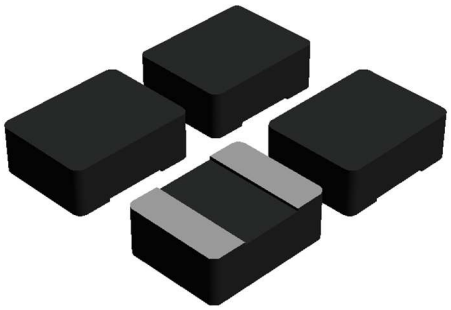
THP Series INDEX

THP141208W SERIES

HIGH POWER INDUCTOR



Applications:

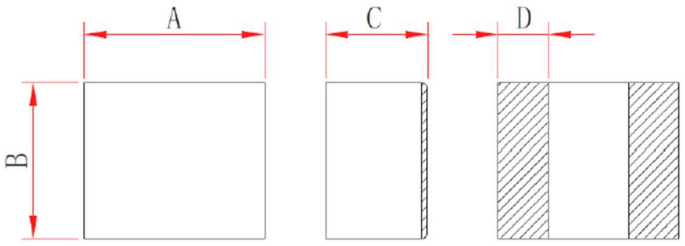
· DC/DC converter for CPU in Notebook PC

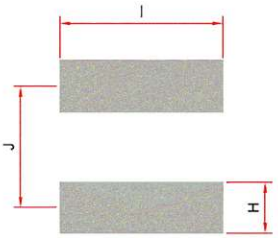
· Cellular phones, LCD displays, HDDs, DVCs, PDAs etc..

· Thin type on-board power supply module for exchanger

· VRM for server

Shape and Dimensions (Dimensions are in mm):





Item	A	B	C	D	H	I	J
THP141208W	1.40±0.2	1.20±0.2	0.80Max	0.45±0.2	0.53	1.30	0.97

Features :

· High performance (Isat) realized by metal dust core.

· Low loss realized with low DCR

· Magnetically Shielded.

· Meet 100% lead(Pb) free meet RoHS standard.

Characteristics:

· Saturation Current (Isat) : The current causes L_0 dropped approximately 30% typically.

· Temperature Rise Current(Irms) : The current will causes the coil temperature rised approximately △T=40℃

· Operating Temperature : -55℃ to 125℃.

Handling and precautions :

· Please contact us before cleaning this product.

Product Identification :

THP 141208 W – 1R0 M

(1) (2) (3) (4) (5)

(1) Product Symbol

(2) Dimensions Code

（141208：length=1.4mm width=1.2mm，Thickness=0.8mm）

(3) Product Series（W）

(4) Inductance（1R0：1.0uH）

(5) Inductance tolerance（M: ± 20%）

Test equipments :

· L: WK3260,WK3265B,WK6500,WK6565 LCR Meter.

· DCR: Chroma16502, Hioki 3545 Milliohm Meter

● THP141208W Series

RoHS COMPLIANT

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP141208W-R24M	0.24	20	27	5.7	6.0	3.7	4.1
THP141208W-R33M	0.33	20	28	5.0	5.3	3.5	4.0
THP141208W-R47M	0.47	20	35	4.2	4.6	3.3	3.8

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component,PCB trace size and thickness airflow and other cooling provisions all could 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.

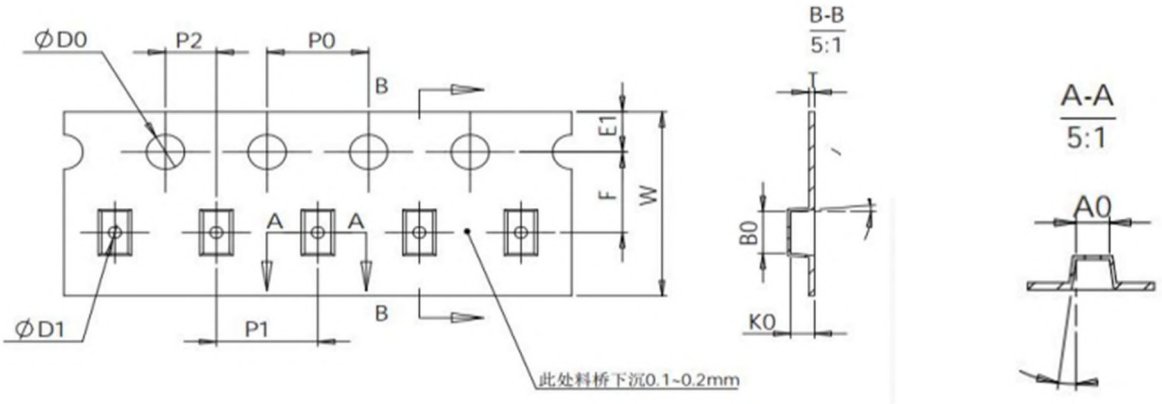
.

