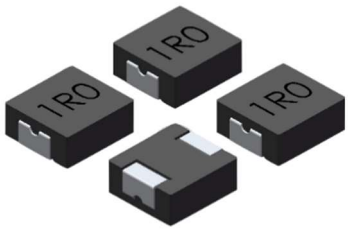
HPIF04~05 Series INDEX

HPIF 04 SERIES

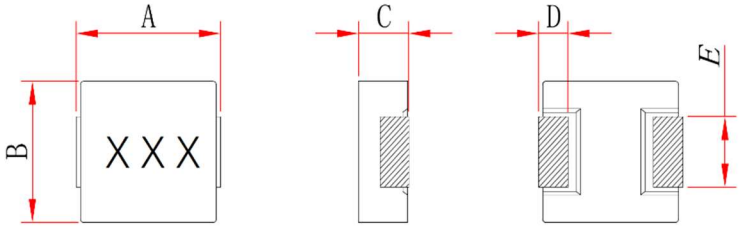
HIGH POWER INDUCTOR

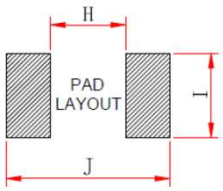
Applications:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server



Shape and Dimensions (Dimensions are in mm) :





Item	A	B	C	D	E	H	I	J
HPIF0412	4.4±0.2	4.0±0.2	1.0±0.2	0.76±0.3	2.0±0.3	2.16	2.30	4.95
HPIF0402	4.4±0.2	4.0±0.2	1.8±0.2	0.76±0.3	2.0±0.3	2.16	2.30	4.95

Features :

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

Product Identification:

HPIF 0412 – 1R0 M

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

(1) Product Symbol

(2) Dimensions Code

(3) Inductance: **1R0** for 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 tested by Wayne kerr 3260B LCR meter with Wayne kerr 3265B bais current source.

DCR：Chroma16502 Milliohm Meter

● HPIF0412 Series

Part No.	Inductance L(uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
HPIF0412-R47M	0.47	20	19.0	24.0	6.8	6.0	5.4	5.0
HPIF0412-R68M	0.68	20	25.0	30.0	6.7	5.5	5.1	4.7
HPIF0412-1R0M	1.0	20	35.0	42.0	5.3	4.5	4.2	3.5
HPIF0412-2R2M	2.2	20	68.0	80.0	3.0	2.4	2.8	2.2
HPIF0412-4R7M	4.7	20	145.0	168.0	2.2	1.8	2.0	1.6

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 20℃.

Note 2: Test Condition: 1MHz, 1.0 V.

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

Isat (Max) : DC current（A）that will cause L0 to drop 30% Max

Irms (Typ) : DC current（A）that will cause an approximate ΔT of 40℃

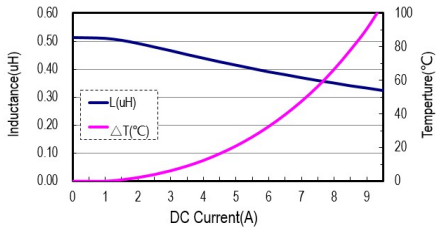
Irms (Max) : DC current（A）that will cause an ΔT of 40℃ Max

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

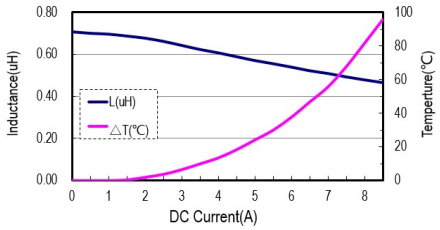
Note 5: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

Typical Performance curves:

