



SMD Power Inductors MTPR Series

Features

- * High current type
- * Magnetic shielded for low radiation
- * 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

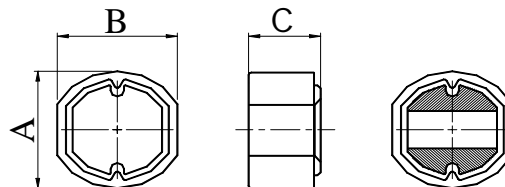
MTPR $\frac{\square\square\square\square}{(1)}$ - $\frac{\square\square\square}{(2)}$ $\frac{\square}{(3)}$ $\frac{\square}{(4)}$

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

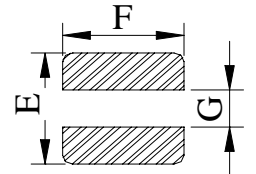
Shapes and Dimensions



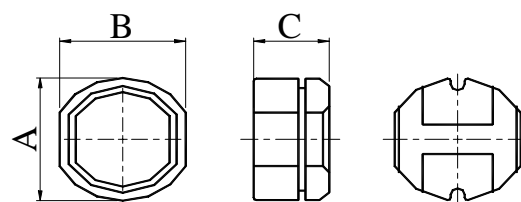
MTPR



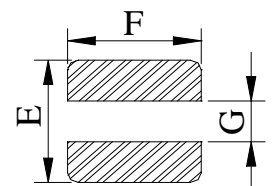
Land Pattern



MTPRB



Land Pattern



TYPE	A	B	C	E	F	G
MTPR0603	6.20 ±0.30	5.60±0.30	3.20±0.30	4.7	4.2	1.5
MTPR0704	7.80 ±0.35	7.50±0.30	4.50±0.40	6.0	5.5	1.5
MTPR1005	10.0 ±0.40	9.45±0.40	5.00±0.50	8.0	7.5	2.3
MTPR1205	12.60 ±0.50	11.6±0.50	5.40±0.50	10.0	9.5	2.5
MTPR0603B	6.20 ±0.30	5.60±0.30	3.20±0.30	4.7	4.2	1.5
MTPR0704B	7.80 ±0.35	7.00±0.35	4.50±0.40	6.0	5.5	1.5
MTPR1005B	10.0 ±0.40	9.00±0.40	5.00±0.50	8.0	7.5	2.3



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Electrical Characteristics

MTPR 0603

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTPR0603-1R0□	1.0 \pm 20%	2.52MHz	0.016	1.60
MTPR0603-2R7□	2.7 \pm 20%	2.52MHz	0.030	1.40
MTPR0603-4R7□	4.7 \pm 20%	2.52MHz	0.058	1.20
MTPR0603-100□	10 \pm 20%	2.52MHz	0.140	1.00
MTPR0603-120□	12 \pm 20%	2.52MHz	0.160	0.94
MTPR0603-150□	15 \pm 20%	2.52MHz	0.180	0.86
MTPR0603-180□	18 \pm 20%	2.52MHz	0.250	0.78
MTPR0603-220□	22 \pm 20%	2.52MHz	0.320	0.76
MTPR0603-270□	27 \pm 20%	2.52MHz	0.360	0.64
MTPR0603-330□	33 \pm 20%	2.52MHz	0.410	0.61
MTPR0603-390□	39 \pm 20%	2.52MHz	0.470	0.53
MTPR0603-470□	47 \pm 20%	2.52MHz	0.510	0.50
MTPR0603-560□	56 \pm 20%	2.52MHz	0.720	0.46
MTPR0603-680□	68 \pm 20%	2.52MHz	0.750	0.42
MTPR0603-820□	82 \pm 20%	2.52MHz	0.820	0.32
MTPR0603-101□	100 \pm 20%	1KHz	0.850	0.30
MTPR0603-221□	220 \pm 20%	1KHz	1.00	0.10