* 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.

Packaging Information

RoHS COMPLIANT

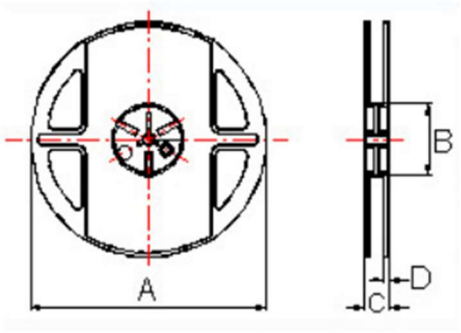
(1) Tape Packaging Dimensions（Unit：mm）



Taping Drawings (UNIT:mm)

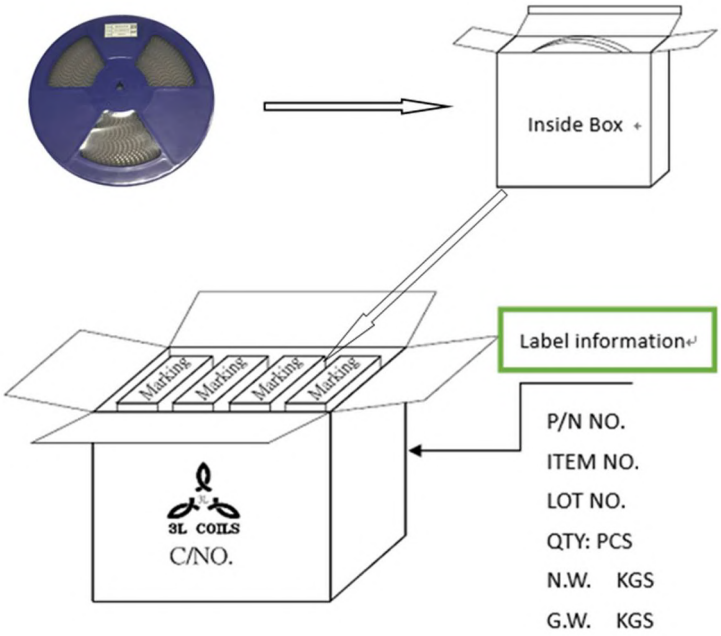
Tape dimensions (mm)												
P/N	W	P0	P1	P2	D	D1	T	A0	B0	K0	E1	F
THP141208W	8±0.3	4±0.1	4±0.1	2±0.1	1.5+0.1/-0	1.0	0.23±0.05	1.50±0.05	1.75±0.05	1.00±0.05	1.75±0.1	3.50±0.1

(2) Reel Dimensions（Unit：mm）



Reel dimensions (mm)					PCS / REEL
P/N	A	B	C	D	
THP141208W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000

(3) Package Specifications



The Outside Carton Package quantity		
P/N	**PCS / Inside Box**	**PCS / Outside Carton**
THP141208W	**12000**	**144000**

Storage Conditions:

a) Temperature and humidity conditions: <35℃ and < 35-65%.

b) Recommendation: inductors should be used within 6 months from the time or delivery

c) Cartons must be placed in correct direction which indicated on carton, otherwise the reel or wire will be deformed.

d) Storage conditions as below are inappropriate:

①. Stored in high electrostatic environment

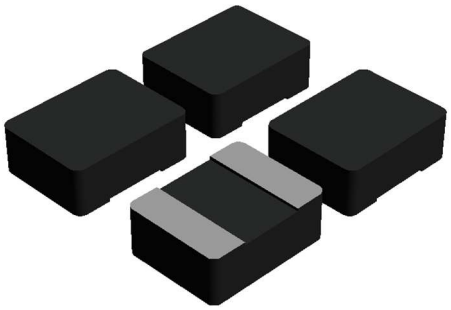
②. Stored in direct sunshine, rain, snow or condensation.

