

TDC Series (Rev. 6.0)



Features

- * Low cost
- * Wide range of inductance
- * High reliability

Product Identification

TDC 1012 - 100 K
 1 2 3 4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: K=10% (J=5%, L=15%, M=20%, N=30%)

Operating & Storage Condition

- * Operating Temp. : -40 to +85℃
- * Storage Temp. : -20 to +35℃
- * Storage Life Time : 12 Months @25℃ , RH 65%

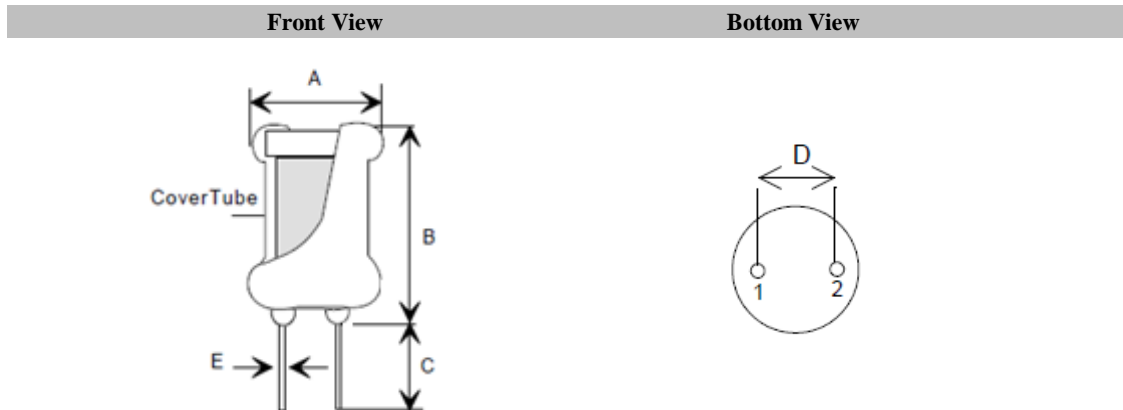
Test Equipment

- * HP484A,HP42841A-L,IDC.Q.RDC
- * HP8753D Network Analyzer-SRF

Standard Atmospheric Conditions

- * Ambient Temp : 20+/-15℃
- * Relative Humidity : 65+/-20%

Dimension: [mm]



Size Code	A(max.)	B(max.)	C(±1.5)	D(±0.5)	E(±0.1)
0406	6.0	7.5	15.0	2.0	0.5
0507	6.5	9.5	15.0	2.5	0.6
0511	6.5	13.0	15.0	2.5	0.6
0608	8.0	10.0	15.0	3.0	0.6
0810	10.0	11.5	15.0	5.0	0.6
0912	11.0	13.5	15.0	5.0	0.8
1012	12.0	13.5	15.0	6.0	0.8
1016	12.5	18.0	15.0	6.0	0.8

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P/N	Inductance (μ H)	DCR (Ω) max.	IDC (A) max.
TDC0406-1R0	1.0	0.035	2.00
TDC0406-1R5	1.5	0.075	1.90
TDC0406-1R8	1.8	0.080	1.80
TDC0406-2R2	2.2	0.090	1.75
TDC0406-2R7	2.7	0.095	1.68
TDC0406-3R3	3.3	0.100	1.60
TDC0406-3R9	3.9	0.110	1.55
TDC0406-4R7	4.7	0.120	1.50
TDC0406-5R6	5.6	0.120	1.20
TDC0406-6R8	6.8	0.130	1.00
TDC0406-8R2	8.2	0.140	0.80
TDC0406-100	10.0	0.150	0.70
TDC0406-120	12.0	0.180	0.06
TDC0406-150	15.0	0.200	0.65
TDC0406-180	18.0	0.240	0.63
TDC0406-220	22.0	0.260	0.60
TDC0406-270	27.0	0.300	0.56
TDC0406-330	33.0	0.400	0.55
TDC0406-390	39.0	0.500	0.52
TDC0406-470	47.0	0.600	0.50
TDC0406-560	56.0	0.700	0.50
TDC0406-680	68.0	1.000	0.48
TDC0406-820	82.0	1.200	0.47
TDC0406-101	100.0	1.400	0.45
TDC0406-121	120.0	1.500	0.40
TDC0406-151	150.0	1.600	0.35
TDC0406-181	180.0	1.800	0.30
TDC0406-221	220.0	2.000	0.24
TDC0406-271	270.0	2.500	0.22
TDC0406-331	330.0	3.000	0.20
TDC0406-391	390.0	3.300	0.18
TDC0406-471	470.0	3.500	0.18
TDC0406-561	560.0	4.000	0.16
TDC0406-681	680.0	6.000	0.15
TDC0406-821	820.0	7.000	0.12
TDC0406-102	1000.0	9.000	0.10

