



## SMD Power Inductors MTPRH 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

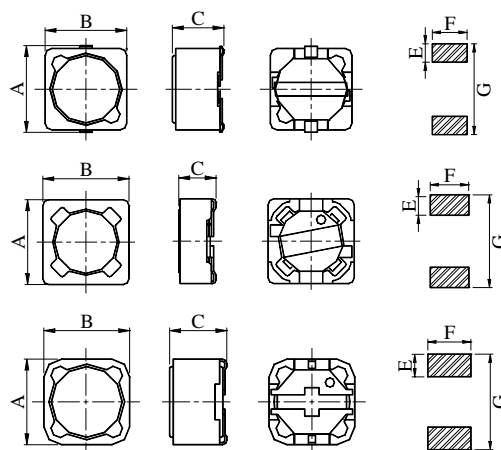
- \* Portable communication equipment
- \* Notebook PC, digital camera, LCD television set
- \* Power supply for VTR, OA equipment
- \* DC / DC converters

### Product Identifications

MTPRH    □□□□ - □□□    □  
(1)            (2)            (3)    (4)

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

### Shapes and Dimensions



MTPRH0603 0605

MTPRH0703 0704

MTPRH12XX



# SMD Power Inductors

## MTPRH Series

TYPE	A	B	C	E	F	G
MTPRH0603	6.60±0.30	6.20±0.30	3.0MAX	1.4	1.6	7.0
MTPRH0605	6.60±0.30	6.20±0.30	5.0MAX	1.4	1.6	7.0
MTPRH0703	7.30±0.20	7.30±0.20	3.5MAX	1.3	2.1	7.6
MTPRH0704	7.30±0.20	7.30±0.20	4.5MAX	1.3	2.1	7.6
MTPRH1203	12.0±0.30	12.0±0.30	3.9MAX	2.8	5.4	12.6
MTPRH1204	12.0±0.30	12.0±0.30	5.0MAX	2.8	5.4	12.6
MTPRH1205	12.0±0.30	12.0±0.30	6.0MAX	2.8	5.4	12.6
MTPRH1207	12.0±0.30	12.0±0.30	8.0MAX	2.8	5.4	12.6

**Electrical Characteristics****MTPRH 0603**

Part number	Inductance (μH)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTPRH0603-2R9□	2.9±20%	7.96MHz	0.068	1.94
MTPRH0603-4R0□	4.0±20%	7.96MHz	0.080	1.63
MTPRH0603-4R3□	4.3±20%	7.96MHz	0.085	1.55
MTPRH0603-4R7□	4.7±20%	7.96MHz	0.090	1.46
MTPRH0603-5R5□	5.5±20%	7.96MHz	0.096	1.35
MTPRH0603-100□	10±20%	1KHz	0.150	1.10
MTPRH0603-120□	12±20%	1KHz	0.200	1.00
MTPRH0603-150□	15±20%	1KHz	0.230	0.90
MTPRH0603-180□	18±20%	1KHz	0.270	0.80
MTPRH0603-220□	22±20%	1KHz	0.340	0.74
MTPRH0603-270□	27±20%	1KHz	0.380	0.66
MTPRH0603-330□	33±20%	1KHz	0.450	0.59
MTPRH0603-390□	39±20%	1KHz	0.490	0.54
MTPRH0603-470□	47±20%	1KHz	0.690	0.50
MTPRH0603-560□	56±20%	1KHz	0.780	0.46
MTPRH0603-680□	68±20%	1KHz	1.070	0.42
MTPRH0603-820□	82±20%	1KHz	1.210	0.38
MTPRH0603-101□	100±20%	1KHz	1.390	0.34
MTPRH0603-121□	120±20%	1KHz	1.900	0.31
MTPRH0603-151□	150±20%	1KHz	2.180	0.28
MTPRH0603-181□	180±20%	1KHz	2.770	0.26
MTPRH0603-221□	220±20%	1KHz	3.120	0.23
MTPRH0603-271□	270±20%	1KHz	4.380	0.22
MTPRH0603-331□	330±20%	1KHz	4.940	0.19

