

# UNSHIELDED SMD POWER INDUCTORS / TPY TYPE

## FEATURES

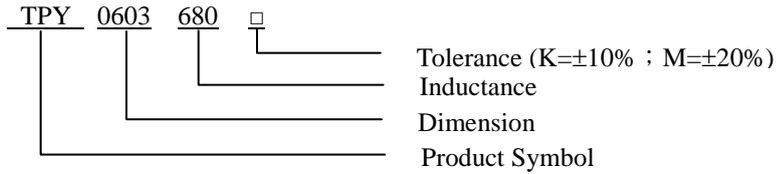
- ◆ Surface mount inductor with high current rating.
- ◆ Low resistance to keep power loss minimum.



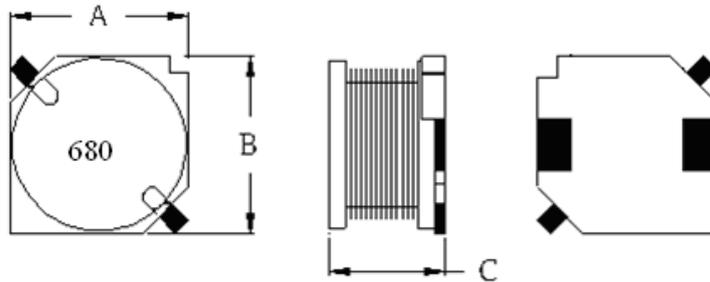
## APPLICATIONS

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

## ORDERING CODE



## SHAPES



## DIMENSIONS (UNIT:mm)

Part No.	A	B	C
TPY0603	6.0 ± 0.2	6.0 ± 0.2	3.0 ± 0.2
TPY0604	6.0 ± 0.3	6.0 ± 0.3	3.9 ± 0.3
TPY0605	6.0 ± 0.3	6.0 ± 0.3	4.9 ± 0.3
TPY0703	7.0 ± 0.3	7.0 ± 0.3	3.0 ± 0.3
TPY0705	7.0 ± 0.3	7.0 ± 0.3	4.6 ± 0.3
TPY1003	10.0 ± 0.3	10.0 ± 0.3	3.0 ± 0.3
TPY1004	10.0 ± 0.3	10.0 ± 0.3	4.6 ± 0.3