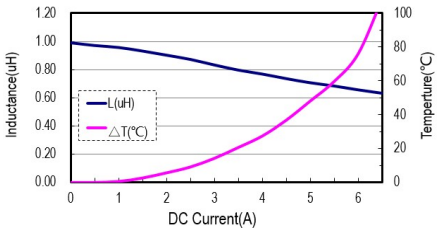
HPIF0412-R47M



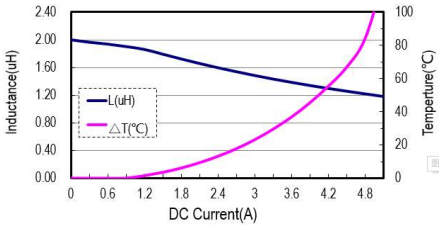
HPIF0412-R68M



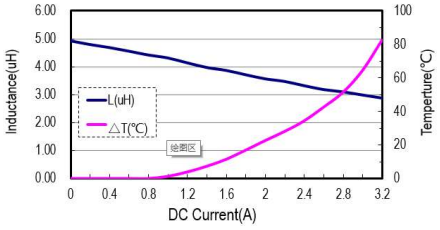
HPIF0412-1R0M



HPIF0412-2R2M



HPIF0412-4R7M



● HPIF0402 Series

Part No.	Inductance L(uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
HPIF0402-R33M	0.33	20	8.2	9.8	11.0	9.0	10.0	9.0
HPIF0402-R47M	0.47	20	9.8	12.0	9.5	7.6	9.0	8.0
HPIF0402-4R7M	4.7	20	57.0	75.0	3.4	2.9	3.2	2.9
HPIF0402-100M	10.0	20	172.0	210.0	2.2	1.9	2.0	1.8

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 20℃.

Note 2: Test Condition: 1MHz, 1.0 V.

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

Isat (Max) : DC current（A）that will cause L0 to drop 30% Max

Irms (Typ) : DC current（A）that will cause an approximate ΔT of 40℃

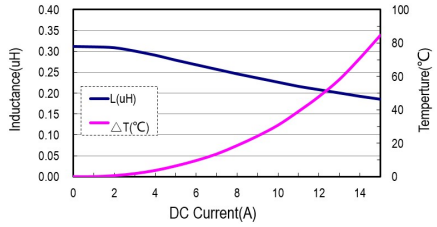
Irms (Max) : DC current（A）that will cause an ΔT of 40℃ Max

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

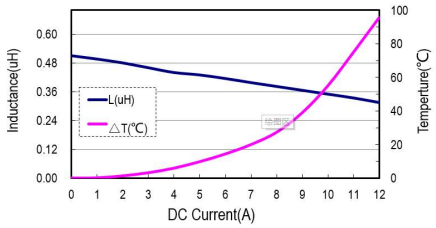
Note 5: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

Typical Performance curves:

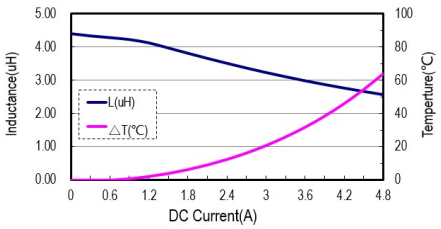
HPIF0402-R33M



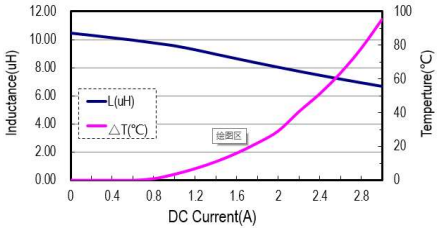
HPIF0402-R47M



HPIF0402-4R7M



HPIF0402-100M



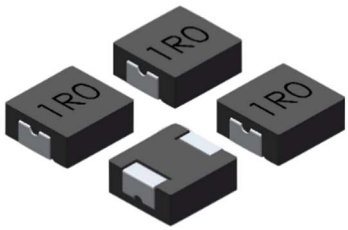
* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.

HPIF 0518 SERIES

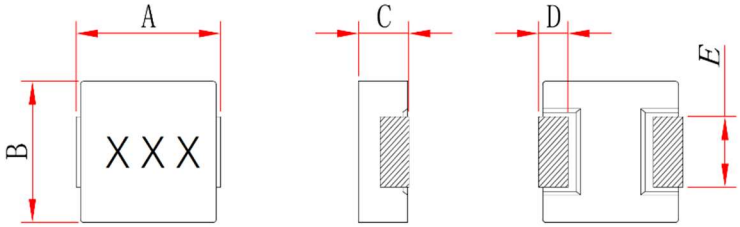
HIGH POWER INDUCTOR

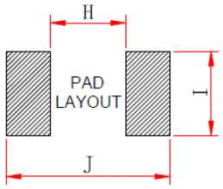
Applications:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server