③. Exposed to sea wind or corrosive gases, such as Cl2, H2S, NH3, SO2, NO2, etc.

e) The products are used in circuit board thickness greater than 1.6mm. If customers use less than the thickness of the circuit board that you should confirm with the company, in order to recommend a more suitable product.

THP160808W SERIES

HIGH POWER INDUCTOR



Applications:

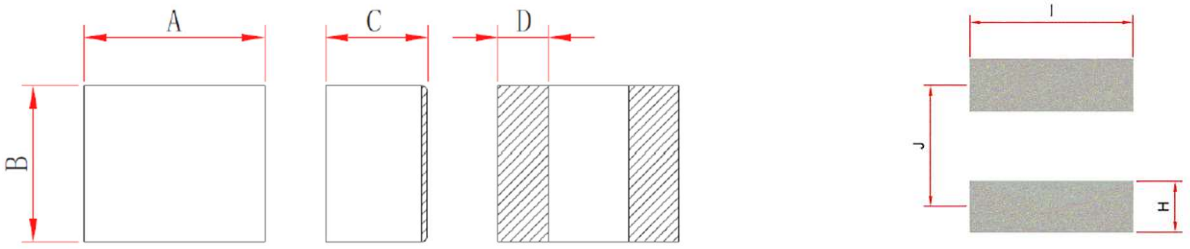
· DC/DC converter for CPU in Notebook PC

· 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	H	I	J
THP160808W	1.60±0.2	0.80±0.2	0.80Max	0.40±0.2	0.65	0.90	1.05

Features :

· High performance (Isat) realized by metal dust core.

· Low loss realized with low DCR

· Magnetically Shielded.

· Meet 100% lead(Pb) free meet RoHS standard.

Characteristics:

· Saturation Current (Isat) : The current causes L_0 dropped approximately 30% typically.

· Temperature Rise Current(Irms) : The current will causes the coil temperature rised approximately △T=40℃

· Operating Temperature : -55℃ to 125℃.

Handling and precautions :

· Please contact us before cleaning this product.

Product Identification :

THP 160808 W – 1R0 M

(1) (2) (3) (4) (5)

(1) Product Symbol

(2) Dimensions Code

（160808：length=1.6mm width=0.8mm，Thickness=0.8mm）

(3) Product Series（W）

(4) Inductance（1R0：1.0uH）

(5) Inductance tolerance（M: ± 20%）

Test equipments :

· L: WK3260,WK3265B,WK6500,WK6565 LCR Meter.

· DCR: Chroma16502, Hioki 3545 Milliohm Meter

RoHS COMPLIANT

● THP160808W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP160808W-R22M	0.22	20	40	5.0	5.5	3.0	3.4
THP160808W-R24M	0.24	20	41	4.8	5.3	2.9	3.3
THP160808W-R47M	0.47	20	100	3.7	4.1	2.3	2.6
THP160808W-R56M	0.56	20	110	3.5	4.0	1.9	2.2
THP160808W-R68M	0.68	20	130	3.0	3.3	1.9	2.1
THP160808W-1R0M	1.00	20	200	2.3	3.0	1.8	2.1

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component,PCB trace size and thickness airflow and other cooling provisions all could 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.

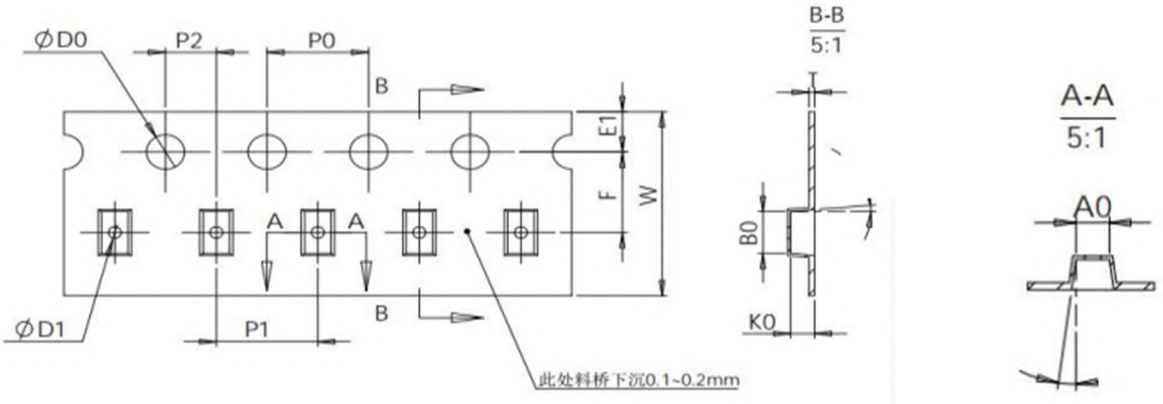
.

