



SMD Power Inductors

SMT Unshielded Power Inductors - TCD4006/4008 Series / 晶片开放式功率电感

► SMT Unshielded Power Inductor Features

- Open Magnetic circuit construction
- Low Profile

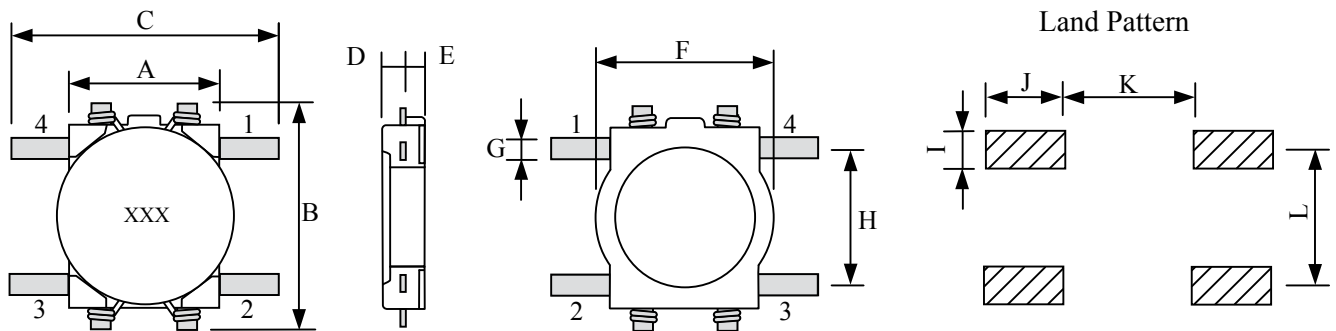
► Applications

- LCD Driver
- Cellular Phone
- Small DC/DC converter
- Transformers

► SMT Unshielded Power Inductor Dimensions & Configurations (Unit: mm)

Type	A	B(max)	C(max)	D(max)	E	F	G	H	I	J	K	L
TCD4006	3.5	5.8	6.3	0.8	0.4	4.1	0.5	3.2	0.9	1.5	4.0	3.2
TCD4008	3.5	5.8	6.3	1.0	0.4	4.1	0.5	3.2	0.9	1.5	4.0	3.2

Note: Design as Customer's Requested Specifications.



► Electrical Characteristics for TCD4006 Series SMT Unshielded Power Inductors

Part Number	Inductance(μ H)	Test Freq.(KHz)	DCR (Ω)(max)	IDC (A)(max)
TCD4006 - 2R2M	2.20	100	0.116	0.95
TCD4006 - 3R3M	3.30	100	0.174	0.77
TCD4006 - 4R7M	4.70	100	0.216	0.75
TCD4006 - 6R8M	6.80	100	0.296	0.62
TCD4006 - 100M	10.00	100	0.457	0.50
TCD4006 - 150M	15.00	100	0.676	0.40
TCD4006 - 220M	22.00	100	1.066	0.30
TCD4006 - 330M	33.00	100	1.647	0.24
TCD4006 - 470M	47.00	100	2.843	0.18

Note: Test Freq.: 100KHz / 0.1V.

Operating Temp.: -40°C ~ +85°C.

Inductance drop=10% typ. at IDC.



SMD Power Inductors

► Electrical Characteristics for TCD4008 Series SMT Unshielded Power Inductors

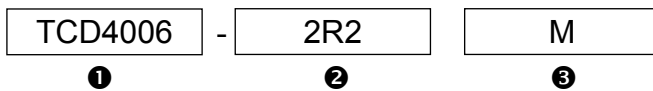
Part Number	Inductance(μ H)	Test Freq.(KHz)	DCR (Ω)(max)	IDC (A)(max)
TCD4008-3R3M	3.30	100	0.160	0.85
TCD4008-4R7M	4.70	100	0.194	0.80
TCD4008-6R8M	6.80	100	0.276	0.65
TCD4008-100M	10.00	100	0.335	0.57
TCD4008-150M	15.00	100	0.508	0.45
TCD4008-220M	22.00	100	0.766	0.37
TCD4008-330M	33.00	100	1.162	0.28
TCD4008-470M	47.00	100	1.658	0.22
TCD4008-680M	68.00	100	2.534	0.18
TCD4008-101M	100.00	100	3.304	0.17

Note: Test Freq.: 100KHz / 0.1V.