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



## SMD Power Inductors MTPRH Series

### Electrical Characteristics

### MTPRH 0605

Part number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) MAX.	Rated Current (A) MAX.
MTPRH0605-100□	10 $\pm$ 20%	1KHz	0.120	1.35
MTPRH0605-120□	12 $\pm$ 20%	1KHz	0.130	1.22
MTPRH0605-150□	15 $\pm$ 20%	1KHz	0.180	1.11
MTPRH0605-180□	18 $\pm$ 20%	1KHz	0.240	1.02
MTPRH0605-220□	22 $\pm$ 20%	1KHz	0.270	0.91
MTPRH0605-270□	27 $\pm$ 20%	1KHz	0.300	0.82
MTPRH0605-330□	33 $\pm$ 20%	1KHz	0.330	0.74
MTPRH0605-390□	39 $\pm$ 20%	1KHz	0.370	0.69
MTPRH0605-470□	47 $\pm$ 20%	1KHz	0.520	0.62
MTPRH0605-560□	56 $\pm$ 20%	1KHz	0.560	0.58
MTPRH0605-680□	68 $\pm$ 20%	1KHz	0.630	0.51
MTPRH0605-820□	82 $\pm$ 20%	1KHz	0.710	0.46
MTPRH0605-101□	100 $\pm$ 20%	1KHz	1.030	0.42
MTPRH0605-121□	120 $\pm$ 20%	1KHz	1.150	0.38
MTPRH0605-151□	150 $\pm$ 20%	1KHz	1.680	0.35
MTPRH0605-181□	180 $\pm$ 20%	1KHz	1.870	0.32
MTPRH0605-221□	220 $\pm$ 20%	1KHz	2.080	0.29
MTPRH0605-271□	270 $\pm$ 20%	1KHz	2.370	0.26
MTPRH0605-331□	330 $\pm$ 20%	1KHz	2.670	0.23
MTPRH0605-391□	390 $\pm$ 20%	1KHz	2.940	0.22
MTPRH0605-471□	470 $\pm$ 20%	1KHz	3.930	0.20
MTPRH0605-561□	560 $\pm$ 20%	1KHz	5.430	0.18
MTPRH0605-681□	680 $\pm$ 20%	1KHz	7.320	0.17
MTPRH0605-821□	820 $\pm$ 20%	1KHz	8.240	0.15
MTPRH0605-102□	1000 $\pm$ 20%	1KHz	9.260	0.14

