TCDM Series (Rev. 1.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment
* LCD televisions
* Notebook PCs
* Portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications

Operating & Storage Condition

* Operating Temp :Stand Type:-40 to +85°C
* Storage Temp : Stand Type -40 to +85°C
* Storage Life Time :12 Months @25°C,RH 65%

Product Identification

TCDM	104	-	680	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 68uH
4. Tolerance: M=±20%, N=±30%

Test Equipment

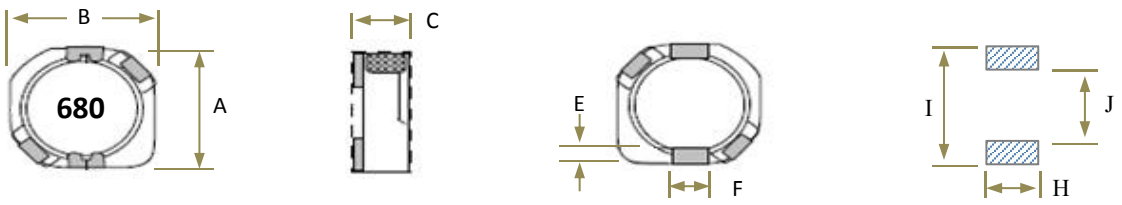
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65±20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	PAD Layout



Size Code	A(±0.5)	B(±0.5)	C(max.)	E(typ.)	F(typ.)	H(ref.)	I(ref.)	J(ref.)
104	10.2	10.2	4.5	1.2	3.0	3.2	10.5	7.3
105	10.2	10.2	5.1	1.2	3.0	3.2	10.5	7.3

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Electrical Characteristics

P/N	Inductance (uH)	Tolerance (M/N)	DCR (mΩ) max.	IDC (A) max.
TCDM104-R33N	0.33	N	4.2	8.50
TCDM104-R68N	0.68	N	6.0	7.50
TCDM104-1R0N	1.00	N	15.0	6.50
TCDM104-1R3N	1.30	N	15.5	5.40
TCDM104-1R8N	1.80	N	16.0	5.20
TCDM104-2R2N	2.20	N	17.0	4.95
TCDM104-2R5N	2.50	N	20.0	4.50
TCDM104-3R0N	3.00	N	20.0	4.50
TCDM104-3R3N	3.30	N	22.0	4.35
TCDM104-3R8N	3.80	N	26.0	4.05
TCDM104-4R7N	4.70	N	30.0	3.90
TCDM104-5R2N	5.20	N	33.0	3.90
TCDM104-5R6N	5.60	N	33.0	3.80
TCDM104-6R8N	6.80	N	43.0	3.50
TCDM104-7R0N	7.00	N	43.0	3.50
TCDM104-8R2N	8.20	N	50.0	3.20
TCDM104-100M	10.00	M	60.0	3.15
TCDM104-150M	15.00	M	78.0	2.90
TCDM104-180M	18.00	M	90.0	2.70
TCDM104-220M	22.00	M	107.0	2.50
TCDM104-270M	27.00	M	114.0	2.30
TCDM104-330M	33.00	M	133.0	2.00
TCDM104-470M	47.00	M	241.0	1.80
TCDM104-680M	68.00	M	338.0	1.35
TCDM104-820M	82.00	M	384.0	1.26
TCDM104-101M	100.00	M	429.0	1.17
TCDM104-151M	150.00	M	611.0	1.05
TCDM104-221M	220.00	M	939.0	0.90
TCDM104-331M	330.00	M	1300.0	0.53
TCDM104-471M	470.00	M	1760.0	0.40

* Test Freq.: @100KHz / 0.1V
* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)
* Tolerance: M= ±20%, N= ±30%

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Electrical Characteristics

P/N	Inductance (uH)	Tolerance (M/N)	DCR (mΩ) max.	IDC (A) max.
TCDM105-1R2N	1.2	N	12.0	8.30
TCDM105-1R5N	1.5	N	14.0	8.30
TCDM105-1R8N	1.8	N	15.0	7.85
TCDM105-2R2N	2.2	N	16.0	7.50
TCDM105-2R7N	2.7	N	18.2	7.10
TCDM105-3R3N	3.3	N	19.5	6.50
TCDM105-3R9N	3.9	N	22.5	6.00
TCDM105-4R7N	4.7	N	28.0	5.50
TCDM105-5R6N	5.6	N	30.0	4.50
TCDM105-6R8N	6.8	N	36.0	4.90
TCDM105-8R2N	8.2	N	45.0	4.55
TCDM105-100M	10.0	M	51.0	4.00
TCDM105-150M	15.0	M	57.0	3.30
TCDM105-180M	18.0	M	59.0	3.10
TCDM105-220M	22.0	M	82.0	2.90
TCDM105-330M	33.0	M	95.0	2.60
TCDM105-470M	47.0	M	183.0	2.00
TCDM105-560M	56.0	M	205.0	1.80
TCDM105-680M	68.0	M	234.0	1.60
TCDM105-820M	82.0	M	247.0	1.40
TCDM105-101M	100.0	M	325.0	1.35
TCDM105-151M	150.0	M	403.0	1.10
TCDM105-181M	180.0	M	527.0	1.00
TCDM105-221M	220.0	M	668.0	0.94
TCDM105-331M	330.0	M	775.0	0.60
TCDM105-471M	470.0	M	1300.0	0.54
TCDM105-561M	560.0	M	1400.0	0.48
TCDM105-681M	680.0	M	1560.0	0.45

* Test Freq.: @100KHz / 0.1V
* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)
* Tolerance: M= ±20%, N= ±30%