## UNSHIELDED SMD POWER INDUCTORS / TPY TYPE

### ELECTRICAL CHARACTERISTICS FOR TPY0603 / TPY0604

Part No.	Inductance (uH)	RDC (Ω) MAX	IDC (A) MAX	Part No.	Inductance (uH)	RDC (Ω) MAX	IDC (A) MAX
TPY0603-1R2M	1.2 ± 20%	0.030	2.80	TPY0604-1R2M	1.2 ± 20%	0.025	3.00
TPY0603-1R5M	1.5 ± 20%	0.035	2.60	TPY0604-1R8M	1.8 ± 20%	0.030	2.85
TPY0603-2R2M	2.2 ± 20%	0.040	2.30	TPY0604-2R2M	2.2 ± 20%	0.035	2.65
TPY0603-3R3M	3.3 ± 20%	0.055	2.00	TPY0604-3R3M	3.3 ± 20%	0.045	2.35
TPY0603-4R7M	4.7 ± 20%	0.065	1.85	TPY0604-4R7M	4.7 ± 20%	0.055	2.15
TPY0603-6R8M	6.8 ± 20%	0.090	1.55	TPY0604-6R8M	6.8 ± 20%	0.065	1.85
TPY0603-100M	10 ± 20%	0.115	1.30	TPY0604-100M	10 ± 20%	0.085	1.60
TPY0603-120M	12 ± 20%	0.150	1.20	TPY0604-120M	12 ± 20%	0.090	1.50
TPY0603-150M	15 ± 20%	0.180	1.10	TPY0604-150M	15 ± 20%	0.106	1.44
TPY0603-180M	18 ± 20%	0.230	1.04	TPY0604-180M	18 ± 20%	0.120	1.30
TPY0603-220M	22 ± 20%	0.250	0.98	TPY0604-220M	22 ± 20%	0.160	1.15
TPY0603-270M	27 ± 20%	0.350	0.94	TPY0604-270M	27 ± 20%	0.190	1.08
TPY0603-330K	33 ± 10%	0.380	0.83	TPY0604-330K	33 ± 10%	0.280	0.97
TPY0603-390K	39 ± 10%	0.410	0.73	TPY0604-390K	39 ± 10%	0.300	0.85
TPY0603-470K	47 ± 10%	0.430	0.68	TPY0604-470K	47 ± 10%	0.330	0.77
TPY0603-560K	56 ± 10%	0.620	0.63	TPY0604-560K	56 ± 10%	0.410	0.70
TPY0603-680K	68 ± 10%	0.710	0.58	TPY0604-680K	68 ± 10%	0.450	0.64
TPY0603-820K	82 ± 10%	0.730	0.48	TPY0604-820K	82 ± 10%	0.600	0.58
TPY0603-101K	100 ± 10%	1.050	0.42	TPY0604-101K	100 ± 10%	0.660	0.50
TPY0603-121K	120 ± 10%	1.180	0.38	TPY0604-121K	120 ± 10%	0.720	0.48
TPY0603-151K	150 ± 10%	1.800	0.32	TPY0604-151K	150 ± 10%	1.050	0.42
TPY0603-181K	180 ± 10%	1.950	0.30	TPY0604-181K	180 ± 10%	1.150	0.38
TPY0603-221K	220 ± 10%	2.960	0.28	TPY0604-221K	220 ± 10%	1.250	0.35
TPY0603-271K	270 ± 10%	3.450	0.26	TPY0604-271K	270 ± 10%	1.800	0.30
TPY0603-331K	330 ± 10%	3.800	0.23	TPY0604-331K	330 ± 10%	1.950	0.28
TPY0603-391K	390 ± 10%	4.000	0.21	TPY0604-391K	390 ± 10%	2.780	0.25
TPY0603-471K	470 ± 10%	4.400	0.19	TPY0604-471K	470 ± 10%	2.980	0.23
TPY0603-561K	560 ± 10%	6.200	0.17	TPY0604-561K	560 ± 10%	3.300	0.21
TPY0603-681K	680 ± 10%	6.800	0.15	TPY0604-681K	680 ± 10%	5.100	0.19
TPY0603-821K	820 ± 10%	12.000	0.14	TPY0604-821K	820 ± 10%	5.400	0.17
TPY0603-102K	1000 ± 10%	13.500	0.13	TPY0604-102K	1000 ± 10%	6.000	0.15

## UNSHIELDED SMD POWER INDUCTORS / TPY TYPE

### ELECTRICAL CHARACTERISTICS FOR TPY0605 / TPY0703

Part No.	Inductance (uH)	RDC (Ω) MAX	IDC (A) MAX	Part No.	Inductance (uH)	RDC (Ω) MAX	IDC (A) MAX
TPY0605-1R2M	1.2 ± 20%	0.028	3.50	TPY0703-1R0M	1.0 ± 20%	0.020	3.20
TPY0605-1R5M	1.5 ± 20%	0.030	3.00	TPY0703-1R5M	1.5 ± 20%	0.030	2.80
TPY0605-2R2M	2.2 ± 20%	0.035	2.70	TPY0703-2R2M	2.2 ± 20%	0.035	2.50
TPY0605-3R3M	3.3 ± 20%	0.042	2.50	TPY0703-3R3M	3.3 ± 20%	0.042	2.20
TPY0605-4R7M	4.7 ± 20%	0.050	2.20	TPY0703-4R7M	4.7 ± 20%	0.055	2.00
TPY0605-6R8M	6.8 ± 20%	0.060	2.00	TPY0703-6R8M	6.8 ± 20%	0.065	1.60
TPY0605-100M	10 ± 20%	0.070	1.80	TPY0703-100M	10 ± 20%	0.080	1.40
TPY0605-120M	12 ± 20%	0.080	1.60	TPY0703-120M	12 ± 20%	0.085	1.30
TPY0605-150M	15 ± 20%	0.090	1.50	TPY0703-150L	15 ± 15%	0.130	1.100
TPY0605-180M	18 ± 20%	0.095	1.30	TPY0703-180L	18 ± 15%	0.130	1.05
TPY0605-220M	22 ± 20%	0.110	1.20	TPY0703-220L	22 ± 15%	0.150	1.00
TPY0605-270M	27 ± 20%	0.130	1.10	TPY0703-270L	27 ± 15%	0.190	0.95
TPY0605-330K	33 ± 10%	0.180	1.00	TPY0703-330L	33 ± 15%	0.230	0.85
TPY0605-390K	39 ± 10%	0.2041	0.868	TPY0703-390L	39 ± 15%	0.270	0.75
TPY0605-470K	47 ± 10%	0.2297	0.794	TPY0703-470L	47 ± 15%	0.310	0.70
TPY0605-560K	56 ± 10%	0.3031	0.731	TPY0703-560K	56 ± 10%	0.390	0.65
TPY0605-650K	65 ± 10%	0.3416	0.665	TPY0703-680K	68 ± 10%	0.430	0.60
TPY0605-680K	68 ± 10%	0.3416	0.665	TPY0703-820K	82 ± 10%	0.490	0.50
TPY0605-820K	82 ± 10%	0.4534	0.600	TPY0703-101K	100 ± 10%	0.650	0.45
TPY0605-101K	100 ± 10%	0.430	0.55	TPY0703-121K	120 ± 10%	0.700	0.40
TPY0605-121K	120 ± 10%	0.500	0.50	TPY0703-151K	150 ± 10%	0.850	0.35
TPY0605-151K	150 ± 10%	0.620	0.45	TPY0703-181K	180 ± 10%	1.100	0.33
TPY0605-181K	180 ± 10%	0.690	0.40	TPY0703-221K	220 ± 10%	1.250	0.30
TPY0605-221K	220 ± 10%	0.890	0.38	TPY0703-271K	270 ± 10%	1.450	0.28
TPY0605-271K	270 ± 10%	1.000	0.35	TPY0703-331K	330 ± 10%	2.000	0.25
TPY0605-331K	330 ± 10%	1.400	0.32	TPY0703-391K	390 ± 10%	2.250	0.23
TPY0605-391K	390 ± 10%	1.500	0.30	TPY0703-471K	470 ± 10%	2.600	0.22
TPY0605-471K	470 ± 10%	2.000	0.28	TPY0703-561K	560 ± 10%	3.700	0.20
TPY0605-561K	560 ± 10%	2.300	0.25	TPY0703-681K	680 ± 10%	4.300	0.18
TPY0605-681K	680 ± 10%	3.200	0.20	TPY0703-821K	820 ± 10%	4.900	0.16
TPY0605-821K	820 ± 10%	3.500	0.18	TPY0703-102K	1000 ± 10%	5.600	0.15
TPY0605-102K	1000 ± 10%	4.100	0.16				