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



# SMD Power Inductors

## MTPRH Series

**Electrical Characteristics****MTPRH 0703**

Part number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) MAX.	Rated Current (A) MAX.
MTPRH0703-R33□	0.33 $\pm$ 20%	100KHz	0.0059	6.94
MTPRH0703-R68□	0.68 $\pm$ 20%	100KHz	0.006	5.80
MTPRH0703-1R0□	1.0 $\pm$ 20%	100KHz	0.018	5.20
MTPRH0703-1R2□	1.2 $\pm$ 20%	100KHz	0.020	4.20
MTPRH0703-2R2□	2.2 $\pm$ 20%	100KHz	0.025	3.50
MTPRH0703-4R2□	4.2 $\pm$ 20%	100KHz	0.060	2.50
MTPRH0703-4R7□	4.7 $\pm$ 20%	100KHz	0.038	2.26
MTPRH0703-5R0□	5.0 $\pm$ 20%	100KHz	0.060	2.12
MTPRH0703-6R8□	6.8 $\pm$ 20%	100KHz	0.065	1.81
MTPRH0703-100□	10 $\pm$ 20%	1KHz	0.072	1.68
MTPRH0703-120□	12 $\pm$ 20%	1KHz	0.098	1.52
MTPRH0703-150□	15 $\pm$ 20%	1KHz	0.130	1.33
MTPRH0703-180□	18 $\pm$ 20%	1KHz	0.140	1.20
MTPRH0703-220□	22 $\pm$ 20%	1KHz	0.190	1.07
MTPRH0703-270□	27 $\pm$ 20%	1KHz	0.210	0.96
MTPRH0703-330□	33 $\pm$ 20%	1KHz	0.240	0.91
MTPRH0703-390□	39 $\pm$ 20%	1KHz	0.320	0.77
MTPRH0703-470□	47 $\pm$ 20%	1KHz	0.360	0.46
MTPRH0703-560□	56 $\pm$ 20%	1KHz	0.470	0.68
MTPRH0703-680□	68 $\pm$ 20%	1KHz	0.520	0.61
MTPRH0703-820□	82 $\pm$ 20%	1KHz	0.690	0.57
MTPRH0703-101□	100 $\pm$ 20%	1KHz	0.790	0.50
MTPRH0703-121□	120 $\pm$ 20%	1KHz	0.890	0.49
MTPRH0703-151□	150 $\pm$ 20%	1KHz	1.270	0.43
MTPRH0703-181□	180 $\pm$ 20%	1KHz	1.450	0.39
MTPRH0703-201□	200 $\pm$ 20%	1KHz	1.550	0.37
MTPRH0703-221□	220 $\pm$ 20%	1KHz	1.65	0.35
MTPRH0703-271□	270 $\pm$ 20%	1KHz	2.31	0.32
MTPRH0703-331□	330 $\pm$ 20%	1KHz	2.62	0.28
MTPRH0703-391□	390 $\pm$ 20%	1KHz	2.94	0.26
MTPRH0703-471□	470 $\pm$ 20%	1KHz	4.18	0.24
MTPRH0703-681□	680 $\pm$ 20%	1KHz	5.73	0.19
MTPRH0703-821□	820 $\pm$ 20%	1KHz	6.54	0.18
MTPRH0703-102□	1000 $\pm$ 20%	1KHz	9.44	0.16

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



## SMD Power Inductors MTPRH Series

**Electrical Characteristics****MTPRH 0704**

Part number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) MAX.	Rated Current (A) MAX.
MTPRH0704-R33□	0.33 $\pm$ 20%	100KHz	0.0059	7.00
MTPRH0704-1R2□	1.2 $\pm$ 20%	100KHz	0.015	5.23
MTPRH0704-2R7□	2.7 $\pm$ 20%	100KHz	0.020	4.56
MTPRH0704-3R3□	3.3 $\pm$ 20%	100KHz	0.025	4.20
MTPRH0704-3R9□	3.9 $\pm$ 20%	100KHz	0.030	3.90
MTPRH0704-4R7□	4.7 $\pm$ 20%	100KHz	0.038	3.70
MTPRH0704-100□	10 $\pm$ 20%	1KHz	0.049	1.84
MTPRH0704-120□	12 $\pm$ 20%	1KHz	0.058	1.71
MTPRH0704-150□	15 $\pm$ 20%	1KHz	0.089	1.47
MTPRH0704-180□	18 $\pm$ 20%	1KHz	0.091	1.31
MTPRH0704-220□	22 $\pm$ 20%	1KHz	0.110	1.23
MTPRH0704-270□	27 $\pm$ 20%	1KHz	0.150	1.12
MTPRH0704-330□	33 $\pm$ 20%	1KHz	0.170	0.96
MTPRH0704-390□	39 $\pm$ 20%	1KHz	0.230	0.91
MTPRH0704-470□	47 $\pm$ 20%	1KHz	0.260	0.88
MTPRH0704-560□	56 $\pm$ 20%	1KHz	0.350	0.75
MTPRH0704-680□	68 $\pm$ 20%	1KHz	0.380	0.69
MTPRH0704-820□	82 $\pm$ 20%	1KHz	0.430	0.61
MTPRH0704-101□	100 $\pm$ 20%	1KHz	0.610	0.60
MTPRH0704-121□	120 $\pm$ 20%	1KHz	0.660	0.52
MTPRH0704-151□	150 $\pm$ 20%	1KHz	0.880	0.46
MTPRH0704-181□	180 $\pm$ 20%	1KHz	0.980	0.42
MTPRH0704-221□	220 $\pm$ 20%	1KHz	1.170	0.36
MTPRH0704-271□	270 $\pm$ 20%	1KHz	1.640	0.34
MTPRH0704-331□	330 $\pm$ 20%	1KHz	1.860	0.32
MTPRH0704-391□	390 $\pm$ 20%	1KHz	2.850	0.29
MTPRH0704-471□	470 $\pm$ 20%	1KHz	3.010	0.26
MTPRH0704-561□	560 $\pm$ 20%	1KHz	3.620	0.23
MTPRH0704-681□	680 $\pm$ 20%	1KHz	4.630	0.22
MTPRH0704-821□	820 $\pm$ 20%	1KHz	5.200	0.20
MTPRH0704-102□	1000 $\pm$ 20%	1KHz	6.000	0.18

