0.165	1.20
MTP0302-6R8□	6.8 \pm 20%	5.0MHz	0.188	1.10
MTP0302-100□	10 \pm 20%	2.52MHz	0.341	1.00
MTP0302-150□	15 \pm 20%	2.52MHz	0.460	0.90
MTP0302-220□	22 \pm 20%	2.52MHz	0.685	0.75
MTP0302-270□	27 \pm 20%	2.52MHz	0.912	0.70
MTP0302-330□	33 \pm 20%	2.52MHz	0.951	0.60

□ Tolerance : J = \pm 5% , K = \pm 10% , L = \pm 15% , M = \pm 20% , N = \pm 30%



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Electrical Characteristics

MTP 0403

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTP0403-R50□	0.50 \pm 20%	7.96MHz	0.022	3.00
MTP0403-R60□	0.60 \pm 20%	7.96MHz	0.040	2.80
MTP0403-1R0□	1.0 \pm 20%	7.96MHz	0.049	2.56
MTP0403-1R2□	1.2 \pm 20%	7.96MHz	0.055	2.54
MTP0403-1R4□	1.4 \pm 20%	7.96MHz	0.057	2.52
MTP0403-1R8□	1.8 \pm 20%	7.96MHz	0.064	1.95
MTP0403-2R2□	2.2 \pm 20%	7.96MHz	0.072	1.75
MTP0403-2R4□	2.4 \pm 20%	7.96MHz	0.076	1.65
MTP0403-2R7□	2.7 \pm 20%	7.96MHz	0.079	1.58
MTP0403-3R3□	3.3 \pm 20%	7.96MHz	0.087	1.44
MTP0403-3R9□	3.9 \pm 20%	7.96MHz	0.094	1.33
MTP0403-4R1□	4.1 \pm 20%	7.96MHz	0.100	1.20
MTP0403-4R7□	4.7 \pm 20%	7.96MHz	0.109	1.15
MTP0403-5R2□	5.2 \pm 20%	7.96MHz	0.118	1.05
MTP0403-5R6□	5.6 \pm 20%	7.96MHz	0.126	0.99
MTP0403-6R8□	6.8 \pm 20%	7.96MHz	0.132	0.95
MTP0403-8R2□	8.2 \pm 20%	7.96MHz	0.147	0.84
MTP0403-100□	10 \pm 20%	2.52MHz	0.182	0.80
MTP0403-120□	12 \pm 20%	2.52MHz	0.210	0.78
MTP0403-150□	15 \pm 20%	2.52MHz	0.235	0.76
MTP0403-180□	18 \pm 20%	2.52MHz	0.280	0.74
MTP0403-200□	20 \pm 20%	2.52MHz	0.312	0.70
MTP0403-220□	22 \pm 20%	2.52MHz	0.378	0.68
MTP0403-270□	27 \pm 20%	2.52MHz	0.522	0.62
MTP0403-330□	33 \pm 20%	2.52MHz	0.540	0.56
MTP0403-390□	39 \pm 20%	2.52MHz	0.587	0.52
MTP0403-470□	47 \pm 20%	2.52MHz	0.844	0.44
MTP0403-560□	56 \pm 20%	2.52MHz	0.937	0.42
MTP0403-680□	68 \pm 20%	2.52MHz	1.117	0.37
MTP0403-820□	82 \pm 20%	2.52MHz	1.170	0.35
MTP0403-101□	100 \pm 20%	1KHz	1.200	0.32
MTP0403-151□	150 \pm 20%	1KHz	1.560	0.25
MTP0403-181□	180 \pm 20%	1KHz	2.200	0.23
MTP0403-221□	220 \pm 20%	1KHz	2.500	0.20
MTP0403-251□	250 \pm 20%	1KHz	2.650	0.19
MTP0403-331□	330 \pm 20%	1KHz	4.050	0.18
MTP0403-471□	470 \pm 20%	1KHz	5.780	0.17
MTP0403-561□	560 \pm 20%	1KHz	7.100	0.16
MTP0403-681□	680 \pm 20%	1KHz	8.030	0.15
MTP0403-102□	1000 \pm 20%	1KHz	10.70	0.14
MTP0403-122□	1200 \pm 20%	1KHz	12.00	0.10
MTP0403-152□	1500 \pm 20%	1KHz	17.00	0.09
MTP0403-162□	1600 \pm 20%	1KHz	16.00	0.08



