

SMD Type Power Inductors 晶片型功率電感

TP Series

Unshielded Power Inductors 無護殼型



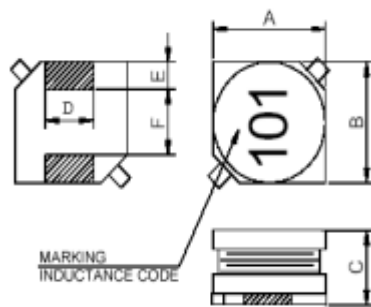
Features

1. surface mount inductor with high current rating.
2. Low resistance to keep power loss minimum.

Applications

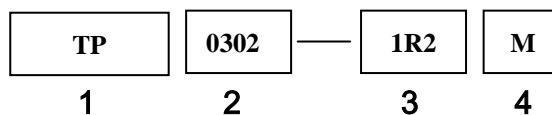
Excellent for power line DC-DC conversion applications used in hard disk, computers and other Electronic equipment.

Dimensions



| Series | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) |
|--------|---------|---------|---------|---------|---------|---------|
| TP0603 | 6.0±0.3 | 6.0±0.3 | 2.9±0.3 | 2.0±0.2 | 1.5±0.2 | 3.0±0.2 |
| TP0604 | 6.0±0.3 | 6.0±0.3 | 3.9±0.3 | 2.0±0.2 | 1.5±0.2 | 3.0±0.2 |
| TP0605 | 6.0±0.3 | 6.0±0.3 | 4.9±0.3 | 2.0±0.2 | 1.5±0.2 | 3.0±0.2 |
| TP0703 | 7.0±0.3 | 7.0±0.3 | 3.0±0.3 | 2.0±0.2 | 1.5±0.2 | 4.0±0.2 |
| TP0705 | 7.0±0.3 | 7.0±0.3 | 4.6±0.3 | 2.0±0.2 | 1.5±0.2 | 4.0±0.2 |
| TP1003 | 10±0.3 | 10±0.3 | 3.0±0.3 | 2.4±0.2 | 2.0±0.2 | 6.0±0.2 |
| TP1004 | 10±0.3 | 10±0.3 | 4.6±0.3 | 2.4±0.2 | 2.0±0.2 | 6.0±0.2 |

Part Numbering



- 1 . Series
- 2 . Dimension : A*C
- 3 . Inductance : 1R2 =1.2uH
- 4 . Inductance Tolerance : J=±5% , K=±10% , M=±20%

TP0603 Series

| Part Number | Inductance (uH) | Test Frequency (Hz) | DCR (Ω)max | IDC (A)max |
|-------------|-----------------|---------------------|---------------------|------------|
| TP0603-1R2M | 1.2 | 1V/100K | 0.025 | 2.80 |
| TP0603-1R5M | 1.5 | 1V/100K | 0.028 | 2.60 |
| TP0603-2R2M | 2.2 | 1V/100K | 0.030 | 2.30 |
| TP0603-3R3M | 3.3 | 1V/100K | 0.055 | 2.00 |
| TP0603-4R7M | 4.7 | 1V/100K | 0.065 | 1.85 |
| TP0603-6R8M | 6.8 | 1V/100K | 0.090 | 1.65 |
| TP0603-100M | 10 | 1V/100K | 0.115 | 1.45 |
| TP0603-120M | 12 | 1V/100K | 0.150 | 1.20 |
| TP0603-150M | 15 | 1V/100K | 0.180 | 1.15 |
| TP0603-180M | 18 | 1V/100K | 0.230 | 1.05 |
| TP0603-220M | 22 | 1V/100K | 0.250 | 1.00 |
| TP0603-270M | 27 | 1V/100K | 0.350 | 0.95 |
| TP0603-330K | 33 | 1V/100K | 0.380 | 0.90 |
| TP0603-390K | 39 | 1V/100K | 0.410 | 0.80 |
| TP0603-470K | 47 | 1V/100K | 0.430 | 0.75 |
| TP0603-560K | 56 | 1V/100K | 0.620 | 0.70 |
| TP0603-680K | 68 | 1V/100K | 0.710 | 0.60 |
| TP0603-820K | 82 | 1V/100K | 0.730 | 0.50 |
| TP0603-101K | 100 | 1V/100K | 1.050 | 0.48 |
| TP0603-121K | 120 | 1V/100K | 1.180 | 0.45 |
| TP0603-151K | 150 | 1V/100K | 1.800 | 0.40 |
| TP0603-181K | 180 | 1V/100K | 1.950 | 0.35 |
| TP0603-221K | 220 | 1V/100K | 2.960 | 0.30 |
| TP0603-271K | 270 | 1V/100K | 3.450 | 0.28 |
| TP0603-331K | 330 | 1V/100K | 3.800 | 0.26 |
| TP0603-391K | 390 | 1V/100K | 4.000 | 0.24 |
| TP0603-471K | 470 | 1V/100K | 4.400 | 0.22 |
| TP0603-561K | 560 | 1V/100K | 6.200 | 0.20 |
| TP0603-681K | 680 | 1V/100K | 6.800 | 0.18 |
| TP0603-821K | 820 | 1V/100K | 12.000 | 0.16 |
| TP0603-102K | 1000 | 1V/100K | 13.500 | 0.14 |

