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LHPM 2016 SERIES

HF Halogen Free RoHS COMPLIANT

HIGH POWER INDUCTOR

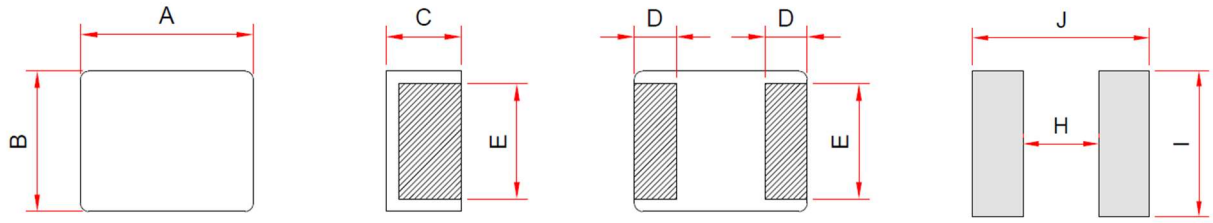
Applications:

- Infotainment System
- LED Headlight & DRL
- Autonomous driving, Instrument Cluster
- Other DC-DC conversion circuit

Enable 3D View

This is the product 3D document.
Please click "Trust the document" to preview.

Shape and Dimensions(Dimensions are in mm) :



Item	A	B	C	D	E	H	I	J
LHPM201610	2.0±0.2	1.6±0.2	0.8±0.2	0.5±0.3	1.4±0.2	0.7	1.8	2.3
LHPM201612	2.0±0.2	1.6±0.2	1.0±0.2	0.5±0.3	1.4±0.2	0.7	1.8	2.3

Features :

- High performance (Isat) realized by metal dust core.
- Low profile: 2.0mm x 1.6mm x 1.0mm.
  2.0mm x 1.6mm x 1.2mm.
- Low loss realized with low DCR.
- Magnetically Shielded.
- Compliance with RoHS and Halogen Free
- Automotive Grade.

Product Identification:

LHPM 201610 – 1R0 M

(1) (2) (3) (4)

(1) Product Symbol
(2) Dimensions Code
(3) Inductance（1R0：1.0uH）
(4) Inductance tolerance（M：± 20%）

Characteristics:

- Saturation Current (Isat) : The current will cause L_0 to drop approximately 30% typical.
- Temperature Rise Current (Irms) : The current will cause the coil temperature rise approximately △T=40℃.
- Operating Temperature : -55℃ to 125℃.

Measurement equipment :

- L: Agilent E4980 Precision LCR Meter (Upgraded version of Agilent HP4284A) with HP42841A Current Source.
- DCR: Chroma16502 Milliohm Meter

● LHPM201610 SERIES

Part No.	Inductance L(uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
LHPM201610-R47M	0.47	20	27	35	4.7	4.2	4.0	3.6
LHPM201610-R68M	0.68	20	34	42	3.8	3.4	2.8	2.5
LHPM201610-1R0M	1.0	20	52	65	3.4	3.0	2.6	2.3
LHPM201610-1R5M	1.5	20	115	128	2.6	2.3	2.0	1.7
LHPM201610-2R2M	2.2	20	159	185	2.3	2.0	1.6	1.4
LHPM201610-3R3M	3.3	20	193	230	1.6	1.4	1.2	1.0

If you require another part number, please contact us.

Note 1: Referenced ambient temperature 25℃.

Note 2: L Test Condition：1MHz,1.0V

Note 3: I sat (Typ): DC current (A) that will cause L0 to drop approximately 30%.

I sat (Max): DC current (A) that will cause L0 to drop 30% Max.

I rms (Typ): DC current (A) that will cause an approximate △T of 40℃.

I rms (Max): DC current (A) that will cause △T of 40℃ Max.

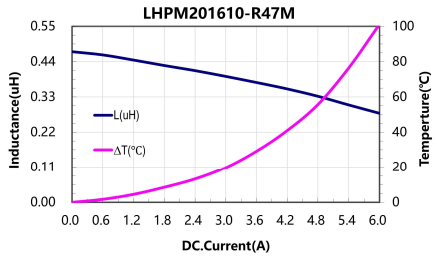
Note 4: Operating Temperature range includes self-temperature rise.