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MTP0403-182□	1800±20%	1KHz	18.00	0.07
MTP0403-222□	2200±20%	1KHz	27.00	0.06

□ Tolerance : J = ± 5% , K = ± 10% , L = ± 15% , M = ± 20% , N = ± 30%



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MTP 0502

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTP0502-2R2□	2.2 \pm 20%	2.52MHz	0.050	2.50
MTP0502-3R3□	3.3 \pm 20%	2.52MHz	0.088	2.40
MTP0502-3R5□	3.5 \pm 20%	2.52MHz	0.092	2.30
MTP0502-4R3□	4.3 \pm 20%	2.52MHz	0.120	2.20
MTP0502-4R7□	4.7 \pm 20%	2.52MHz	0.130	2.10
MTP0502-6R8□	6.8 \pm 20%	2.52MHz	0.166	1.70
MTP0502-100□	10 \pm 20%	2.52MHz	0.223	1.35
MTP0502-120□	12 \pm 20%	2.52MHz	0.285	1.10
MTP0502-150□	15 \pm 20%	2.52MHz	0.335	0.90
MTP0502-220□	22 \pm 20%	2.52MHz	0.499	0.75
MTP0502-270□	27 \pm 20%	2.52MHz	0.564	0.62
MTP0502-330□	33 \pm 20%	2.52MHz	0.659	0.56
MTP0502-390□	39 \pm 20%	2.52MHz	0.790	0.52
MTP0502-470□	47 \pm 20%	2.52MHz	0.920	0.48
MTP0502-680□	68 \pm 20%	2.52MHz	1.264	0.37
MTP0502-820□	82 \pm 20%	2.52MHz	1.469	0.27
MTP0502-101□	100 \pm 20%	1KHz	1.697	0.20
MTP0502-121□	120 \pm 20%	1KHz	2.280	0.19
MTP0502-151□	150 \pm 20%	1KHz	2.912	0.17
MTP0502-181□	180 \pm 20%	1KHz	3.800	0.16
MTP0502-221□	220 \pm 20%	1KHz	4.706	0.15
MTP0502-331□	330 \pm 20%	1KHz	7.306	0.13
MTP0502-471□	470 \pm 20%	1KHz	9.282	0.12
MTP0502-681□	680 \pm 20%	1KHz	14.040	0.10