## UNSHIELDED SMD POWER INDUCTORS / TPY TYPE

### ELECTRICAL CHARACTERISTICS FOR TPY0705 / TPY1003

Part No.	Inductance (uH)	RDC (Ω) MAX	IDC (A) MAX	Part No.	Inductance (uH)	RDC (Ω) MAX	IDC (A) MAX
TPY0705-1R0M	1.0 ± 20%	0.023	3.50	TPY1003-1R8M	1.8 ± 20%	0.027	4.00
TPY0705-1R5M	1.5 ± 20%	0.028	3.20	TPY1003-2R7M	2.7 ± 20%	0.030	3.65
TPY0705-2R2M	2.2 ± 20%	0.033	3.00	TPY1003-3R9M	3.9 ± 20%	0.035	3.15
TPY0705-3R3M	3.3 ± 20%	0.040	2.70	TPY1003-4R7M	4.7 ± 20%	0.040	3.00
TPY0705-4R7M	4.7 ± 20%	0.050	2.50	TPY1003-6R8M	6.8 ± 20%	0.050	2.35
TPY0705-6R8M	6.8 ± 20%	0.060	2.20	TPY1003-100M	10 ± 20%	0.060	2.20
TPY0705-100M	10 ± 20%	0.075	2.00	TPY1003-120M	12 ± 20%	0.080	2.00
TPY0705-120M	12 ± 20%	0.085	1.90	TPY1003-150M	15 ± 20%	0.100	1.75
TPY0705-150L	15 ± 15%	0.090	1.50	TPY1003-180L	18 ± 15%	0.110	1.70
TPY0705-180L	18 ± 15%	0.100	1.40	TPY1003-220L	22 ± 15%	0.140	1.60
TPY0705-220L	22 ± 15%	0.120	1.30	TPY1003-270L	27 ± 15%	0.160	1.40
TPY0705-270L	27 ± 15%	0.150	1.20	TPY1003-330L	33 ± 15%	0.210	1.20
TPY0705-330L	33 ± 15%	0.180	1.10	TPY1003-390L	39 ± 15%	0.235	1.10
TPY0705-390L	39 ± 15%	0.190	1.00	TPY1003-470L	47 ± 15%	0.280	1.00
TPY0705-470L	47 ± 15%	0.220	0.90	TPY1003-560L	56 ± 15%	0.320	0.90
TPY0705-560K	56 ± 10%	0.250	0.85	TPY1003-680L	68 ± 15%	0.370	0.85
TPY0705-680K	68 ± 10%	0.270	0.80	TPY1003-820L	82 ± 15%	0.430	0.74
TPY0705-820K	82 ± 10%	0.380	0.70	TPY1003-101K	100 ± 10%	0.560	0.70
TPY0705-101K	100 ± 10%	0.420	0.65	TPY1003-121K	120 ± 10%	0.640	0.60
TPY0705-121K	120 ± 10%	0.520	0.60	TPY1003-151K	150 ± 10%	0.730	0.55
TPY0705-151K	150 ± 10%	0.580	0.50	TPY1003-181K	180 ± 10%	0.960	0.50
TPY0705-181K	180 ± 10%	0.650	0.45	TPY1003-221K	220 ± 10%	1.100	0.48
TPY0705-221K	220 ± 10%	0.880	0.40	TPY1003-271K	270 ± 10%	1.240	0.45
TPY0705-271K	270 ± 10%	0.990	0.35	TPY1003-331K	330 ± 10%	1.640	0.38
TPY0705-331K	330 ± 10%	1.100	0.32	TPY1003-391K	390 ± 10%	1.790	0.35
TPY0705-391K	390 ± 10%	1.400	0.30	TPY1003-471K	470 ± 10%	2.050	0.30
TPY0705-471K	470 ± 10%	2.600	0.28	TPY1003-561K	560 ± 10%	2.890	0.29
TPY0705-561K	560 ± 10%	2.200	0.25	TPY1003-681K	680 ± 10%	3.240	0.27
TPY0705-681K	680 ± 10%	2.500	0.22	TPY1003-821K	820 ± 10%	3.700	0.25
TPY0705-821K	820 ± 10%	2.900	0.20	TPY1003-102K	1000 ± 10%	7.000	0.24
TPY0705-102K	1000 ± 10%	4.000	0.18				