* 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.

Packaging Information

RoHS COMPLIANT

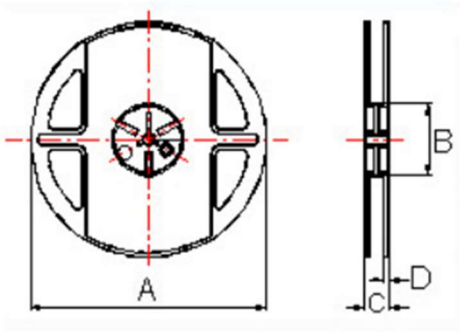
(1) Tape Packaging Dimensions（Unit：mm）



Taping Drawings (UNIT:mm)

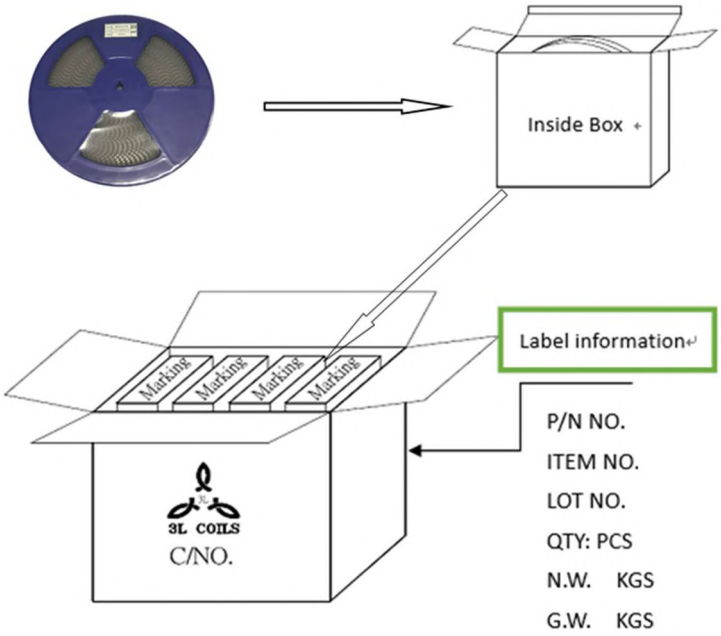
Tape dimensions (mm)												
P/N	W	P0	P1	P2	D	D1	T	A0	B0	K0	E1	F
THP160808W	8±0.3	4±0.1	4±0.1	2±0.1	1.5+0.1/-0	0.6	0.23±0.05	1.10±0.05	1.95±0.05	1.00±0.05	1.75±0.1	3.50±0.1

(2) Reel Dimensions（Unit：mm）



Reel dimensions (mm)					PCS / REEL
P/N	A	B	C	D	
THP160808W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000

(3) Package Specifications



The Outside Carton Package quantity		
P/N	**PCS / Inside Box**	**PCS / Outside Carton**
THP160808W	**12000**	**144000**

Storage Conditions:

a) Temperature and humidity conditions: <35℃ and < 35-65%.

b) Recommendation: inductors should be used within 6 months from the time or delivery

c) Cartons must be placed in correct direction which indicated on carton, otherwise the reel or wire will be deformed.

d) Storage conditions as below are inappropriate:

①. Stored in high electrostatic environment

②. Stored in direct sunshine, rain, snow or condensation.