* Test Freq.: @ 1KHz / 0.25V

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P/N	Inductance (μ H)	DCR (Ω) max.	IDC (A) max.
TDC0507-4R7M	4.7 @100KHz, 0.25V	0.05	2.00
TDC0507-6R8M	6.8 @100KHz, 0.25V	0.06	1.80
TDC0507-100K	10.0	0.08	1.60
TDC0507-120K	12.0	0.10	1.60
TDC0507-150K	15.0	0.14	1.50
TDC0507-180K	18.0	0.15	1.20
TDC0507-220K	22.0	0.16	1.00
TDC0507-270K	27.0	0.20	0.90
TDC0507-330K	33.0	0.30	0.80
TDC0507-390K	39.0	0.40	0.75
TDC0507-470K	47.0	0.45	0.70
TDC0507-560K	56.0	0.50	0.65
TDC0507-680K	68.0	0.55	0.60
TDC0507-820K	82.0	0.60	0.55
TDC0507-101K	100.0	0.80	0.50
TDC0507-121K	120.0	1.00	0.48
TDC0507-151K	150.0	1.50	0.45
TDC0507-181K	180.0	1.80	0.42
TDC0507-221K	220.0	2.00	0.40
TDC0507-271K	270.0	2.30	0.35
TDC0507-331K	330.0	2.60	0.30
TDC0507-391K	390.0	2.80	0.28
TDC0507-471K	470.0	3.00	0.25
TDC0507-561K	560.0	3.50	0.25
TDC0507-681K	680.0	4.50	0.24
TDC0507-821K	820.0	5.00	0.20
TDC0507-102K	1000.0	6.00	0.18
TDC0507-122K	1200.0	8.00	0.16
TDC0507-152K	1500.0	9.00	0.15
TDC0507-182K	1800.0	10.00	0.14
TDC0507-222K	2200.0	12.00	0.10
TDC0507-272K	2700.0	16.00	0.09
TDC0507-332K	3300.0	20.00	0.08
TDC0507-392K	3900.0	24.00	0.07
TDC0507-472K	4700.0	26.00	0.06
TDC0507-562K	5600.0	28.00	0.05
TDC0507-682K	6800.0	30.00	0.05
TDC0507-822K	8200.0	40.00	0.04
TDC0507-103K	10000.0	60.00	0.04
TDC0511-131K	130.0	0.400	0.58

* Test Freq.: @ 1KHz / 0.25V

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* TiYang has UL tube on TDC Series to avoid damage when wave soldering