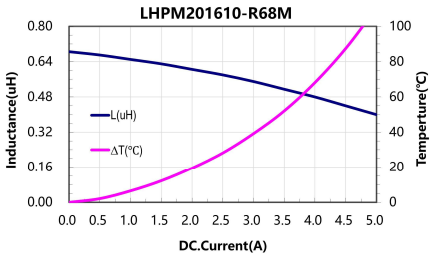
Note 5: The part temperature (ambient + temp rise) should not exceed 125℃ under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

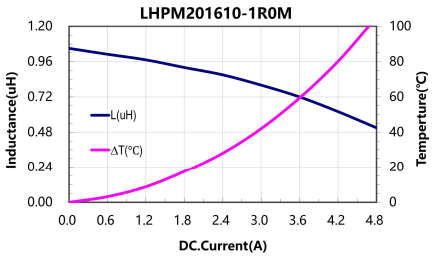
Note 6: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

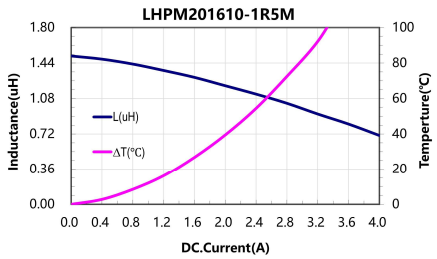
Note 7: Rated Voltage : 20V Max.

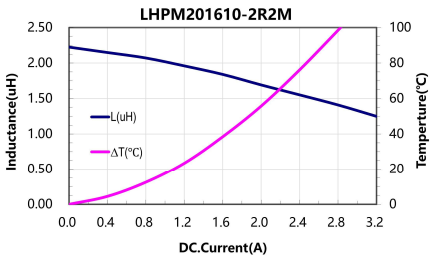
Typical performance curves :

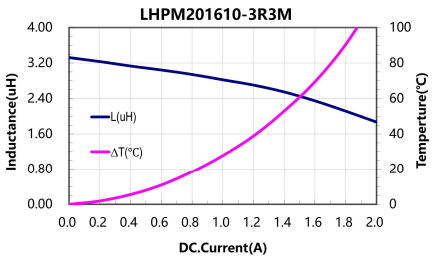












● LHPM201612 SERIES

Part No.	Inductance L(uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
LHPM201612-R47M	0.47	20	19	24	5.8	5.0	4.5	4.2
LHPM201612-1R0M	1.0	20	53	65	3.3	2.9	2.8	2.5
LHPM201612-1R5M	1.5	20	86	100	2.8	2.5	2.2	1.9
LHPM201612-2R2M	2.2	20	101	125	2.4	2.1	1.8	1.6
LHPM201612-3R3M	3.3	20	185	225	1.8	1.6	1.3	1.1

If you require another part number, please contact us.

Note 1: Referenced ambient temperature 25℃.

Note 2: L Test Condition：1MHz,1.0V

Note 3: I sat (Typ): DC current (A) that will cause L0 to drop approximately 30%.

I sat (Max): DC current (A) that will cause L0 to drop 30% Max.

I rms (Typ): DC current (A) that will cause an approximate △T of 40℃.

I rms (Max): DC current (A) that will cause △T of 40℃ Max.

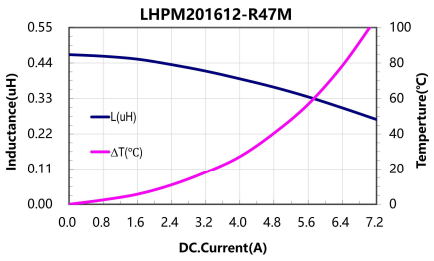
Note 4: Operating Temperature range includes self-temperature rise.