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



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Electrical Characteristics

MTPR 0704

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTPR0704-4R7□	4.7 \pm 20%	2.52MHz	0.042	3.00
MTPR0704-100□	10 \pm 20%	2.52MHz	0.070	1.65
MTPR0704-120□	12 \pm 20%	2.52MHz	0.075	1.57
MTPR0704-150□	15 \pm 20%	2.52MHz	0.080	1.39
MTPR0704-180□	18 \pm 20%	2.52MHz	0.100	1.29
MTPR0704-220□	22 \pm 20%	2.52MHz	0.130	1.12
MTPR0704-270□	27 \pm 20%	2.52MHz	0.160	1.06
MTPR0704-330□	33 \pm 20%	2.52MHz	0.180	0.97
MTPR0704-390□	39 \pm 20%	2.52MHz	0.210	0.91
MTPR0704-470□	47 \pm 20%	2.52MHz	0.270	0.80
MTPR0704-560□	56 \pm 20%	2.52MHz	0.290	0.76
MTPR0704-680□	68 \pm 20%	2.52MHz	0.330	0.68
MTPR0704-820□	82 \pm 20%	2.52MHz	0.430	0.62
MTPR0704-101□	100 \pm 20%	1KHz	0.490	0.55
MTPR0704-121□	120 \pm 20%	1KHz	0.680	0.49
MTPR0704-151□	150 \pm 20%	1KHz	0.940	0.44
MTPR0704-181□	180 \pm 20%	1KHz	1.000	0.40
MTPR0704-221□	220 \pm 20%	1KHz	1.180	0.36
MTPR0704-271□	270 \pm 20%	1KHz	1.300	0.33
MTPR0704-471□	470 \pm 20%	1KHz	1.500	0.25

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Electrical Characteristics

MTPR 1005

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTPR1005-4R7□	4.7 \pm 20%	2.52MHz	0.0327	4.00
MTPR1005-100□	10 \pm 20%	2.52MHz	0.060	2.52
MTPR1005-120□	12 \pm 20%	2.52MHz	0.070	2.31
MTPR1005-150□	15 \pm 20%	2.52MHz	0.075	2.06
MTPR1005-180□	18 \pm 20%	2.52MHz	0.080	1.89
MTPR1005-220□	22 \pm 20%	2.52MHz	0.090	1.71
MTPR1005-270□	27 \pm 20%	2.52MHz	0.100	1.54
MTPR1005-330□	33 \pm 20%	2.52MHz	0.110	1.39
MTPR1005-390□	39 \pm 20%	2.52MHz	0.120	1.28
MTPR1005-470□	47 \pm 20%	2.52MHz	0.140	1.17
MTPR1005-560□	56 \pm 20%	2.52MHz	0.190	1.07
MTPR1005-680□	68 \pm 20%	2.52MHz	0.210	0.97
MTPR1005-820□	82 \pm 20%	2.52MHz	0.280	0.88
MTPR1005-101□	100 \pm 20%	1KHz	0.340	0.80
MTPR1005-121□	120 \pm 20%	1KHz	0.380	0.73
MTPR1005-151□	150 \pm 20%	1KHz	0.510	0.65
MTPR1005-181□	180 \pm 20%	1KHz	0.570	0.60
MTPR1005-221□	220 \pm 20%	1KHz	0.780	0.54
MTPR1005-271□	270 \pm 20%	1KHz	0.870	0.49
MTPR1005-331□	330 \pm 20%	1KHz	1.200	0.44
MTPR1005-391□	390 \pm 20%	1KHz	1.340	0.41
MTPR1005-471□	470 \pm 20%	1KHz	1.500	0.37

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



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Electrical Characteristics

MTPR 1205

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTPR1205-100□	10 \pm 20%	2.52MHz	0.050	2.65
MTPR1205-120□	12 \pm 20%	2.52MHz	0.055	2.50
MTPR1205-150□	15 \pm 20%	2.52MHz	0.060	2.45
MTPR1205-180□	18 \pm 20%	2.52MHz	0.065	2.40
MTPR1205-220□	22 \pm 20%	2.52MHz	0.070	2.20
MTPR1205-270□	27 \pm 20%	2.52MHz	0.080	2.00
MTPR1205-330□	33 \pm 20%	2.52MHz	0.100	1.80
MTPR1205-390□	39 \pm 20%	2.52MHz	0.110	1.65
MTPR1205-470□	47 \pm 20%	2.52MHz	0.120	1.50
MTPR1205-560□	56 \pm 20%	2.52MHz	0.150	1.38
MTPR1205-680□	68 \pm 20%	2.52MHz	0.170	1.26
MTPR1205-820□	82 \pm 20%	2.52MHz	0.200	1.14
MTPR1205-101□	100 \pm 20%	1KHz	0.250	1.05
MTPR1205-121□	120 \pm 20%	1KHz	0.280	0.95
MTPR1205-151□	150 \pm 20%	1KHz	0.400	0.85
MTPR1205-181□	180 \pm 20%	1KHz	0.480	0.77
MTPR1205-221□	220 \pm 20%	1KHz	0.520	0.70
MTPR1205-271□	270 \pm 20%	1KHz	0.700	0.63
MTPR1205-331□	330 \pm 20%	1KHz	0.800	0.57
MTPR1205-391□	390 \pm 20%	1KHz	1.080	0.52
MTPR1205-471□	470 \pm 20%	1KHz	1.200	0.48
MTPR1205-561□	560 \pm 20%	1KHz	1.340	0.44
MTPR1205-591□	590 \pm 20%	1KHz	1.480	0.42
MTPR1205-681□	680 \pm 20%	1KHz	1.780	0.40
MTPR1205-821□	820 \pm 20%	1KHz	2.000	0.36

