TMDI76 Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	76	-	3R3	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 3.3uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

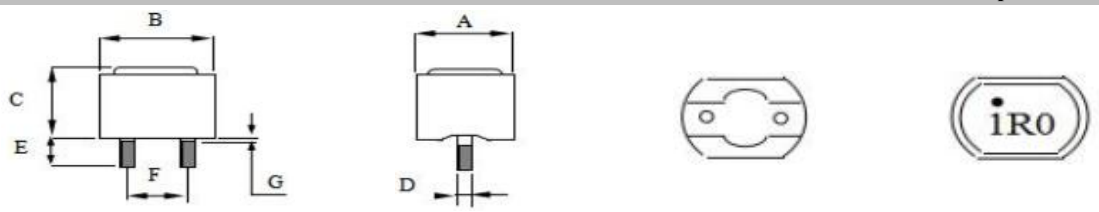
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Front View	Side View	Bottom View	Top View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
76	7.5	9.5	8.5	by p/n	3.4	6.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI76-1R0M	1.0	5.0	13.0	15.0
TMDI76-2R8M	2.8	6.9	11.0	12.0
TMDI76-3R3M	3.3	11.0	9.0	6.5
TMDI76-4R7M	4.7	16.0	7.0	6.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI0707 Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	0707	-	3R3	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 3.3uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

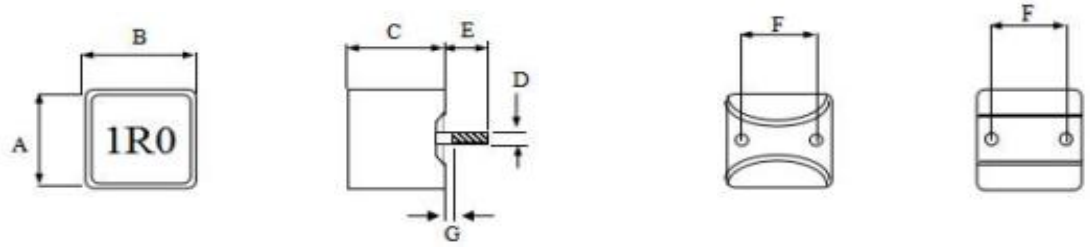
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Top View	Side View	Bottom View



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
0707	7.4	7.4	7.5	by p/n	3.4	5.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI0707-1R0M	1.0	4.0	13.0	20.0
TMDI0707-2R2M	2.2	6.5	11.0	12.0
TMDI0707-3R3M	3.3	10.0	9.0	10.0
TMDI0707-4R7M	4.7	17.0	7.0	6.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI0808R Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	0808R	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

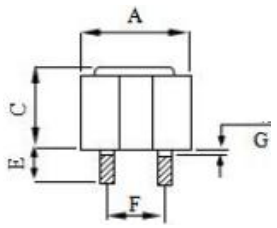
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

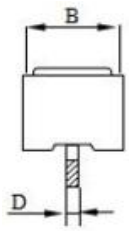
Standard Atmospheric Conditions

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

Dimension: [mm]

Front View	Side View	Bottom View	Top View





Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
0808R	8.8	8.5	10.0	by p/n	3.4	5.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI0808R-100M	10.0	29.0	5.0	5.8
TMDI0808R-150M	15.0	38.0	5.5	4.0
TMDI0808R-220M	22.0	49.0	4.0	4.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI0808H Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	0808H	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

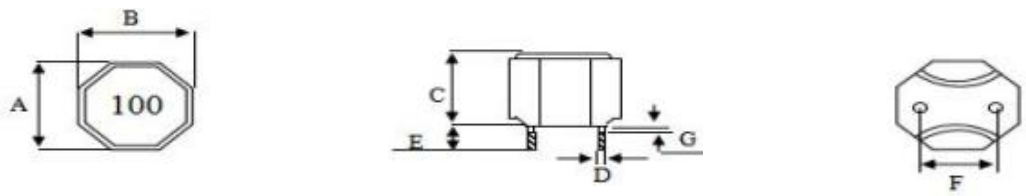
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Top View	Side View	Bottom View



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
0808H	8.0	8.0	10.0	by p/n	3.4	5.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI0808H-100M	10.0	29.0	5.0	5.8
TMDI0808H-150M	15.0	38.0	5.5	4.0
TMDI0808H-220M	22.0	49.0	4.0	4.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI0910 Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	0910	-	100	M	S
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%
5. S: special

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

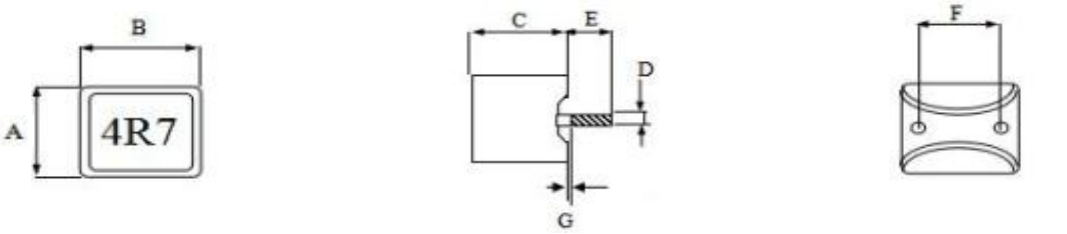
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Top View	Side View	Bottom View