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Electrical Characteristics

P/N	Inductance (μ H)	DCR (Ω) max.	IDC (A) max.
TDC0608-1R0	1.0	0.015	3.00
TDC0608-2R2	2.2	0.030	2.50
TDC0608-3R3	3.3	0.040	2.00
TDC0608-4R7	4.7	0.060	1.80
TDC0608-6R8	6.8	0.070	1.50
TDC0608-100	10.0	0.090	1.30
TDC0608-120	12.0	0.100	1.10
TDC0608-150	15.0	0.110	1.05
TDC0608-180	18.0	0.120	1.00
TDC0608-220	22.0	0.120	0.96
TDC0608-270	27.0	0.170	0.92
TDC0608-330	33.0	0.190	0.88
TDC0608-390	39.0	0.220	0.86
TDC0608-470	47.0	0.230	0.83
TDC0608-560	56.0	0.290	0.81
TDC0608-680	68.0	0.370	0.75
TDC0608-820	82.0	0.390	0.74
TDC0608-101	100.0	0.440	0.70
TDC0608-121	120.0	0.640	0.65
TDC0608-151	150.0	0.730	0.60
TDC0608-181	180.0	0.820	0.55
TDC0608-221	220.0	0.920	0.50
TDC0608-271	270.0	1.300	0.45
TDC0608-331	330.0	1.500	0.40
TDC0608-391	390.0	1.800	0.35
TDC0608-471	470.0	2.300	0.30
TDC0608-561	560.0	3.000	0.28
TDC0608-681	680.0	3.250	0.25
TDC0608-821	820.0	4.160	0.23
TDC0608-102	1000.0	5.000	0.21
TDC0608-122	1200.0	6.500	0.20
TDC0608-152	1500.0	8.000	0.17
TDC0608-182	1800.0	9.000	0.16
TDC0608-222	2200.0	9.500	0.14

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P/N	Inductance (μ H)	DCR (Ω) max.	IDC (A) max.
TDC0810-1R0	1.0	0.015	4.50
TDC0810-1R5	1.5	0.020	4.50
TDC0810-2R2	2.2	0.030	4.20
TDC0810-2R7	2.7	0.030	4.20
TDC0810-3R3	3.3	0.040	4.00
TDC0810-3R9	3.9	0.050	4.00
TDC0810-4R7	4.7	0.060	4.00
TDC0810-5R6	5.6	0.060	3.80
TDC0810-6R8	6.8	0.060	3.80
TDC0810-8R2	8.2	0.060	3.60
TDC0810-100	10.0	0.070	3.50
TDC0810-120	12.0	0.080	3.20
TDC0810-150	15.0	0.090	3.00
TDC0810-180	18.0	0.100	2.80
TDC0810-220	22.0	0.120	2.50
TDC0810-270	27.0	0.140	2.20
TDC0810-330	33.0	0.160	2.00
TDC0810-390	39.0	0.160	1.80
TDC0810-470	47.0	0.180	1.50
TDC0810-560	56.0	0.180	1.40
TDC0810-680	68.0	0.230	1.30
TDC0810-820	82.0	0.270	1.20
TDC0810-101	100.0	0.300	1.20
TDC0810-121	120.0	0.330	1.00
TDC0810-151	150.0	0.460	0.80
TDC0810-181	180.0	0.510	0.60
TDC0810-221	220.0	0.620	0.55
TDC0810-271	270.0	0.650	0.45
TDC0810-331	330.0	0.790	0.40
TDC0810-391	390.0	0.910	0.40
TDC0810-471	470.0	1.100	0.35
TDC0810-561	560.0	1.200	0.30
TDC0810-681	680.0	1.500	0.28
TDC0810-821	820.0	1.700	0.25
TDC0810-102	1000.0	2.000	0.22
TDC0810-222	2200.0	4.200	0.14

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P/N	Inductance (uH)	DCR (Ω) max.	IDC (A) max.
TDC0912-1R0	1.0	0.015	5.00
TDC0912-2R2	2.2	0.015	4.50
TDC0912-3R3	3.3	0.020	4.40
TDC0912-4R7	4.7	0.025	4.20
TDC0912-6R8	6.8	0.030	3.90
TDC0912-100	10.0	0.040	3.80
TDC0912-120	12.0	0.045	3.80
TDC0912-150	15.0	0.050	3.50
TDC0912-180	18.0	0.060	3.20
TDC0912-220	22.0	0.070	3.00
TDC0912-270	27.0	0.100	2.80
TDC0912-330	33.0	0.120	2.50
TDC0912-390	39.0	0.120	2.00
TDC0912-470	47.0	0.130	1.90
TDC0912-560	56.0	0.140	1.80
TDC0912-680	68.0	0.150	1.70
TDC0912-820	82.0	0.160	1.60
TDC0912-101	100.0	0.250	1.50
TDC0912-121	120.0	0.280	1.20
TDC0912-151	150.0	0.300	1.00
TDC0912-181	180.0	0.450	0.70
TDC0912-221	220.0	0.500	0.60
TDC0912-271	270.0	0.650	0.50
TDC0912-331	330.0	0.850	0.45
TDC0912-391	390.0	0.950	0.40
TDC0912-471	470.0	1.100	0.35
TDC0912-561	560.0	1.200	0.30
TDC0912-681	680.0	1.300	0.25
TDC0912-821	820.0	1.500	0.20
TDC0912-102	1000.0	2.000	0.20
TDC0912-122	1200.0	2.300	0.18
TDC0912-152	1500.0	2.900	0.17
TDC0912-182	1800.0	3.300	0.16
TDC0912-222	2200.0	4.500	0.15
TDC0912-332	3300.0	5.700	0.13