## UNSHIELDED SMD POWER INDUCTORS / TPY TYPE

### ELECTRICAL CHARACTERISTICS FOR TPY1004

Part No.	Inductance ( $\mu$ H)	RDC ( $\Omega$ ) MAX	IDC (A) MAX	Part No.	Inductance ( $\mu$ H)	RDC ( $\Omega$ ) MAX	IDC (A) MAX
TPY1004-1R8M	1.8 $\pm$ 20%	0.023	5.50	TPY1004-680L	68 $\pm$ 15%	0.210	1.40
TPY1004-2R7M	2.7 $\pm$ 20%	0.025	5.00	TPY1004-820L	82 $\pm$ 15%	0.240	1.30
TPY1004-3R9M	3.9 $\pm$ 20%	0.030	4.50	TPY1004-101K	100 $\pm$ 10%	0.290	1.20
TPY1004-4R7M	4.7 $\pm$ 20%	0.035	4.00	TPY1004-121K	120 $\pm$ 10%	0.340	1.10
TPY1004-6R8M	6.8 $\pm$ 20%	0.040	3.80	TPY1004-151K	150 $\pm$ 10%	0.470	1.00
TPY1004-100M	10 $\pm$ 20%	0.050	3.30	TPY1004-181K	180 $\pm$ 10%	0.530	0.90
TPY1004-120M	12 $\pm$ 20%	0.055	3.20	TPY1004-221K	220 $\pm$ 10%	0.730	0.80
TPY1004-150M	15 $\pm$ 20%	0.065	3.00	TPY1004-271K	270 $\pm$ 10%	0.830	0.70
TPY1004-180L	18 $\pm$ 15%	0.070	2.70	TPY1004-331K	330 $\pm$ 10%	0.990	0.65
TPY1004-220L	22 $\pm$ 15%	0.080	2.64	TPY1004-391K	390 $\pm$ 10%	1.100	0.60
TPY1004-270L	27 $\pm$ 15%	0.090	2.40	TPY1004-471K	470 $\pm$ 10%	1.250	0.55
TPY1004-330L	33 $\pm$ 15%	0.110	2.00	TPY1004-561K	560 $\pm$ 10%	1.600	0.50
TPY1004-390L	39 $\pm$ 15%	0.120	1.90	TPY1004-681K	680 $\pm$ 10%	1.800	0.45
TPY1004-470L	47 $\pm$ 15%	0.130	1.80	TPY1004-821K	820 $\pm$ 10%	2.060	0.40
TPY1004-560L	56 $\pm$ 15%	0.180	1.60	TPY1004-102K	1000 $\pm$ 10%	2.800	0.38

\* Test Frequency : 100KHZ/0.1V