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



## SMD Power Inductors MTPRH Series

### Electrical Characteristics

### MTPRH 1203

Part number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) MAX.	Rated Current (A) MAX.
MTPRH1203-1R6□	1.6 $\pm$ 20%	7.96MHz	0.010	8.00
MTPRH1203-2R2□	2.2 $\pm$ 20%	7.96MHz	0.015	7.00
MTPRH1203-2R5□	2.5 $\pm$ 20%	7.96MHz	0.020	6.78
MTPRH1203-3R3□	3.3 $\pm$ 20%	7.96MHz	0.027	6.43
MTPRH1203-4R7□	4.7 $\pm$ 20%	7.96MHz	0.030	6.00
MTPRH1203-5R6□	5.6 $\pm$ 20%	7.96MHz	0.032	5.63
MTPRH1203-6R8□	6.8 $\pm$ 20%	7.96MHz	0.035	5.00
MTPRH1203-8R2□	8.2 $\pm$ 20%	7.96MHz	0.042	4.00
MTPRH1203-100□	100 $\pm$ 20%	1KHz	0.060	3.60
MTPRH1203-150□	150 $\pm$ 20%	1KHz	0.077	3.00
MTPRH1203-220□	220 $\pm$ 20%	1KHz	0.102	2.50

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



# SMD Power Inductors

## MTPRH Series

**Electrical Characteristics****MTPRH 1204**

Part number	Inductance (μH)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTPRH1204-1R8□	1.8±20%	7.96MHz	0.105	9.00
MTPRH1204-2R2□	2.2±20%	7.96MHz	0.0115	8.20
MTPRH1204-2R5□	2.5±20%	7.96MHz	0.0125	7.60
MTPRH1204-3R3□	3.3±20%	7.96MHz	0.0140	7.00
MTPRH1204-3R9□	3.9±20%	7.96MHz	0.0150	6.50
MTPRH1204-4R7□	4.7±20%	7.96MHz	0.0180	5.70
MTPRH1204-5R6□	5.6±20%	7.96MHz	0.0210	5.20
MTPRH1204-6R8□	6.8±20%	7.96MHz	0.0230	4.90
MTPRH1204-8R2□	8.2±20%	7.96MHz	0.0263	4.50
MTPRH1204-100□	10±20%	1KHz	0.0280	4.30
MTPRH1204-120□	12±20%	1KHz	0.0380	4.00
MTPRH1204-150□	15±20%	1KHz	0.0500	3.20
MTPRH1204-180□	18±20%	1KHz	0.0570	3.10
MTPRH1204-220□	22±20%	1KHz	0.0660	2.90
MTPRH1204-270□	27±20%	1KHz	0.0800	2.80
MTPRH1204-330□	33±20%	1KHz	0.0970	2.70
MTPRH1204-390□	39±20%	1KHz	0.132	2.10
MTPRH1204-470□	47±20%	1KHz	0.150	1.90
MTPRH1204-560□	56±20%	1KHz	0.190	1.80
MTPRH1204-680□	68±20%	1KHz	0.220	1.50
MTPRH1204-820□	82±20%	1KHz	0.260	1.30
MTPRH1204-101□	100±20%	1KHz	0.308	1.20
MTPRH1204-121□	120±20%	1KHz	0.380	1.10
MTPRH1204-151□	150±20%	1KHz	0.530	0.95
MTPRH1204-181□	180±20%	1KHz	0.620	0.85
MTPRH1204-221□	220±20%	1KHz	0.700	0.80
MTPRH1204-271□	270±20%	1KHz	0.876	0.60
MTPRH1204-331□	330±20%	1KHz	0.990	0.50
MTPRH1204-102□	1000±20%	1KHz	2.870	0.20

