TDC Series (Rev. 5.0)

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

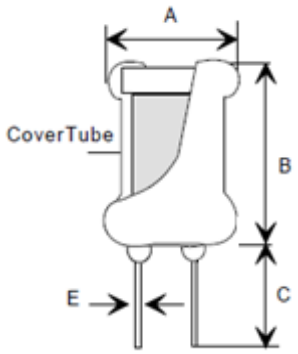
* HP484A,HP42841A-L,IDC.Q.RDC
* HP8753D Network Analyzer-SRF

Standard Atmospheric Conditions

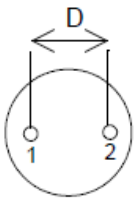
* Ambient Temp : 20+/-15℃
* Relative Humidity : 65+/-20%

Dimension: [mm]

Front View



Bottom View



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
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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Electrical Characteristics

P/N	Inductance (uH)	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
* Inductance Drop: 20% typ. at IDC.
* Tolerance: J=5%,K= ±10%, M= ±20%, N= ±30%.
* TiYang has UL tube on TDC Series to avoid damage when wave soldering.

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Electrical Characteristics

P/N	Inductance (uH)	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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Electrical Characteristics

P/N	Inductance (uH)	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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Electrical Characteristics

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 (uH)	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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