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
0910	9.0	9.0	10.0	by p/n	3.4	6.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI0910-4R7M	4.7	17.0	5.0	10.0
TMDI0910-100M	10.0	16.0	7.0	9.0
TMDI0910-100MS	10.0	17.0	4.0	9.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI1010R Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	1010R	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

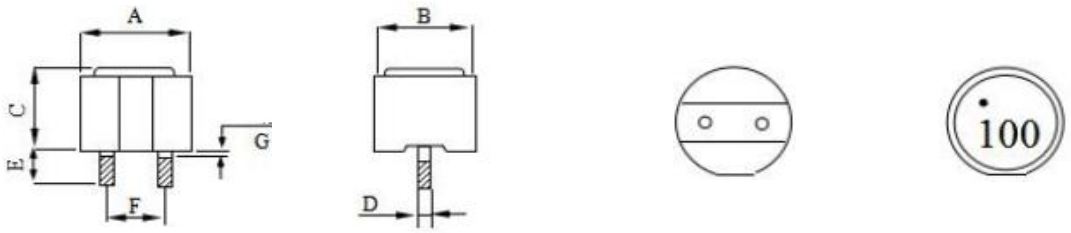
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Front View	Side View	Bottom View	Top View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1010R	11.0	10.0	11.0	by p/n	3.4	5.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI1010R-4R7M	4.7	12.0	9.0	13.0
TMDI1010R-6R8M	6.8	16.0	8.0	11.0
TMDI1010R-100M	10.0	22.0	7.0	9.0
TMDI1010R-150M	15.0	35.0	5.0	9.0
TMDI1010R-220M	22.0	33.0	7.0	5.5
TMDI1010R-330M	33.0	54.0	4.5	5.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI1010H Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	1010H	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

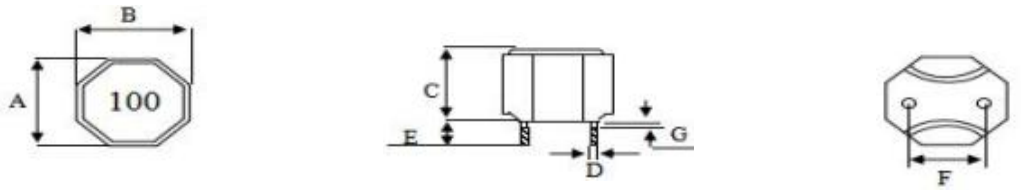
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Top View	Side View	Bottom View



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1010H	10.0	10.0	10.0	by p/n	3.4	6.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI1010H-100M	10.0	22.0	7.5	10.0
TMDI1010H-150M	15.0	26.0	7.0	8.0
TMDI1010H-220M	22.0	33.0	6.0	6.0
TMDI1010H-330M	33.0	54.0	4.5	5.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI1210 Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	1210	-	3R3	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 3.3uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

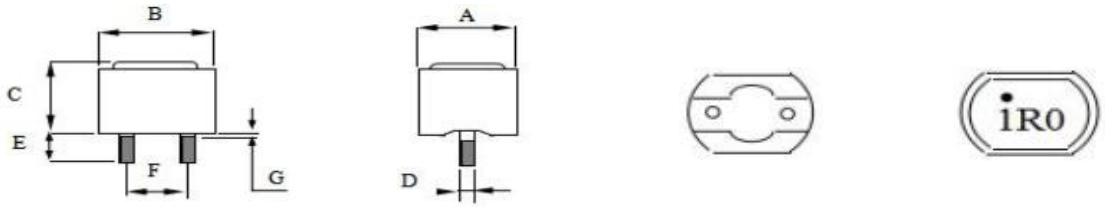
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Front View	Side View	Bottom View	Top View



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1210	10.5	12.5	11.0	by p/n	3.4	8.0/8.5	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI1210-1R0M	1.0	2.0	21.0	25.0
TMDI1210-2R2M	2.2	3.3	15.0	22.0
TMDI1210-3R3M	3.3	4.3	11.0	16.0
TMDI1210-4R7M	4.7	5.8	10.0	14.0
TMDI1210-100M	10.0	17.0	8.5	9.5
TMDI1210-150M	15.0	21.0	7.5	8.5
TMDI1210-220M	22.0	27.0	7.0	8.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI1215 Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	1215	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