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



# SMD Power Inductors

## MTPRH Series

**Electrical Characteristics****MTPRH 1205**

Part number	Inductance (μH)	Test Frequency	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
MTPRH1205-1R0□	1.0±20%	7.96MHz	0.012	8.00
MTPRH1205-1R5□	1.5±20%	7.96MHz	0.013	7.70
MTPRH1205-1R8□	1.8±20%	7.96MHz	0.014	7.40
MTPRH1205-2R2□	2.2±20%	7.96MHz	0.015	7.00
MTPRH1205-2R5□	2.5±20%	7.96MHz	0.017	6.40
MTPRH1205-3R0□	3.0±20%	7.96MHz	0.018	5.80
MTPRH1205-3R3□	3.3±20%	7.96MHz	0.019	5.40
MTPRH1205-4R7□	4.7±20%	7.96MHz	0.020	4.80
MTPRH1205-5R6□	5.6±20%	7.96MHz	0.021	4.40
MTPRH1205-6R8□	6.8±20%	7.96MHz	0.022	4.30
MTPRH1205-7R7□	7.7±20%	7.96MHz	0.024	4.20
MTPRH1205-8R2□	8.2±20%	7.96MHz	0.025	4.10
MTPRH1205-100□	10±20%	1KHz	0.026	4.00
MTPRH1205-120□	12±20%	1KHz	0.027	3.50
MTPRH1205-150□	15±20%	1KHz	0.030	3.30
MTPRH1205-180□	18±20%	1KHz	0.034	3.00
MTPRH1205-220□	22±20%	1KHz	0.036	2.80
MTPRH1205-270□	27±20%	1KHz	0.051	2.30
MTPRH1205-300□	30±20%	1KHz	0.057	2.20
MTPRH1205-330□	33±20%	1KHz	0.060	2.10
MTPRH1205-390□	39±20%	1KHz	0.068	2.00
MTPRH1205-470□	47±20%	1KHz	0.075	1.80
MTPRH1205-560□	56±20%	1KHz	0.110	1.70
MTPRH1205-680□	68±20%	1KHz	0.120	1.50
MTPRH1205-820□	82±20%	1KHz	0.140	1.40
MTPRH1205-101□	100±20%	1KHz	0.160	1.30
MTPRH1205-121□	120±20%	1KHz	0.170	1.10
MTPRH1205-151□	150±20%	1KHz	0.230	1.00
MTPRH1205-181□	180±20%	1KHz	0.290	0.90
MTPRH1205-221□	220±20%	1KHz	0.400	0.80
MTPRH1205-271□	270±20%	1KHz	0.460	0.75
MTPRH1205-331□	330±20%	1KHz	0.510	0.68
MTPRH1205-391□	390±20%	1KHz	0.690	0.65
MTPRH1205-471□	470±20%	1KHz	0.770	0.58
MTPRH1205-561□	560±20%	1KHz	0.860	0.54
MTPRH1205-681□	680±20%	1KHz	1.200	0.48
MTPRH1205-821□	820±20%	1KHz	1.340	0.43
MTPRH1205-102□	1000±20%	1KHz	1.530	0.40
MTPRH1205-103□	10000±20%	1KHz	18.0	0.06