□ Tolerance : J = \pm 5% , K = \pm 10% , L = \pm 15% , M = \pm 20% , N = \pm 30%



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Electrical Characteristics

MTP 0504

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTP0504-1R0□	1.0 \pm 20%	7.96MHz	0.025	4.00
MTP0504-1R2□	1.2 \pm 20%	7.96MHz	0.027	3.90
MTP0504-2R0□	2.0 \pm 20%	7.96MHz	0.030	3.80
MTP0504-2R2□	2.2 \pm 20%	7.96MHz	0.035	3.50
MTP0504-2R4□	2.4 \pm 20%	7.96MHz	0.040	3.30
MTP0504-3R3□	3.3 \pm 20%	7.96MHz	0.045	3.00
MTP0504-3R9□	3.9 \pm 20%	7.96MHz	0.050	2.70
MTP0504-4R7□	4.7 \pm 20%	7.96MHz	0.054	2.50
MTP0504-5R2□	5.2 \pm 20%	7.96MHz	0.055	2.40
MTP0504-5R6□	5.6 \pm 20%	7.96MHz	0.065	2.20
MTP0504-6R8□	6.8 \pm 20%	7.96MHz	0.070	2.00
MTP0504-8R2□	8.2 \pm 20%	7.96MHz	0.075	1.56
MTP0504-100□	10 \pm 20%	2.52MHz	0.100	1.44
MTP0504-120□	12 \pm 20%	2.52MHz	0.120	1.40
MTP0504-150□	15 \pm 20%	2.52MHz	0.140	1.30
MTP0504-180□	18 \pm 20%	2.52MHz	0.150	1.23
MTP0504-220□	22 \pm 20%	2.52MHz	0.180	1.11
MTP0504-270□	27 \pm 20%	2.52MHz	0.200	0.97
MTP0504-300□	30 \pm 20%	2.52MHz	0.220	0.92
MTP0504-330□	33 \pm 20%	2.52MHz	0.230	0.88
MTP0504-390□	39 \pm 20%	2.52MHz	0.320	0.80
MTP0504-470□	47 \pm 20%	2.52MHz	0.370	0.72
MTP0504-560□	56 \pm 20%	2.52MHz	0.420	0.68
MTP0504-680□	68 \pm 20%	2.52MHz	0.460	0.61
MTP0504-820□	82 \pm 20%	2.52MHz	0.600	0.58
MTP0504-101□	100 \pm 20%	1KHz	0.700	0.52
MTP0504-121□	120 \pm 20%	1KHz	0.930	0.48
MTP0504-151□	150 \pm 20%	1KHz	1.100	0.40
MTP0504-181□	180 \pm 20%	1KHz	1.380	0.38
MTP0504-221□	220 \pm 20%	1KHz	1.570	0.35
MTP0504-331□	330 \pm 20%	1KHz	1.750	0.30
MTP0504-681□	680 \pm 20%	1KHz	4.500	0.25
MTP0504-102□	1000 \pm 20%	1KHz	6.500	0.20
MTP0504-152□	1500 \pm 20%	1KHz	9.200	0.16
MTP0504-202□	2000 \pm 20%	1KHz	10.00	0.12
MTP0504-682□	6800 \pm 20%	1KHz	40.00	0.06

□ Tolerance : J = \pm 5% , K = \pm 10% , L = \pm 15% , M = \pm 20% , N = \pm 30%



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MTP 0703

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTP0703-1R0□	1.0 \pm 20%	5MHz	0.023	3.47
MTP0703-2R2□	2.2 \pm 20%	5MHz	0.034	3.18
MTP0703-3R3□	3.3 \pm 20%	5MHz	0.036	2.89
MTP0703-4R2□	4.2 \pm 20%	5MHz	0.040	2.72
MTP0703-4R7□	4.7 \pm 20%	5MHz	0.048	2.60
MTP0703-5R6□	5.6 \pm 20%	5MHz	0.054	2.31
MTP0703-6R8□	6.8 \pm 20%	5MHz	0.060	2.02
MTP0703-8R2□	8.2 \pm 20%	5MHz	0.071	1.73
MTP0703-100□	10 \pm 20%	2.52MHz	0.081	1.44
MTP0703-120□	12 \pm 20%	2.52MHz	0.090	1.39
MTP0703-150□	15 \pm 20%	2.52MHz	0.104	1.24
MTP0703-180□	18 \pm 20%	2.52MHz	0.111	1.12
MTP0703-220□	22 \pm 20%	2.52MHz	0.129	1.07
MTP0703-270□	27 \pm 20%	2.52MHz	0.153	0.94
MTP0703-330□	33 \pm 20%	2.52MHz	0.170	0.85
MTP0703-390□	39 \pm 20%	2.52MHz	0.217	0.74
MTP0703-470□	47 \pm 20%	2.52MHz	0.252	0.68
MTP0703-560□	56 \pm 20%	2.52MHz	0.282	0.64
MTP0703-680□	68 \pm 20%	2.52MHz	0.332	0.59
MTP0703-820□	82 \pm 20%	2.52MHz	0.406	0.54
MTP0703-101□	100 \pm 20%	1KHz	0.481	0.51
MTP0703-121□	120 \pm 20%	1KHz	0.536	0.49
MTP0703-151□	150 \pm 20%	1KHz	0.755	0.40
MTP0703-181□	180 \pm 20%	1KHz	1.022	0.36
MTP0703-221□	220 \pm 20%	1KHz	1.200	0.31
MTP0703-271□	270 \pm 20%	1KHz	1.306	0.29
MTP0703-331□	330 \pm 20%	1KHz	1.495	0.28
MTP0703-471□	470 \pm 20%	1KHz	2.300	0.25
MTP0703-222□	2200 \pm 20%	1KHz	10.00	0.15