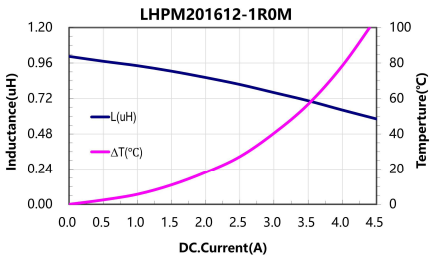
Note 5: The part temperature (ambient + temp rise) should not exceed 125℃ under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

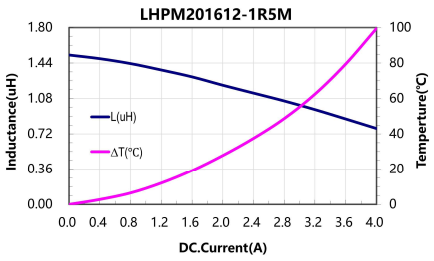
Note 6: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

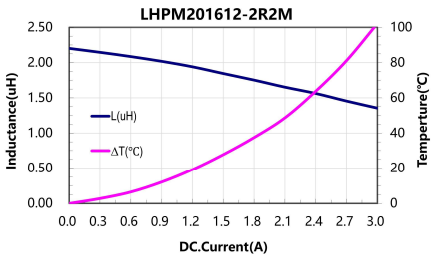
Note 7: Rated Voltage : 20V Max.

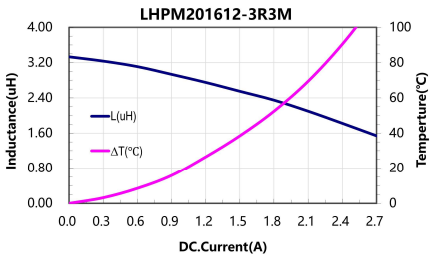
Typical performance curves :











* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.

LHPM 2520 SERIES

HF Halogen Free RoHS COMPLIANT

HIGH POWER INDUCTOR

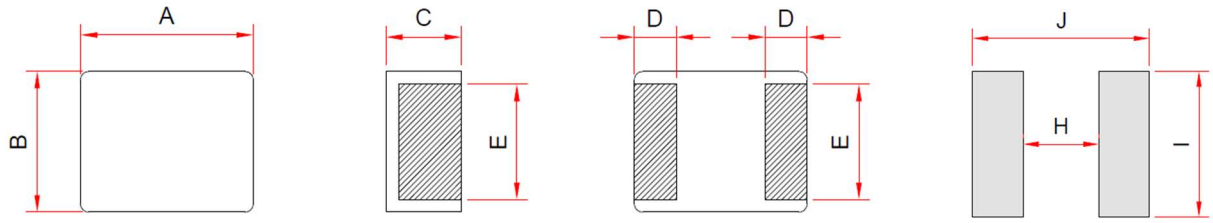
Applications:

- Infotainment System
- LED Headlight & DRL
- Autonomous driving, Instrument Cluster
- Other DC-DC conversion circuit

Enable 3D View

This is the product 3D document.
Please click "Trust the document" to preview.

Shape and Dimensions(Dimensions are in mm) :



Item	A	B	C	D	E	H	I	J
LHPM252010	2.5±0.2	2.0±0.2	0.8±0.2	0.6±0.3	1.8±0.2	1.2	2.3	2.8
LHPM252012	2.5±0.2	2.0±0.2	1.0±0.2	0.6±0.3	1.8±0.2	1.2	2.3	2.8

Features :

- High performance (Isat) realized by metal dust core.
- Low profile: 2.5mm x 2.0mm x 1.0mm.
  2.5mm x 2.0mm x 1.2mm.
- Low loss realized with low DCR.
- Magnetically Shielded.
- Compliance with RoHS and Halogen Free
- Automotive Grade.

Product Identification:

LHPM 252010 – 1R0 M

(1) (2) (3) (4)

(1) Product Symbol
(2) Dimensions Code
(3) Inductance（1R0：1.0uH）
(4) Inductance tolerance（M：± 20%）

Characteristics:

- Saturation Current (Isat) : The current will cause L_0 to drop approximately 30% typical.
- Temperature Rise Current (Irms) : The current will cause the coil temperature rise approximately △T=40℃.
- Operating Temperature : -55℃ to 125℃.