Operating Temp.: -40°C ~ +85°C.

Inductance drop=10% typ. at IDC.

► How to Order



❶ SMT Unshielded Power Inductors: TCD4006, TCD4008

❷ Inductance

Code	Inductance
2R2	2.20 μ H
100	10.00 μ H
101	100.00 μ H

❸ Tolerance

Code	Tolerance
M	20%
N	30%





SMD Power Inductors

Unshielded SMT Power Inductor - TCD4011/4013 Series

► Unshielded SMT Power Inductor Features

- Open Magnetic circuit construction
- Low Profile

► Applications

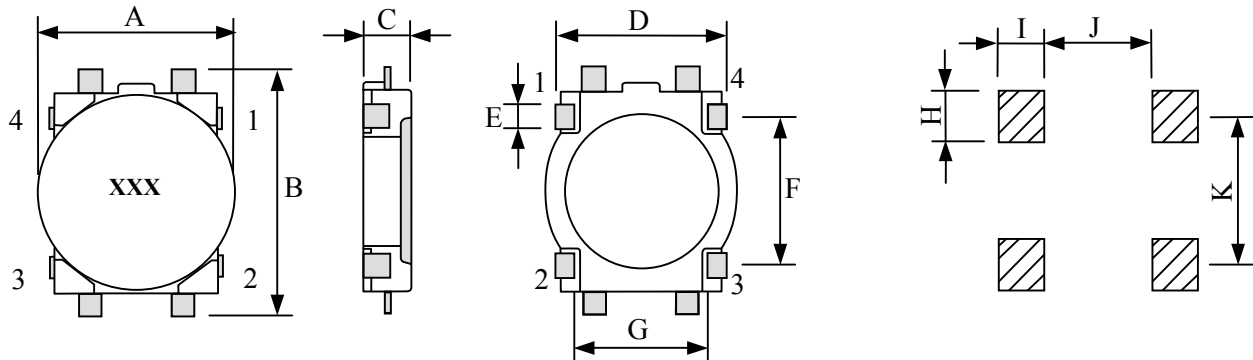
- LCD Driver
- Cellular Phone
- Small DC/DC converter
- Transformers

► Unshielded SMT Power Inductor Dimensions & Configurations (Unit: mm)

Type	A(max)	B(max)	C(max)	D	E	F	G	H	I	J	K
TCD4011	4.4	5.8	1.2	3.7	0.5	3.2	2.9	0.8	1.4	2.5	3.2
TCD4013	4.4	5.8	1.45	3.7	0.5	3.2	2.9	0.8	1.4	2.5	3.2

Note: Design as Customer's Requested Specifications.

Land Pattern



► Electrical Characteristics for TCD4011 Series Unshielded SMT Power Inductor

Part Number	Inductance(μ H)	Test Freq.(KHz)	DCR (Ω)(max)	IDC (A)(max)
TCD4011 - 2R2M	2.20	100	0.116	0.95
TCD4011 - 3R3M	3.30	100	0.174	0.77
TCD4011 - 4R7M	4.70	100	0.216	0.75
TCD4011 - 6R8M	6.80	100	0.296	0.62
TCD4011 - 100M	10.00	100	0.457	0.50
TCD4011 - 150M	15.00	100	0.676	0.40
TCD4011 - 220M	22.00	100	1.066	0.30
TCD4011 - 330M	33.00	100	1.647	0.24
TCD4011 - 470M	47.00	100	2.843	0.18

Note: Test Freq.: 100KHz / 0.1V.