Note : 1.Inductance measured by LCR meter HP 4294/HP4291

2.DCR measured by Milliohm meter CH502AC

TP0604 Series

| Part Number | Inductance (μ H) | Test Frequency (Hz) | DCR (Ω)max | IDC (A)max |
|-------------|--------------------------|------------------------|------------------------|---------------|
| TP0604-1R2M | 1.2 | 1V/100K | 0.025 | 3.00 |
| TP0604-1R8M | 1.8 | 1V/100K | 0.030 | 2.85 |
| TP0604-2R2M | 2.2 | 1V/100K | 0.035 | 2.65 |
| TP0604-3R3M | 3.3 | 1V/100K | 0.040 | 2.35 |
| TP0604-4R7M | 4.7 | 1V/100K | 0.045 | 2.15 |
| TP0604-6R8M | 6.8 | 1V/100K | 0.060 | 1.85 |
| TP0604-100M | 10 | 1V/100K | 0.085 | 1.60 |
| TP0604-120M | 12 | 1V/100K | 0.090 | 1.50 |
| TP0604-150M | 15 | 1V/100K | 0.110 | 1.45 |
| TP0604-180M | 18 | 1V/100K | 0.120 | 1.30 |
| TP0604-220M | 22 | 1V/100K | 0.160 | 1.25 |
| TP0604-270M | 27 | 1V/100K | 0.190 | 1.10 |
| TP0604-330K | 33 | 1V/100K | 0.280 | 1.00 |
| TP0604-390K | 39 | 1V/100K | 0.300 | 0.90 |
| TP0604-470K | 47 | 1V/100K | 0.330 | 0.85 |
| TP0604-560K | 56 | 1V/100K | 0.410 | 0.80 |
| TP0604-680K | 68 | 1V/100K | 0.450 | 0.70 |
| TP0604-820K | 82 | 1V/100K | 0.600 | 0.60 |
| TP0604-101K | 100 | 1V/100K | 0.660 | 0.55 |
| TP0604-121K | 120 | 1V/100K | 0.720 | 0.50 |
| TP0604-151K | 150 | 1V/100K | 1.050 | 0.45 |
| TP0604-181K | 180 | 1V/100K | 1.250 | 0.40 |
| TP0604-221K | 220 | 1V/100K | 1.800 | 0.35 |
| TP0604-271K | 270 | 1V/100K | 1.950 | 0.30 |
| TP0604-331K | 330 | 1V/100K | 2.780 | 0.28 |
| TP0604-391K | 390 | 1V/100K | 3.300 | 0.25 |
| TP0604-471K | 470 | 1V/100K | 5.100 | 0.23 |
| TP0604-561K | 560 | 1V/100K | 5.400 | 0.21 |
| TP0604-681K | 680 | 1V/100K | 6.000 | 0.20 |
| TP0604-821K | 820 | 1V/100K | 12.000 | 0.18 |
| TP0604-102K | 1000 | 1V/100K | 13.500 | 0.16 |