Measurement equipment :

- L: Agilent E4980 Precision LCR Meter (Upgraded version of Agilent HP4284A) with HP42841A Current Source.
- DCR: Chroma16502 Milliohm Meter

● LHPM252010 SERIES

Part No.	Inductance L(uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
LHPM252010-R47M	0.47	20	19	23	6.0	5.0	4.7	4.0
LHPM252010-1R0M	1.0	20	42	56	4.5	3.9	3.7	3.3
LHPM252010-1R5M	1.5	20	53	65	2.9	2.5	2.5	2.2
LHPM252010-2R2M	2.2	20	100	115	2.7	2.4	2.4	2.1
LHPM252010-3R3M	3.3	20	142	168	2.1	1.8	1.8	1.6
LHPM252010-4R7M	4.7	20	230	275	1.8	1.6	1.3	1.1

If you require another part number, please contact us.

Note 1: Referenced ambient temperature 25℃.

Note 2: L Test Condition：1MHz,1.0V

Note 3: I sat (Typ): DC current (A) that will cause L0 to drop approximately 30%.

I sat (Max): DC current (A) that will cause L0 to drop 30% Max.

I rms (Typ): DC current (A) that will cause an approximate △T of 40℃.

I rms (Max): DC current (A) that will cause △T of 40℃ Max.

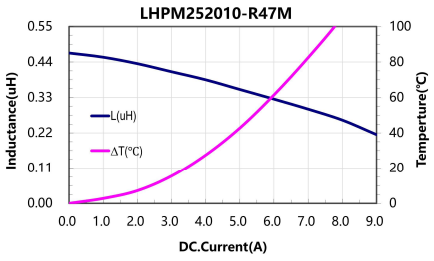
Note 4: Operating Temperature range includes self-temperature rise.

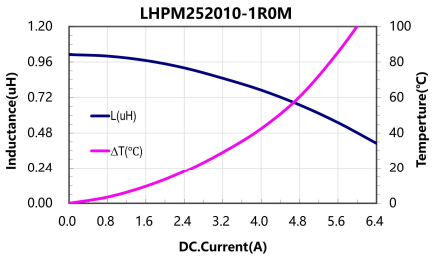
Note 5: The part temperature (ambient + temp rise) should not exceed 125℃ under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

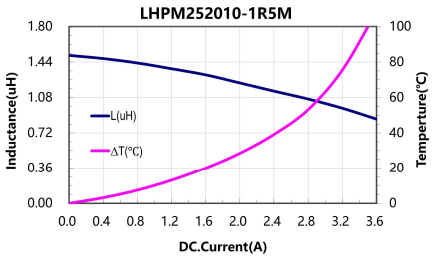
Note 6: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

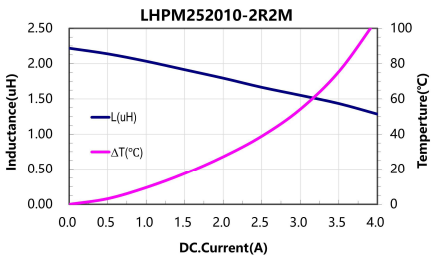
Note 7: Rated Voltage : 20V Max.

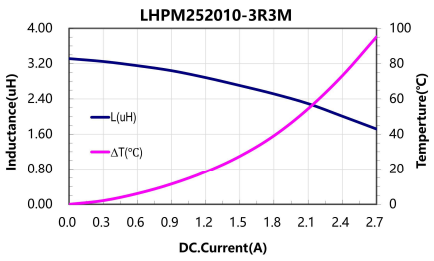
Typical performance curves :

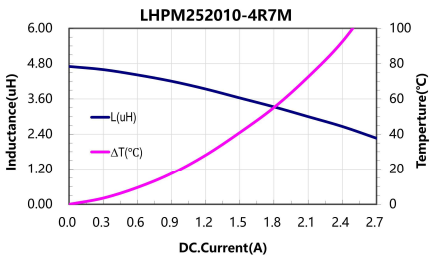












● LHPM252012 SERIES

Part No.	Inductance L(uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
LHPM252012-R24M	0.24	20	11	15	9.0	8.0	7.6	6.7
LHPM252012-R33M	0.33	20	16	21	8.2	7.0	6.5	5.6
LHPM252012-R47M	0.47	20	17	21	6.5	6.0	5.2	4.5
LHPM252012-R68M	0.68	20	25	32	5.2	4.6	4.5	4.0
LHPM252012-1R0M	1.0	20	37	45	4.7	4.2	3.9	3.4
LHPM252012-1R5M	1.5	20	55	65	3.9	3.5	3.3	2.9
LHPM252012-2R2M	2.2	20	84	95	3.2	3.0	2.8	2.5
LHPM252012-3R3M	3.3	20	130	140	2.6	2.3	2.2	2.0
LHPM252012-4R7M	4.7	20	201	230	1.8	1.6	1.4	1.2