□ Tolerance : J = \pm 5% , K = \pm 10% , L = \pm 15% , M = \pm 20% , N = \pm 30%



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Electrical Characteristics

MTP 0705

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTP0705-1R0□	1.0 \pm 20%	5MHz	0.012	7.00
MTP0705-2R2□	2.2 \pm 20%	5MHz	0.020	4.50
MTP0705-3R3□	3.3 \pm 20%	5MHz	0.023	4.00
MTP0705-4R7□	4.7 \pm 20%	5MHz	0.025	3.50
MTP0705-5R6□	5.6 \pm 20%	5MHz	0.034	3.30
MTP0705-6R8□	6.8 \pm 20%	5MHz	0.042	3.20
MTP0705-100□	10 \pm 20%	2.52MHz	0.070	2.30
MTP0705-120□	12 \pm 20%	2.52MHz	0.080	2.00
MTP0705-150□	15 \pm 20%	2.52MHz	0.090	1.80
MTP0705-180□	18 \pm 20%	2.52MHz	0.100	1.60
MTP0705-220□	22 \pm 20%	2.52MHz	0.110	1.50
MTP0705-270□	27 \pm 20%	2.52MHz	0.120	1.30
MTP0705-330□	33 \pm 20%	2.52MHz	0.130	1.20
MTP0705-390□	39 \pm 20%	2.52MHz	0.160	1.10
MTP0705-470□	47 \pm 20%	2.52MHz	0.180	1.10
MTP0705-560□	56 \pm 20%	2.52MHz	0.240	0.94
MTP0705-680□	68 \pm 20%	2.52MHz	0.280	0.85
MTP0705-820□	82 \pm 20%	2.52MHz	0.370	0.78
MTP0705-101□	100 \pm 20%	1KHz	0.430	0.72
MTP0705-121□	120 \pm 20%	1KHz	0.470	0.66
MTP0705-151□	150 \pm 20%	1KHz	0.640	0.58
MTP0705-181□	180 \pm 20%	1KHz	0.710	0.51
MTP0705-221□	220 \pm 20%	1KHz	0.960	0.49
MTP0705-271□	270 \pm 20%	1KHz	1.110	0.42
MTP0705-331□	330 \pm 20%	1KHz	1.260	0.40
MTP0705-391□	390 \pm 20%	1KHz	1.770	0.36
MTP0705-471□	470 \pm 20%	1KHz	1.960	0.34