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



SMD Power Inductors

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Electrical Characteristics

MTPR 0603B

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTPR0603B-100□	10 \pm 20%	2.52MHz	0.14	1.00
MTPR0603B-150□	15 \pm 20%	2.52MHz	0.18	0.86
MTPR0603B-220□	22 \pm 20%	2.52MHz	0.32	0.76
MTPR0603B-470□	47 \pm 20%	2.52MHz	0.51	0.50
MTPR0603B-680□	68 \pm 20%	2.52MHz	0.75	0.42
MTPR0603B-820□	82 \pm 20%	2.52MHz	0.82	0.32
MTPR0603B-101□	100 \pm 20%	1KHz	0.85	0.30
MTPR0603B-561□	560 \pm 20%	1KHz	2.40	0.10

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

Electrical Characteristics

MTPR 0704B

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTPR0704B-100□	10 \pm 20%	2.52MHz	0.07	1.65
MTPR0704B-390□	39 \pm 20%	2.52MHz	0.18	0.91
MTPR0704B-470□	47 \pm 20%	2.52MHz	0.27	0.80
MTPR0704B-101□	100 \pm 20%	1KHz	0.49	0.55
MTPR0704B-221□	220 \pm 20%	1KHz	1.18	0.36
MTPR0704B-271□	270 \pm 20%	1KHz	1.30	0.33
MTPR0704B-471□	470 \pm 20%	1KHz	1.80	0.20

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



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Electrical Characteristics

MTPR 1005B

Part number	Inductance (μ H)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTPR1005B-100□	10 \pm 20%	2.52MHz	0.060	2.06
MTPR1005B-120□	12 \pm 20%	2.52MHz	0.070	1.94
MTPR1005B-150□	15 \pm 20%	2.52MHz	0.075	1.72
MTPR1005B-180□	18 \pm 20%	2.52MHz	0.080	1.58
MTPR1005B-220□	22 \pm 20%	2.52MHz	0.090	1.42
MTPR1005B-270□	27 \pm 20%	2.52MHz	0.100	1.32
MTPR1005B-330□	33 \pm 20%	2.52MHz	0.110	1.16
MTPR1005B-390□	39 \pm 20%	2.52MHz	0.120	1.10
MTPR1005B-470□	47 \pm 20%	2.52MHz	0.140	1.00
MTPR1005B-560□	56 \pm 20%	2.52MHz	0.190	0.93
MTPR1005B-680□	68 \pm 20%	2.52MHz	0.210	0.85
MTPR1005B-820□	82 \pm 20%	2.52MHz	0.280	0.79
MTPR1005B-101□	100 \pm 20%	1KHz	0.340	0.72
MTPR1005B-121□	120 \pm 20%	1KHz	0.450	0.63
MTPR1005B-151□	150 \pm 20%	1KHz	0.510	0.55
MTPR1005B-181□	180 \pm 20%	1KHz	0.570	0.50
MTPR1005B-221□	220 \pm 20%	1KHz	0.780	0.47
MTPR1005B-271□	270 \pm 20%	1KHz	0.870	0.41
MTPR1005B-331□	330 \pm 20%	1KHz	1.200	0.37
MTPR1005B-391□	390 \pm 20%	1KHz	1.340	0.35
MTPR1005B-471□	470 \pm 20%	1KHz	1.500	0.33

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