If you require another part number, please contact us.

Note 1: Referenced ambient temperature 25℃.

Note 2: L Test Condition：1MHz,1.0V

Note 3: I sat (Typ): DC current (A) that will cause L0 to drop approximately 30%.

I sat (Max): DC current (A) that will cause L0 to drop 30% Max.

I rms (Typ): DC current (A) that will cause an approximate △T of 40℃.

I rms (Max): DC current (A) that will cause △T of 40℃ Max.

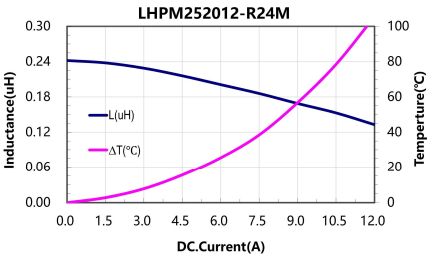
Note 4: Operating Temperature range includes self-temperature rise.

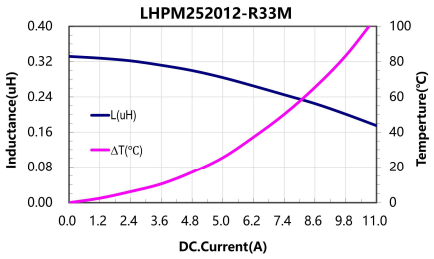
Note 5: The part temperature (ambient + temp rise) should not exceed 125℃ under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

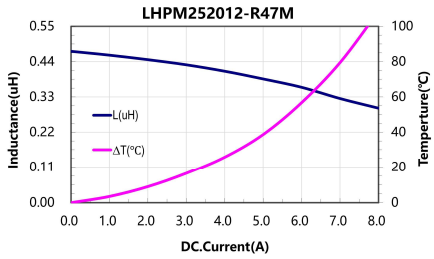
Note 6: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

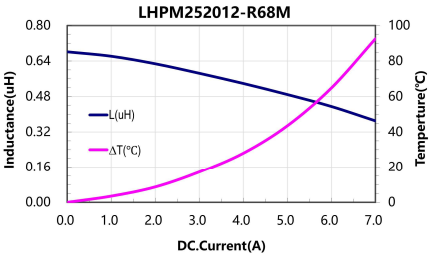
Note 7: Rated Voltage : 20V Max.

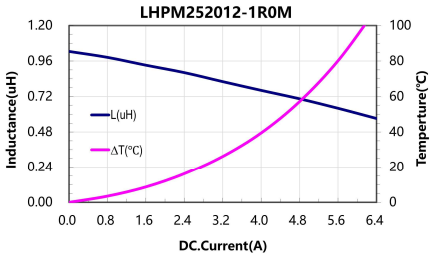
Typical performance curves :