Note : 1.Inductance measured by LCR meter HP 4294/HP4291

2.DCR measured by Milliohm meter CH502AC

TP0605 Series

| Part Number | Inductance (μ H) | Test Frequency (Hz) | DCR (Ω)max | IDC (A)max |
|-------------|--------------------------|------------------------|------------------------|---------------|
| TP0605-1R2M | 1.2 | 1V/100K | 0.028 | 3.50 |
| TP0605-1R5M | 1.5 | 1V/100K | 0.030 | 3.00 |
| TP0605-2R2M | 2.2 | 1V/100K | 0.035 | 2.70 |
| TP0605-3R3M | 3.3 | 1V/100K | 0.042 | 2.50 |
| TP0605-4R7M | 4.7 | 1V/100K | 0.050 | 2.20 |
| TP0605-6R8M | 6.8 | 1V/100K | 0.060 | 2.00 |
| TP0605-100M | 10 | 1V/100K | 0.070 | 1.80 |
| TP0605-120M | 12 | 1V/100K | 0.080 | 1.60 |
| TP0605-150M | 15 | 1V/100K | 0.090 | 1.50 |
| TP0605-180M | 18 | 1V/100K | 0.095 | 1.30 |
| TP0605-220M | 22 | 1V/100K | 0.110 | 1.20 |
| TP0605-270M | 27 | 1V/100K | 0.130 | 1.10 |
| TP0605-330K | 33 | 1V/100K | 0.180 | 1.00 |
| TP0605-390K | 39 | 1V/100K | 0.210 | 0.90 |
| TP0605-470K | 47 | 1V/100K | 0.220 | 0.80 |
| TP0605-560K | 56 | 1V/100K | 0.250 | 0.75 |
| TP0605-680K | 68 | 1V/100K | 0.300 | 0.70 |
| TP0605-820K | 82 | 1V/100K | 0.390 | 0.60 |
| TP0605-101K | 100 | 1V/100K | 0.430 | 0.55 |
| TP0605-121K | 120 | 1V/100K | 0.500 | 0.50 |
| TP0605-151K | 150 | 1V/100K | 0.620 | 0.45 |
| TP0605-181K | 180 | 1V/100K | 0.690 | 0.40 |
| TP0605-221K | 220 | 1V/100K | 0.890 | 0.38 |
| TP0605-271K | 270 | 1V/100K | 1.000 | 0.35 |
| TP0605-331K | 330 | 1V/100K | 1.400 | 0.32 |
| TP0605-391K | 390 | 1V/100K | 1.500 | 0.30 |
| TP0605-471K | 470 | 1V/100K | 2.000 | 0.28 |
| TP0605-561K | 560 | 1V/100K | 2.300 | 0.25 |
| TP0605-681K | 680 | 1V/100K | 3.200 | 0.20 |
| TP0605-821K | 820 | 1V/100K | 3.500 | 0.18 |
| TP0605-102K | 1000 | 1V/100K | 4.100 | 0.16 |

Note : 1.Inductance measured by LCR meter HP 4294/HP4291

2.DCR measured by Milliohm meter CH502AC

TP0703 Series

| Part Number | Inductance (μ H) | Test Frequency (Hz) | DCR (Ω)max | IDC (A)max |
|-------------|--------------------------|------------------------|------------------------|---------------|
| TP0703-1R0M | 1.0 | 1V/100K | 0.020 | 3.20 |
| TP0703-1R5M | 1.5 | 1V/100K | 0.025 | 2.80 |
| TP0703-2R2M | 2.2 | 1V/100K | 0.035 | 2.50 |
| TP0703-3R3M | 3.3 | 1V/100K | 0.040 | 2.20 |
| TP0703-4R7M | 4.7 | 1V/100K | 0.045 | 2.00 |
| TP0703-6R8M | 6.8 | 1V/100K | 0.060 | 1.60 |
| TP0703-100M | 10 | 1V/100K | 0.080 | 1.40 |
| TP0703-120M | 12 | 1V/100K | 0.085 | 1.30 |
| TP0703-150L | 15 | 1V/100K | 0.110 | 1.10 |
| TP0703-180L | 18 | 1V/100K | 0.130 | 1.05 |
| TP0703-220L | 22 | 1V/100K | 0.150 | 1.00 |
| TP0703-270L | 27 | 1V/100K | 0.190 | 0.95 |
| TP0703-330K | 33 | 1V/100K | 0.210 | 0.85 |
| TP0703-390K | 39 | 1V/100K | 0.270 | 0.75 |
| TP0703-470K | 47 | 1V/100K | 0.310 | 0.70 |
| TP0703-560K | 56 | 1V/100K | 0.390 | 0.65 |
| TP0703-680K | 68 | 1V/100K | 0.430 | 0.60 |
| TP0703-820K | 82 | 1V/100K | 0.490 | 0.50 |
| TP0703-101K | 100 | 1V/100K | 0.650 | 0.45 |
| TP0703-121K | 120 | 1V/100K | 0.700 | 0.40 |
| TP0703-151K | 150 | 1V/100K | 0.850 | 0.35 |
| TP0703-181K | 180 | 1V/100K | 1.100 | 0.33 |
| TP0703-221K | 220 | 1V/100K | 1.250 | 0.30 |
| TP0703-271K | 270 | 1V/100K | 1.450 | 0.28 |
| TP0703-331K | 330 | 1V/100K | 2.000 | 0.25 |
| TP0703-391K | 390 | 1V/100K | 2.250 | 0.23 |
| TP0703-471K | 470 | 1V/100K | 2.600 | 0.22 |
| TP0703-561K | 560 | 1V/100K | 3.700 | 0.20 |
| TP0703-681K | 680 | 1V/100K | 4.300 | 0.18 |
| TP0703-821K | 820 | 1V/100K | 4.900 | 0.16 |
| TP0703-102K | 1000 | 1V/100K | 5.600 | 0.15 |