Operating Temp.: -40°C ~ +85°C.

Inductance drop=10% typ. at IDC.



SMD Power Inductors

► Electrical Characteristics for TCD4013 Series Unshielded SMT Power Inductor

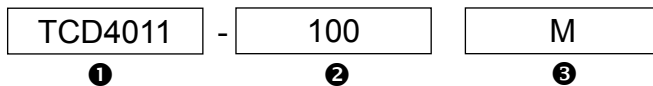
Part Number	Inductance(μ H)	Test Freq.(KHz)	DCR (Ω)(max)	IDC (A)(max)
TCD4013 - 3R3M	3.30	100	0.160	0.85
TCD4013 - 4R7M	4.70	100	0.194	0.80
TCD4013 - 6R8M	6.80	100	0.276	0.65
TCD4013 - 100M	10.00	100	0.335	0.57
TCD4013 - 150M	15.00	100	0.508	0.45
TCD4013 - 220M	22.00	100	0.766	0.37
TCD4013 - 330M	33.00	100	1.162	0.28
TCD4013 - 470M	47.00	100	1.658	0.22
TCD4013 - 680M	33.00	100	2.534	0.18
TCD4013 - 101M	47.00	100	3.304	0.17

Note: Test Freq.: 100KHz / 0.1V.

Operating Temp.: -40°C ~ +85°C.

Inductance drop=10% typ. at IDC.

► How to Order



❶ Unshielded SMT Power Inductors: TCD4011, TCD4013

❷ Inductance

Code	Inductance
2R2	2.20 μ H
100	10.00 μ H
101	100.00 μ H

❸ Tolerance

Code	Tolerance
K	10%
L	15%
M	20%
N	30%



SMD Power Inductors

SMD Unshielded Power Inductors - TCD5011 Series

► SMD Unshielded Power Inductor Features

- Open Magnetic circuit construction
- Low Profile

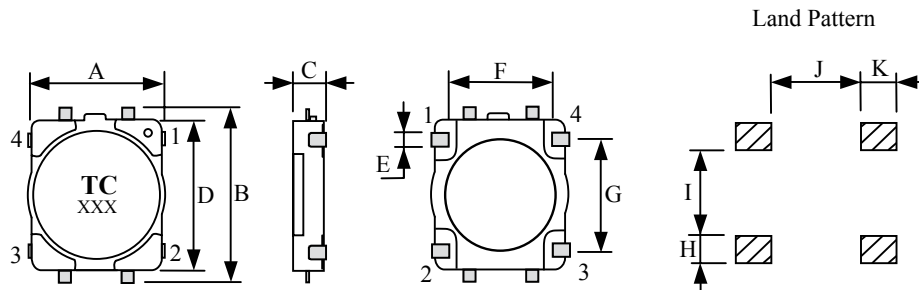
► Applications

- LCD Driver
- Cellular Phone
- Small DC/DC converter
- Transformers

► SMD Unshielded Power Inductor Dimensions & Configurations (Unit: mm)

Type	A(max)	B(max)	C(max)	D	E	F	G	H	I	J	K
TCD5011	5.8	7.4	1.2	6.0	0.6	4.2	4.5	1.1	3.4	3.6	1.4
TCD5013	5.8	7.4	1.5	6.0	0.6	4.2	4.5	1.1	3.4	3.6	1.4

Note: Design as Customer's Requested Specifications.



► Electrical Characteristics for TCD5011 Series Inductors

Part Number	Inductance(μ H)	Test Freq.(KHz)	DCR (Ω)(max)	IDC (A)(max)
TCD5011 - 3R3M	3.30	100	0.109	0.94
TCD5011 - 4R7M	4.70	100	0.156	0.80
TCD5011 - 6R8M	6.80	100	0.216	0.65
TCD5011 - 100M	10.00	100	0.275	0.53
TCD5011 - 150M	15.00	100	0.438	0.40
TCD5011 - 220M	22.00	100	0.663	0.36
TCD5011 - 330M	33.00	100	0.975	0.32
TCD5011 - 470M	47.00	100	1.380	0.26
TCD5011 - 680M	68.00	100	1.700	0.23
TCD5011 - 101M	100.00	100	2.800	0.20

Note: Test Freq.: 100KHz / 0.1V.