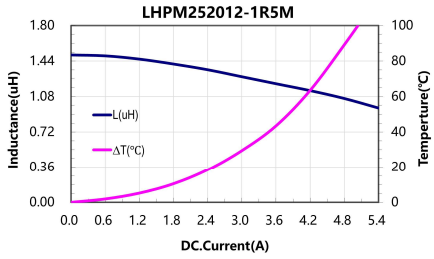


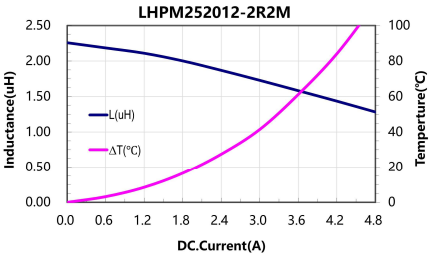


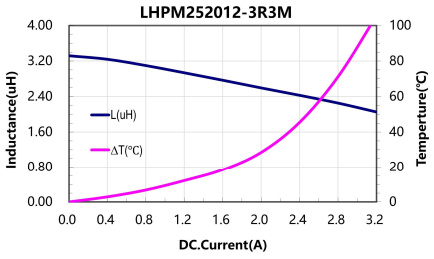


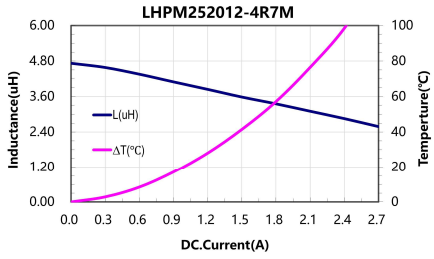












* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.

LHPM 3225 SERIES

HF Halogen Free RoHS COMPLIANT

HIGH POWER INDUCTOR

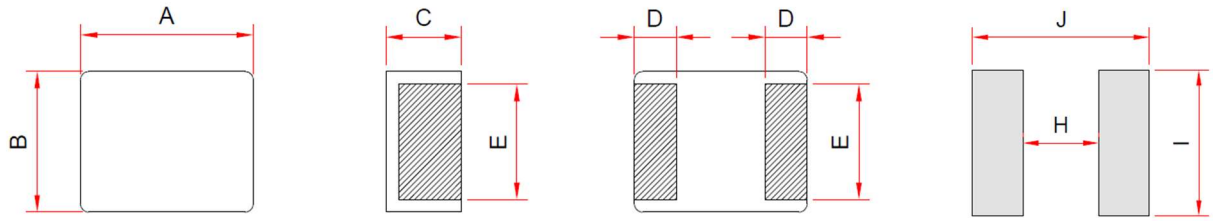
Applications:

- Infotainment System
- LED Headlight & DRL
- Autonomous driving, Instrument Cluster
- Other DC-DC conversion circuit

Enable 3D View

This is the product 3D document.
Please click "Trust the document" to preview.

Shape and Dimensions(Dimensions are in mm) :



Item	A	B	C	D	E	H	I	J
LHPM322512	3.2±0.2	2.5±0.2	1.0±0.2	0.6±0.3	2.3±0.2	1.7	2.8	3.5
LHPM322520	3.2±0.2	2.5±0.2	1.8±0.2	0.6±0.3	2.3±0.2	1.7	2.8	3.5

Features :

- High performance (Isat) realized by metal dust core.
- Low profile: 3.2mm x 2.5mm x 1.2mm.
  3.2mm x 2.5mm x 2.0mm.
- Low loss realized with low DCR.
- Magnetically Shielded.
- Compliance with RoHS and Halogen Free
- Automotive Grade.

Product Identification:

LHPM 322512 – 1R0 M

(1) (2) (3) (4)

(1) Product Symbol
(2) Dimensions Code
(3) Inductance（1R0：1.0uH）
(4) Inductance tolerance（M：± 20%）

Characteristics:

- Saturation Current (Isat) : The current will cause L_0 to drop approximately 30% typical.
- Temperature Rise Current (Irms) : The current will cause the coil temperature rise approximately △T=40℃.
- Operating Temperature : -55℃ to 125℃.

Measurement equipment :

- L: Agilent E4980 Precision LCR Meter (Upgraded version of Agilent HP4284A) with HP42841A Current Source.
- DCR: Chroma16502 Milliohm Meter

● LHPM322512 SERIES

Part No.	Inductance L(uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
LHPM322512-R22M	0.22	20	9.5	13	9.6	8.5	6.8	6.2
LHPM322512-R47M	0.47	20	17	22	9.0	8.0	5.8	5.2
LHPM322512-R68M	0.68	20	18	26	6.5	6.1	5.0	4.4
LHPM322512-1R0M	1.0	20	34	40	6.0	5.5	4.5	4.1
LHPM322512-1R5M	1.5	20	40	48	4.8	4.2	3.9	3.5
LHPM322512-2R2M	2.2	20	58	66	4.0	3.6	3.1	2.8
LHPM322512-3R3M	3.3	20	96	108	3.0	2.6	2.2	2.0
LHPM322512-4R7M	4.7	20	140	157	2.8	2.4	2.1	1.7
LHPM322512-6R8M	6.8	20	220	276	2.2	1.9	1.5	1.2
LHPM322512-100M	10.0	20	340	370	1.8	1.5	1.2	0.9

If you require another part number, please contact us.