Note : 1.Inductance measured by LCR meter HP 4294/HP4291

2.DCR measured by Milliohm meter CH502AC

TP0705 Series

| Part Number | Inductance (μ H) | Test Frequency (Hz) | DCR (Ω)max | IDC (A)max |
|-------------|--------------------------|------------------------|------------------------|---------------|
| TP0705-1R0M | 1.0 | 1V/100K | 0.023 | 3.50 |
| TP0705-1R5M | 1.5 | 1V/100K | 0.028 | 3.20 |
| TP0705-2R2M | 2.2 | 1V/100K | 0.033 | 3.30 |
| TP0705-3R3M | 3.3 | 1V/100K | 0.040 | 2.70 |
| TP0705-4R7M | 4.7 | 1V/100K | 0.050 | 2.50 |
| TP0705-6R8M | 6.8 | 1V/100K | 0.060 | 2.20 |
| TP0705-100M | 10 | 1V/100K | 0.075 | 2.00 |
| TP0705-120M | 12 | 1V/100K | 0.085 | 1.90 |
| TP0705-150L | 15 | 1V/100K | 0.090 | 1.50 |
| TP0705-180L | 18 | 1V/100K | 0.100 | 1.40 |
| TP0705-220L | 22 | 1V/100K | 0.120 | 1.30 |
| TP0705-270L | 27 | 1V/100K | 0.150 | 1.20 |
| TP0705-330K | 33 | 1V/100K | 0.180 | 1.10 |
| TP0705-390K | 39 | 1V/100K | 0.190 | 1.00 |
| TP0705-470K | 47 | 1V/100K | 0.220 | 0.90 |
| TP0705-560K | 56 | 1V/100K | 0.250 | 0.85 |
| TP0705-680K | 68 | 1V/100K | 0.270 | 0.80 |
| TP0705-820K | 82 | 1V/100K | 0.380 | 0.70 |
| TP0705-101K | 100 | 1V/100K | 0.420 | 0.65 |
| TP0705-121K | 120 | 1V/100K | 0.520 | 0.60 |
| TP0705-151K | 150 | 1V/100K | 0.580 | 0.50 |
| TP0705-181K | 180 | 1V/100K | 0.650 | 0.45 |
| TP0705-221K | 220 | 1V/100K | 0.880 | 0.40 |
| TP0705-271K | 270 | 1V/100K | 0.990 | 0.35 |
| TP0705-331K | 330 | 1V/100K | 1.100 | 0.32 |
| TP0705-391K | 390 | 1V/100K | 1.400 | 0.30 |
| TP0705-471K | 470 | 1V/100K | 1.900 | 0.28 |
| TP0705-561K | 560 | 1V/100K | 2.200 | 0.25 |
| TP0705-681K | 680 | 1V/100K | 2.500 | 0.22 |
| TP0705-821K | 820 | 1V/100K | 2.900 | 0.20 |
| TP0705-102K | 1000 | 1V/100K | 4.000 | 0.18 |