Shape and Dimensions (Dimensions are in mm) :





Item	A	B	C	D	E	H	I	J
HPIF0518	5.5±0.2	5.2±0.2	1.6±0.2	1.02±0.3	2.5±0.3	2.16	2.79	5.99

Features :

- High performance (I sat) realized by metal dust core.
- Low profile: 1.8mm
- Low loss realized with low DCR
- Magnetically Shielded.
- Compliance with RoHS and Halogen Free

Product Identification:

HPIF 0518 – 1R0 M

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

(1) Product Symbol

(2) Dimensions Code

(3) Inductance: **1R0** for 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 tested by Wayne kerr 3260B LCR meter with Wayne kerr 3265B bais current source.

DCR：Chroma16502 Milliohm Meter

● HPIF0518 Series

Part No.	Inductance L(uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
HPIF0518-R47M	0.47	20	8.3	9.0	12.0	9.0	10.5	9.0
HPIF0518-1R0M	1.0	20	15.0	17.0	9.0	7.2	8.0	7.0
HPIF0518-2R2M	2.2	20	30.0	35.0	6.0	4.5	5.0	4.5
HPIF0518-4R7M	4.7	20	78.0	85.0	4.0	3.0	3.5	3.0
HPIF0518-100M	10.0	20	122.0	149.0	2.5	2.0	2.5	2.2

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 20℃.

Note 2: Test Condition: 1MHz, 1.0 V.

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

Isat (Max) : DC current（A）that will cause L0 to drop 30% Max

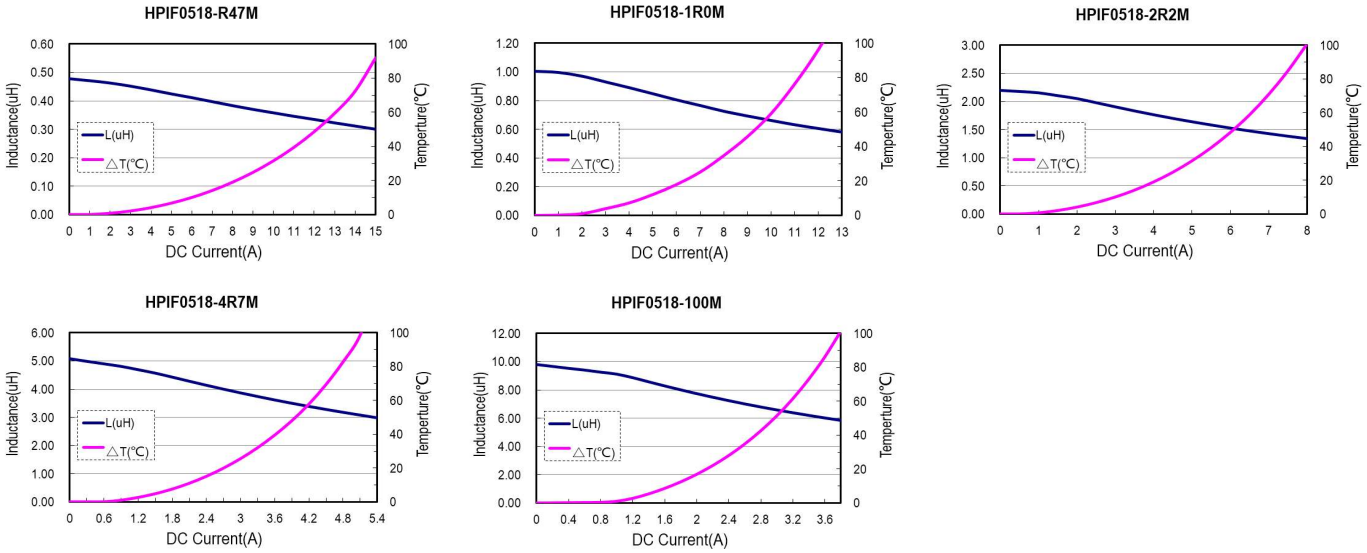
Irms (Typ) : DC current（A）that will cause an approximate ΔT of 40℃

Irms (Max) : DC current（A）that will cause an ΔT of 40℃ Max

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

Note 5: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

Typical Performance curves:



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