Note 1: Referenced ambient temperature 25℃.

Note 2: L Test Condition：1MHz,1.0V

Note 3: I sat (Typ): DC current (A) that will cause L0 to drop approximately 30%.

I sat (Max): DC current (A) that will cause L0 to drop 30% Max.

I rms (Typ): DC current (A) that will cause an approximate △T of 40℃.

I rms (Max): DC current (A) that will cause △T of 40℃ Max.

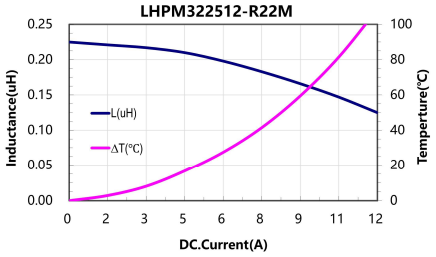
Note 4: Operating Temperature range includes self-temperature rise.

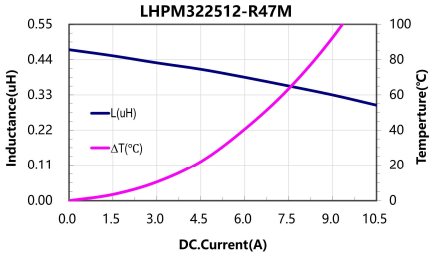
Note 5: The part temperature (ambient + temp rise) should not exceed 125℃ under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

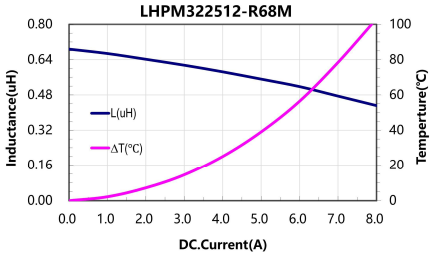
Note 6: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

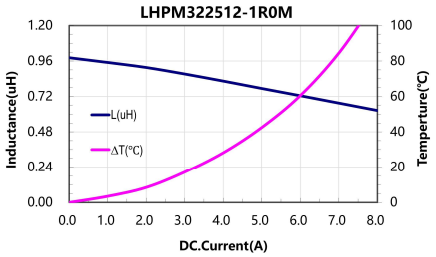
Note 7: Rated Voltage : 20V Max.

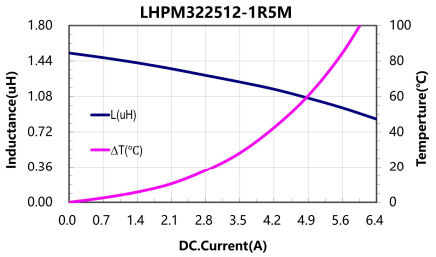
Typical performance curves :