Operating Temp.: -40°C ~ +85°C.

Inductance drop=10% typ. at IDC.





SMD Power Inductors

► Electrical Characteristics for TCD5013 Series Inductors

Part Number	Inductance(μ H)	Test Freq.(KHz)	DCR (Ω)(max)	IDC (A)(max)
TCD5013 - 3R3M	3.30	100	0.081	1.25
TCD5013 - 4R7M	4.70	100	0.106	1.20
TCD5013 - 6R8M	6.80	100	0.144	0.90
TCD5013 - 100M	10.00	100	0.187	0.85
TCD5013 - 150M	15.00	100	0.300	0.57
TCD5013 - 220M	22.00	100	0.431	0.54
TCD5013 - 330M	33.00	100	0.637	0.38
TCD5013 - 470M	47.00	100	0.875	0.35

Note: Test Freq.: 100KHz / 0.1V.

Operating Temp.: -40°C ~ +85°C.

Inductance drop=35% typ. at IDC.

► How to Order

TCD5011	-	100	-	M
❶		❷		❸

❶ SMD Unshielded Power Inductor: TCD5011, TCD5013

❷ Inductance

Code	Inductance
3R3	3.30 μ H
100	10.00 μ H
101	100.00 μ H

❸ Tolerance

Code	Tolerance
M	20%
N	30%





SMD Power Inductors

SMD Power Inductors Unshielded - TCD73F/75F Series

► SMD Power Inductor Features

Low profile (3.5mm Height and 7.4mm Width max.)
For large currents.

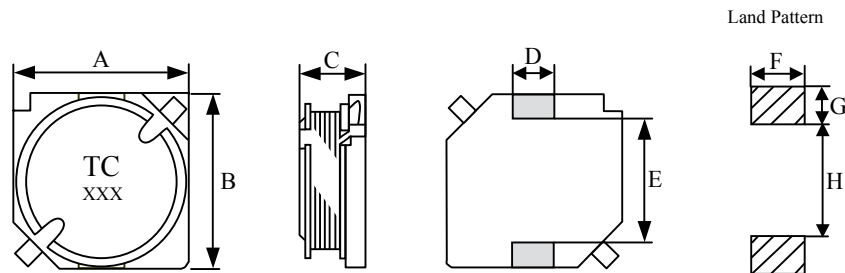
► Applications

Notebook, Portable communication equipments, DC/DC converters, etc..

► SMD Power Inductor Unshielded Dimensions & Configurations (Unit: mm)

Type	A(max)	B(max)	C(max)	D ± 0.2	E(max)	F	G	H
TCD73F	7.4	7.4	3.5	2.0	5.4	3.0	2.0	4.4
TCD75F	7.4	7.4	5.1	2.0	5.4	3.0	2.0	4.4

Note: Design as Customer's Requested Specifications.