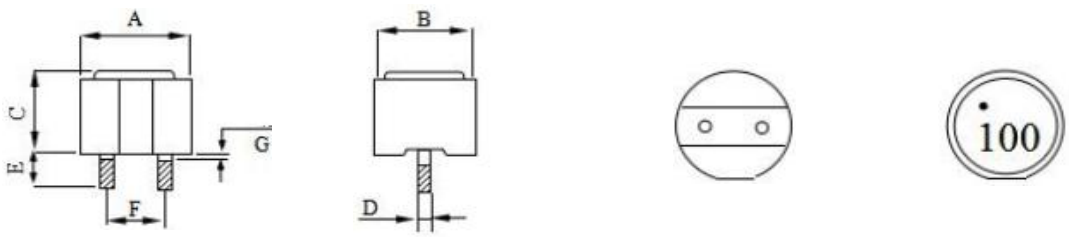
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Front View	Side View	Bottom View	Top View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1215	13.0	11.9	15.0	by p/n	3.4	6.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI1215-100M	10.0	13.0	12.0	14.0
TMDI1215-150M	15.0	17.0	11.0	8.0
TMDI1215-220M	22.0	21.0	10.0	6.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI1316 Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	1316	-	4R7	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 4.7uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

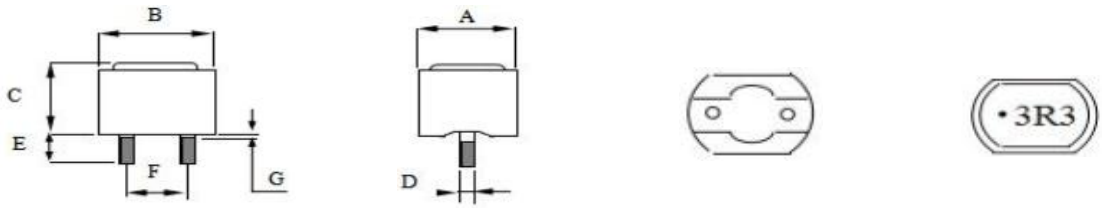
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Front View	Side View	Bottom View	Top View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1316	13.3	14.6	16.9	by p/n	3.4	8.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI1316-3R3M	3.3	4.3	15.0	20.0
TMDI1316-4R7M	4.7	5.7	14.0	17.0
TMDI1316-100M	10.0	12.8	10.0	13.0
TMDI1316-150M	15.0	19.0	10.0	12.0
TMDI1316-220M	22.0	21.0	8.0	7.5
TMDI1316-330M	33.0	33.0	7.0	7.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI1810 Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	1810	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

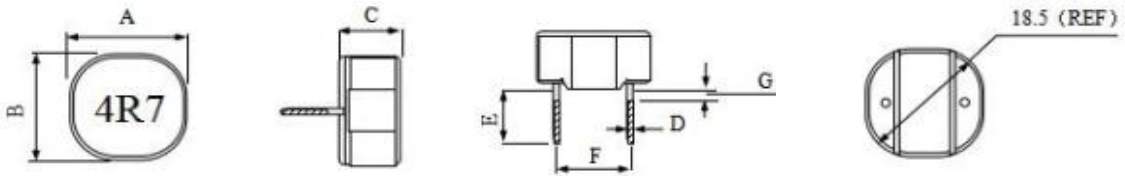
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Top View	Side View	Bottom View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1810	17.8	17.8	10.0	by p/n	3.4	13.0	1.0
1812	17.8	17.8	12.0	by p/n	3.4	13.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI1810-4R7M	4.7	3.0	17.0	26.0
TMDI1810-100M	10.0	8.6	12.0	18.0
TMDI1812-150M	15.0	10.0	13.0	15.0
TMDI1812-330M	33.0	25.0	9.0	10.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

TMDI4424 Series (Rev. 1.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

TMDI	4424	-	180	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 18uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp :Stand Type:-25 to +125°C
* Storage Temp : Stand Type: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH40～65%

Test Equipment

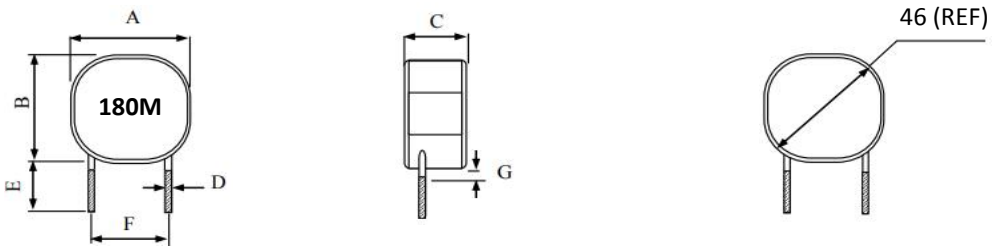
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

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

Dimension: [mm]

Top View	Side View	Front View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±1.0)	G(max.)
4424	44.0	44.0	24.0	by p/n	3.5	29.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
TMDI4424-100M	10.0	2.0	56.0	44.0
TMDI4424-180M	18.0	2.5	50.0	40.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%