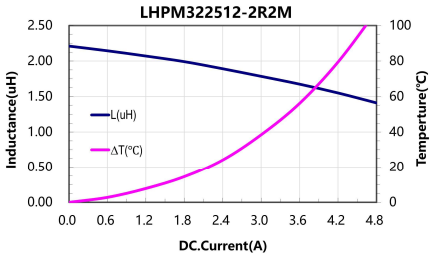


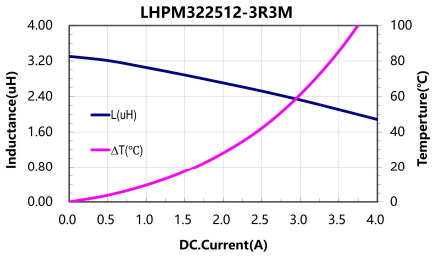


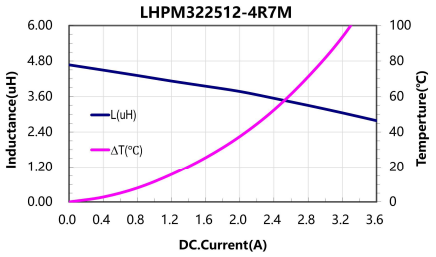


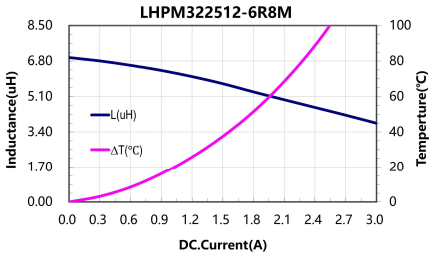


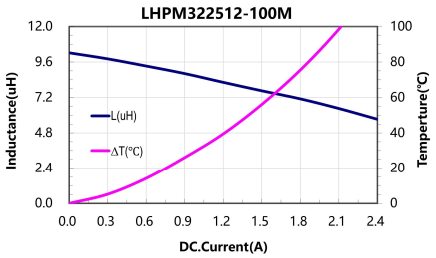












● LHPM322520 SERIES

Part No.	Inductance L(uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
LHPM322520-1R0M	1.0	20	22	25	7.6	6.5	4.8	4.2
LHPM322520-1R5M	1.5	20	30	35	6.0	5.2	4.2	3.5
LHPM322520-2R2M	2.2	20	33	40	4.6	4.0	3.3	2.9
LHPM322520-3R3M	3.3	20	50	65	4.2	3.6	2.6	2.3
LHPM322520-4R7M	4.7	20	86	98	3.4	2.9	2.4	2.0

If you require another part number, please contact us.

Note 1: Referenced ambient temperature 25℃.

Note 2: L Test Condition：1MHz,1.0V

Note 3: I sat (Typ): DC current (A) that will cause L0 to drop approximately 30%.

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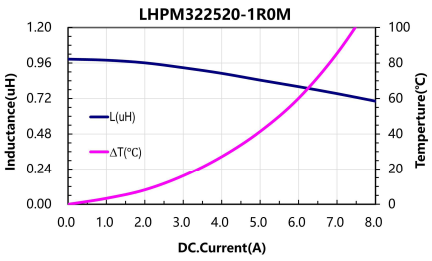
Note 4: Operating Temperature range includes self-temperature rise.

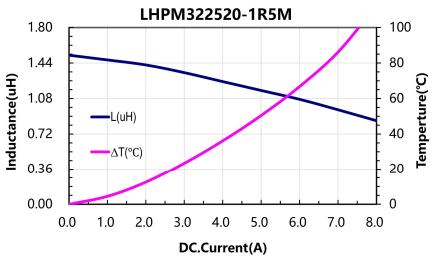
Note 5: The part temperature (ambient + temp rise) should not exceed 125℃ under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

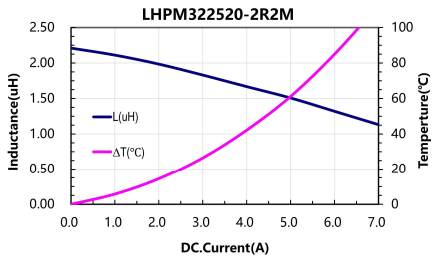
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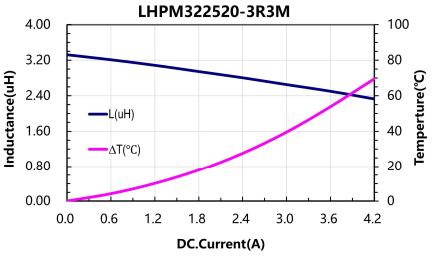
Note 7: Rated Voltage : 20V Max.

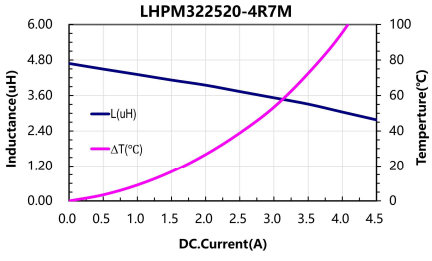
Typical performance curves :











* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.