► Electrical Characteristics for TCD73F Series Inductors

Part Number	Inductance(μH)	Test Freq.(KHz)	DCR (Ω)(max)	IDC (A)(max)
TCD73F - 1R0M	1.00	1	0.022	2.88
TCD73F - 1R5M	1.50	1	0.026	2.67
TCD73F - 2R2M	2.20	1	0.032	2.40
TCD73F - 3R3M	3.30	1	0.041	2.08
TCD73F - 4R7M	4.70	1	0.049	1.92
TCD73F - 6R8M	6.80	1	0.067	1.60
TCD73F - 100M	10.00	1	0.085	1.41
TCD73F - 120M	12.00	1	0.100	1.28
TCD73F - 150M	15.00	1	0.130	1.12
TCD73F - 180M	18.00	1	0.160	1.00
TCD73F - 220M	22.00	1	0.180	0.93
TCD73F - 270M	27.00	1	0.240	0.80
TCD73F - 330M	33.00	1	0.290	0.72
TCD73F - 390M	39.00	1	0.340	0.66
TCD73F - 470M	47.00	1	0.410	0.59
TCD73F - 560M	56.00	1	0.480	0.55
TCD73F - 680M	68.00	1	0.600	0.49
TCD73F - 820M	82.00	1	0.710	0.44
TCD73F - 101M	100.00	1	0.950	0.38

Note: Test Freq.: 1KHz / 0.25V

Operating Temp.: -40°C ~ +85°C.

Inductance drop=10% typ. at IDC.





SMD Power Inductors

► Electrical Characteristics for TCD75F Series Inductors

Part Number	Inductance(μ H)	Test Freq.(KHz)	DCR (Ω)(max)	IDC (A)(max)
TCD75F - 1R0M	1.00	1	0.023	2.880
TCD75F - 1R5M	1.50	1	0.028	2.560
TCD75F - 2R2M	2.20	1	0.032	2.360
TCD75F - 2R7M	2.70	1	0.035	2.360
TCD75F - 3R3M	3.30	1	0.038	2.160
TCD75F - 3R9M	3.90	1	0.042	2.160
TCD75F - 4R7M	4.70	1	0.049	1.880
TCD75F - 5R6M	5.60	1	0.055	1.880
TCD75F - 6R8M	6.80	1	0.060	1.680
TCD75F - 8R2M	8.20	1	0.067	1.680
TCD75F - 100M	10.00	1	0.070	1.560
TCD75F - 120M	12.00	1	0.080	1.440
TCD75F - 150M	15.00	1	0.090	1.360
TCD75F - 180M	18.00	1	0.100	1.280
TCD75F - 220M	22.00	1	0.120	1.170
TCD75F - 270M	27.00	1	0.140	1.070
TCD75F - 330M	33.00	1	0.160	1.000
TCD75F - 390M	39.00	1	0.190	0.910
TCD75F - 470M	47.00	1	0.220	0.840
TCD75F - 560M	56.00	1	0.290	0.720
TCD75F - 680M	68.00	1	0.340	0.660
TCD75F - 820M	82.00	1	0.460	0.580
TCD75F - 101M	100.00	1	0.550	0.510
TCD75F - 121M	120.00	1	0.670	0.420
TCD75F - 151M	150.00	1	0.900	0.370
TCD75F - 181M	180.00	1	1.050	0.350
TCD75F - 221M	220.00	1	1.350	0.290
TCD75F - 271M	270.00	1	1.550	0.280
TCD75F - 331M	330.00	1	2.050	0.230
TCD75F - 391M	390.00	1	2.300	0.215
TCD75F - 471M	470.00	1	2.600	0.195
TCD75F - 561M	560.00	1	2.900	0.185
TCD75F - 681M	680.00	1	3.400	0.170
TCD75F - 821M	820.00	1	4.200	0.165
TCD75F - 102M	1000.00	1	5.390	0.150

Note: Test Freq.: 1KHz / 0.25V.

Operating Temp.: -40°C ~ +85°C.

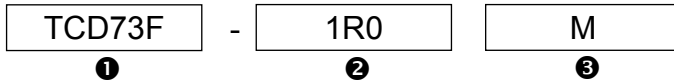
Inductance drop=10% typ. at IDC.





SMD Power Inductors

How to Order



① SMD Unshielded Power Inductors: TCD73F, TCD75F

② Inductance

Code	Inductance
1R0	1.00 μ H
120	12.00 μ H
121	120.00 μ H

③ Tolerance

Code	Tolerance
K	10%
L	15%
M	20%
N	30%