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



## SMD Power Inductors

### MTPRH Series

**Electrical Characteristics****MTPRH 1207**

Part number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) MAX.	Rated Current (A) MAX.
MTPRH1207-R47□	0.47 $\pm$ 20%	100KHz	0.0030	23.5
MTPRH1207-R75□	0.75 $\pm$ 20%	100KHz	0.0042	19.8
MTPRH1207-1R0□	1.0 $\pm$ 20%	100KHz	0.0065	10.0
MTPRH1207-1R2□	1.2 $\pm$ 20%	100KHz	0.007	9.80
MTPRH1207-1R5□	1.5 $\pm$ 20%	100KHz	0.008	9.40
MTPRH1207-1R8□	1.8 $\pm$ 20%	100KHz	0.010	9.00
MTPRH1207-2R2□	2.2 $\pm$ 20%	100KHz	0.012	8.00
MTPRH1207-3R5□	3.5 $\pm$ 20%	100KHz	0.014	7.50
MTPRH1207-4R0□	4.0 $\pm$ 20%	100KHz	0.015	7.20
MTPRH1207-4R7□	4.7 $\pm$ 20%	100KHz	0.016	6.80
MTPRH1207-5R6□	5.6 $\pm$ 20%	100KHz	0.017	6.40
MTPRH1207-6R1□	6.1 $\pm$ 20%	100KHz	0.018	6.20
MTPRH1207-7R0□	7.0 $\pm$ 20%	100KHz	0.019	6.10
MTPRH1207-7R6□	7.6 $\pm$ 20%	100KHz	0.020	5.90
MTPRH1207-120□	12 $\pm$ 20%	1KHz	0.025	4.90
MTPRH1207-150□	15 $\pm$ 20%	1KHz	0.027	4.50
MTPRH1207-180□	18 $\pm$ 20%	1KHz	0.040	3.90
MTPRH1207-220□	22 $\pm$ 20%	1KHz	0.044	3.60
MTPRH1207-270□	27 $\pm$ 20%	1KHz	0.046	3.40
MTPRH1207-330□	33 $\pm$ 20%	1KHz	0.065	3.00
MTPRH1207-390□	39 $\pm$ 20%	1KHz	0.073	2.75
MTPRH1207-470□	47 $\pm$ 20%	1KHz	0.090	2.50
MTPRH1207-530□	53 $\pm$ 20%	1KHz	0.100	2.45
MTPRH1207-560□	56 $\pm$ 20%	1KHz	0.110	2.35
MTPRH1207-680□	68 $\pm$ 20%	1KHz	0.120	2.10
MTPRH1207-820□	82 $\pm$ 20%	1KHz	0.130	1.90
MTPRH1207-101□	100 $\pm$ 20%	1KHz	0.220	1.70
MTPRH1207-121□	120 $\pm$ 20%	1KHz	0.250	1.60
MTPRH1207-151□	150 $\pm$ 20%	1KHz	0.280	1.42
MTPRH1207-221□	220 $\pm$ 20%	1KHz	0.390	1.16
MTPRH1207-271□	270 $\pm$ 20%	1KHz	0.560	1.06
MTPRH1207-331□	330 $\pm$ 20%	1KHz	0.640	0.95
MTPRH1207-471□	470 $\pm$ 20%	1KHz	0.800	0.80
MTPRH1207-561□	560 $\pm$ 20%	1KHz	0.860	0.75
MTPRH1207-821□	820 $\pm$ 20%	1KHz	1.500	0.65
MTPRH1207-102□	1000 $\pm$ 20%	1KHz	1.820	0.55
MTPRH1207-122□	1200 $\pm$ 20%	1KHz	2.600	0.48

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