□ Tolerance : J = \pm 5% , K = \pm 10% , L = \pm 15% , M = \pm 20% , N = \pm 30%



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Electrical Characteristics

MTP 1004

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTP1004-1R0□	1.0 \pm 20%	5MHz	0.0115	8.70
MTP1004-4R7□	4.7 \pm 20%	5MHz	0.038	4.87
MTP1004-5R6□	5.6 \pm 20%	5MHz	0.040	4.20
MTP1004-6R8□	6.8 \pm 20%	5MHz	0.042	3.57
MTP1004-7R2□	7.2 \pm 20%	5MHz	0.046	3.18
MTP1004-7R6□	7.6 \pm 20%	5MHz	0.048	3.00
MTP1004-8R2□	8.2 \pm 20%	5MHz	0.050	2.81
MTP1004-100□	10 \pm 20%	2.52MHz	0.053	2.38
MTP1004-120□	12 \pm 20%	2.52MHz	0.061	2.13
MTP1004-150□	15 \pm 20%	2.52MHz	0.070	1.87
MTP1004-180□	18 \pm 20%	2.52MHz	0.081	1.73
MTP1004-220□	22 \pm 20%	2.52MHz	0.088	1.60
MTP1004-270□	27 \pm 20%	2.52MHz	0.100	1.44
MTP1004-330□	33 \pm 20%	2.52MHz	0.120	1.26
MTP1004-390□	39 \pm 20%	2.52MHz	0.151	1.20
MTP1004-470□	47 \pm 20%	2.52MHz	0.170	1.10
MTP1004-560□	56 \pm 20%	2.52MHz	0.199	1.01
MTP1004-680□	68 \pm 20%	2.52MHz	0.223	0.91
MTP1004-820□	82 \pm 20%	2.52MHz	0.252	0.85
MTP1004-101□	100 \pm 20%	1KHz	0.344	0.74
MTP1004-121□	120 \pm 20%	1KHz	0.396	0.69
MTP1004-151□	150 \pm 20%	1KHz	0.544	0.61
MTP1004-181□	180 \pm 20%	1KHz	0.621	0.56
MTP1004-221□	220 \pm 20%	1KHz	0.721	0.53
MTP1004-271□	270 \pm 20%	1KHz	0.949	0.45
MTP1004-331□	330 \pm 20%	1KHz	1.100	0.42
MTP1004-391□	390 \pm 20%	1KHz	1.245	0.38
MTP1004-471□	470 \pm 20%	1KHz	1.526	0.35
MTP1004-561□	560 \pm 20%	1KHz	1.904	0.32

□ Tolerance : J = \pm 5% , K = \pm 10% , L = \pm 15% , M = \pm 20% , N = \pm 30%



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Electrical Characteristics

MTP 1005

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTP1005-3R3□	3.3 \pm 20%	5MHz	0.030	5.84
MTP1005-4R7□	4.7 \pm 20%	5MHz	0.035	4.50
MTP1005-5R6□	5.6 \pm 20%	5MHz	0.040	3.88
MTP1005-6R0□	6.0 \pm 20%	5MHz	0.050	3.64
MTP1005-100□	10 \pm 20%	2.52MHz	0.060	2.60
MTP1005-120□	12 \pm 20%	2.52MHz	0.070	2.45
MTP1005-150□	15 \pm 20%	2.52MHz	0.080	2.27
MTP1005-180□	18 \pm 20%	2.52MHz	0.090	2.15
MTP1005-220□	22 \pm 20%	2.52MHz	0.100	1.95
MTP1005-270□	27 \pm 20%	2.52MHz	0.110	1.76
MTP1005-330□	33 \pm 20%	2.52MHz	0.120	1.50
MTP1005-390□	39 \pm 20%	2.52MHz	0.140	1.37
MTP1005-470□	47 \pm 20%	2.52MHz	0.170	1.28
MTP1005-560□	56 \pm 20%	2.52MHz	0.190	1.17
MTP1005-680□	68 \pm 20%	2.52MHz	0.220	1.11
MTP1005-820□	82 \pm 20%	2.52MHz	0.250	1.00
MTP1005-101□	100 \pm 20%	1KHz	0.350	0.97
MTP1005-121□	120 \pm 20%	1KHz	0.400	0.89
MTP1005-151□	150 \pm 20%	1KHz	0.470	0.78
MTP1005-181□	180 \pm 20%	1KHz	0.630	0.72
MTP1005-221□	220 \pm 20%	1KHz	0.730	0.66
MTP1005-271□	270 \pm 20%	1KHz	0.970	0.57
MTP1005-331□	330 \pm 20%	1KHz	1.150	0.52
MTP1005-391□	390 \pm 20%	1KHz	1.300	0.48
MTP1005-471□	470 \pm 20%	1KHz	1.480	0.42
MTP1005-561□	560 \pm 20%	1KHz	1.900	0.33
MTP1005-681□	680 \pm 20%	1KHz	2.250	0.28
MTP1005-821□	820 \pm 20%	1KHz	2.550	0.24

□ Tolerance : J = \pm 5% , K = \pm 10% , L = \pm 15% , M = \pm 20% , N = \pm 30%