Note : 1.Inductance measured by LCR meter HP 4294/HP4291

2.DCR measured by Milliohm meter CH502AC

TP1003 Series

| Part Number | Inductance (uH) | Test Frequency (Hz) | DCR (Ω)max | IDC (A)max |
|-------------|--------------------|------------------------|---------------|---------------|
| TP1003-1R8M | 1.8 | 1V/100K | 0.027 | 4.00 |
| TP1003-2R7M | 2.7 | 1V/100K | 0.030 | 3.65 |
| TP1003-3R9M | 3.9 | 1V/100K | 0.035 | 3.15 |
| TP1003-4R7M | 4.7 | 1V/100K | 0.040 | 3.00 |
| TP1003-6R8M | 6.8 | 1V/100K | 0.050 | 2.35 |
| TP1003-100M | 10 | 1V/100K | 0.060 | 2.20 |
| TP1003-120M | 12 | 1V/100K | 0.080 | 2.00 |
| TP1003-150M | 15 | 1V/100K | 0.100 | 1.75 |
| TP1003-180L | 18 | 1V/100K | 0.110 | 1.70 |
| TP1003-220L | 22 | 1V/100K | 0.140 | 1.60 |
| TP1003-270L | 27 | 1V/100K | 0.160 | 1.40 |
| TP1003-330L | 33 | 1V/100K | 0.210 | 1.20 |
| TP1003-390L | 39 | 1V/100K | 0.235 | 1.10 |
| TP1003-470L | 47 | 1V/100K | 0.280 | 1.00 |
| TP1003-560L | 56 | 1V/100K | 0.320 | 0.90 |
| TP1003-680L | 68 | 1V/100K | 0.370 | 0.85 |
| TP1003-820L | 82 | 1V/100K | 0.430 | 0.74 |
| TP1003-101K | 100 | 1V/100K | 0.560 | 0.70 |
| TP1003-121K | 120 | 1V/100K | 0.640 | 0.60 |
| TP1003-151K | 150 | 1V/100K | 0.730 | 0.55 |
| TP1003-181K | 180 | 1V/100K | 0.960 | 0.50 |
| TP1003-221K | 220 | 1V/100K | 1.100 | 0.48 |
| TP1003-271K | 270 | 1V/100K | 1.240 | 0.45 |
| TP1003-331K | 330 | 1V/100K | 1.640 | 0.38 |
| TP1003-391K | 390 | 1V/100K | 1.790 | 0.35 |
| TP1003-471K | 470 | 1V/100K | 2.050 | 0.30 |
| TP1003-561K | 560 | 1V/100K | 2.890 | 0.29 |
| TP1003-681K | 680 | 1V/100K | 3.240 | 0.27 |
| TP1003-821K | 820 | 1V/100K | 3.700 | 0.25 |
| TP1003-102K | 1000 | 1V/100K | 7.000 | 0.24 |

Note : 1.Inductance measured by LCR meter HP 4294/HP4291

2.DCR measured by Milliohm meter CH502AC

TP1004 Series

| Part Number | Inductance (uH) | Test Frequency (Hz) | DCR (Ω)max | IDC (A)max |
|-------------|--------------------|------------------------|---------------|---------------|
| TP1004-1R8M | 1.8 | 1V/100K | 0.023 | 5.50 |
| TP1004-2R7M | 2.7 | 1V/100K | 0.025 | 5.00 |
| TP1004-3R9M | 3.9 | 1V/100K | 0.030 | 4.50 |
| TP1004-4R7M | 4.7 | 1V/100K | 0.035 | 4.00 |
| TP1004-6R8M | 6.8 | 1V/100K | 0.040 | 3.80 |
| TP1004-100M | 10 | 1V/100K | 0.050 | 3.30 |
| TP1004-120M | 12 | 1V/100K | 0.055 | 3.20 |
| TP1004-150M | 15 | 1V/100K | 0.065 | 3.00 |
| TP1004-180L | 18 | 1V/100K | 0.070 | 2.70 |
| TP1004-220L | 22 | 1V/100K | 0.080 | 2.60 |
| TP1004-270L | 27 | 1V/100K | 0.090 | 2.40 |
| TP1004-330L | 33 | 1V/100K | 0.110 | 2.00 |
| TP1004-390L | 39 | 1V/100K | 0.120 | 1.90 |
| TP1004-470L | 47 | 1V/100K | 0.130 | 1.80 |
| TP1004-560L | 56 | 1V/100K | 0.180 | 1.60 |
| TP1004-680L | 68 | 1V/100K | 0.210 | 1.40 |
| TP1004-820L | 82 | 1V/100K | 0.240 | 1.30 |
| TP1004-101K | 100 | 1V/100K | 0.290 | 1.20 |
| TP1004-121K | 120 | 1V/100K | 0.340 | 1.10 |
| TP1004-151K | 150 | 1V/100K | 0.470 | 1.00 |
| TP1004-181K | 180 | 1V/100K | 0.530 | 0.90 |
| TP1004-221K | 220 | 1V/100K | 0.730 | 0.80 |
| TP1004-271K | 270 | 1V/100K | 0.830 | 0.70 |
| TP1004-331K | 330 | 1V/100K | 0.990 | 0.65 |
| TP1004-391K | 390 | 1V/100K | 1.100 | 0.60 |
| TP1004-471K | 470 | 1V/100K | 1.250 | 0.55 |
| TP1004-561K | 560 | 1V/100K | 1.600 | 0.50 |
| TP1004-681K | 680 | 1V/100K | 1.800 | 0.45 |
| TP1004-821K | 820 | 1V/100K | 2.060 | 0.40 |
| TP1004-102K | 1000 | 1V/100K | 2.800 | 0.38 |

Note : 1.Inductance measured by LCR meter HP 4294/HP4291

2.DCR measured by Milliohm meter CH502AC