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P/N	Inductance (μ H)	DCR (Ω) max.	IDC (A) max.
TDC1012-1R0	1.0	0.010	6.00
TDC1012-2R2	2.2	0.020	5.80
TDC1012-3R3	3.3	0.025	5.50
TDC1012-3R9	3.9	0.030	5.00
TDC1012-4R7	4.7	0.030	5.00
TDC1012-5R6	5.6	0.040	4.80
TDC1012-6R8	6.8	0.040	4.80
TDC1012-8R2	8.2	0.045	4.50
TDC1012-100	10.0	0.050	4.20
TDC1012-120	12.0	0.050	4.00
TDC1012-150	15.0	0.060	3.80
TDC1012-180	18.0	0.070	3.80
TDC1012-220	22.0	0.080	3.50
TDC1012-270	27.0	0.090	3.20
TDC1012-330	33.0	0.100	3.00
TDC1012-390	39.0	0.120	2.50
TDC1012-470	47.0	0.120	2.00
TDC1012-560	56.0	0.140	1.80
TDC1012-680	68.0	0.150	1.70
TDC1012-820	82.0	0.160	1.60
TDC1012-101	100.0	0.180	1.50
TDC1012-121	120.0	0.200	1.40
TDC1012-151	150.0	0.250	1.20
TDC1012-181	180.0	0.280	1.00
TDC1012-221	220.0	0.300	0.90
TDC1012-271	270.0	0.420	0.80
TDC1012-331	330.0	0.550	0.70
TDC1012-391	390.0	0.600	0.60
TDC1012-471	470.0	0.650	0.55
TDC1012-561	560.0	0.750	0.50
TDC1012-681	680.0	0.850	0.50
TDC1012-821	820.0	1.100	0.40
TDC1012-102	1000.0	1.400	0.30

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P/N	Inductance (uH)	DCR (Ω) max.	IDC (A) max.
TDC1016-4R7	4.7	0.020	5.80
TDC1016-5R6	5.6	0.025	5.50
TDC1016-6R8	6.8	0.025	5.40
TDC1016-8R2	8.2	0.028	5.20
TDC1016-100	10.0	0.035	5.00
TDC1016-120	12.0	0.035	4.50
TDC1016-150	15.0	0.040	4.00
TDC1016-180	18.0	0.060	4.00
TDC1016-220	22.0	0.080	3.80
TDC1016-270	27.0	0.100	3.50
TDC1016-330	33.0	0.100	3.50
TDC1016-390	39.0	0.120	3.20
TDC1016-470	47.0	0.120	3.00
TDC1016-560	56.0	0.130	2.80
TDC1016-680	68.0	0.140	2.50
TDC1016-820	82.0	0.150	2.20
TDC1016-101	100.0	0.180	2.00
TDC1016-121	120.0	0.200	1.80
TDC1016-151	150.0	0.220	1.60
TDC1016-181	180.0	0.250	1.50
TDC1016-221	220.0	0.300	1.50
TDC1016-271	270.0	0.350	1.40
TDC1016-331	330.0	0.600	1.30
TDC1016-391	390.0	0.700	1.20
TDC1016-471	470.0	0.800	1.00
TDC1016-561	560.0	0.900	1.00
TDC1016-681	680.0	1.000	0.90
TDC1016-821	820.0	1.200	0.80
TDC1016-102	1000.0	1.500	0.70

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