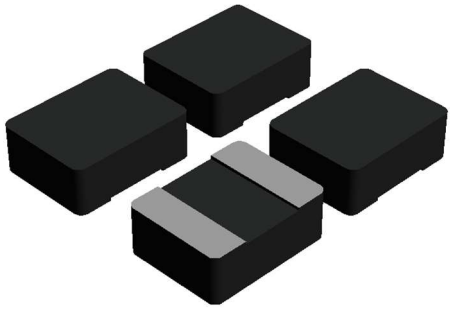
③. Exposed to sea wind or corrosive gases, such as Cl2, H2S, NH3, SO2, NO2, etc.

e) The products are used in circuit board thickness greater than 1.6mm. If customers use less than the thickness of the circuit board that you should confirm with the company, in order to recommend a more suitable product.

THP2012-W SERIES

HF Halogen Free RoHS COMPLIANT

HIGH POWER INDUCTOR



Applications:

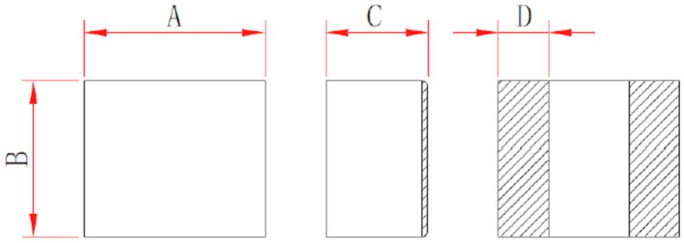
· DC/DC converter for CPU in Notebook PC

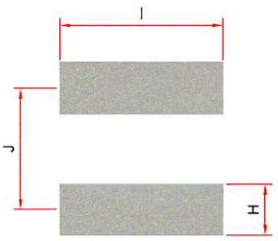
· Cellular phones, LCD displays, HDDs, DVCs, PDAs etc..

· Thin type on-board power supply module for exchanger

· VRM for server

Shape and Dimensions (Dimensions are in mm):





Item	A	B	C	D	H	I	J
THP201208W	2.00±0.2	1.20±0.2	0.80Max	0.75±0.2	0.80	1.30	1.30
THP201210W	2.00±0.2	1.20±0.2	1.00 Max	0.75±0.2	0.80	1.30	1.30

Features :

· High performance (Isat) realized by metal dust core.

· Low loss realized with low DCR

· Magnetically Shielded.

· Compliance with RoHS and Halogen Free

Characteristics:

· Saturation Current (Isat) : The current causes L_0 dropped approximately 30% typically.

· Temperature Rise Current(Irms) : The current will causes the coil temperature rose approximately △T=40℃

· Operating Temperature : -55℃ to 125℃.

Handling and precautions :

· Please contact us before cleaning this product.

Product Identification :

THP 201208 W – 1R0 M

(1) (2) (3) (4) (5)

(1) Product Symbol

(2) Dimensions Code

（201208：length=2.0mm width=1.2mm，Thickness=0.8mm）

(3) Product Series（W）

(4) Inductance（1R0：1.0uH）

(5) Inductance tolerance（M: ± 20%）

Measurement equipment :

· L: WK3260,WK3265B,WK6500,WK6565 LCR Meter.

· DCR: Chroma16502, Hioki 3545 Milliohm Meter

● THP201208W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP201208W-R11M	0.11	20	12	9.0	9.5	6.5	7.0
THP201208W-R24M	0.24	20	23	6.0	6.5	5.9	6.5
THP201208W-R33M	0.33	20	45	4.8	5.2	4.0	4.3
THP201208W-R47M	0.47	20	50	4.6	5.0	3.3	3.5
THP201208W-R68M	0.68	20	60	3.7	4.2	3.3	3.7
THP201208W-1R0M	1.0	20	70	3.5	4.0	2.9	3.3
THP201208W-1R5M	1.5	20	135	2.5	3.0	1.9	2.2
THP201208W-2R2M	2.2	20	185	2.3	2.6	1.8	2.2
THP201208W-3R3M	3.3	20	300	1.6	1.9	1.5	1.8
THP201208W-4R7M	4.7	20	325	1.4	1.6	1.5	1.7

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component, PCB trace size and thickness airflow and other cooling provisions all could 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.

● THP201210W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP201210W-R10M	0.10	20	13	8.0	8.5	7.0	7.5
THP201210W-R22M	0.22	20	22	6.8	7.3	6.5	7.1
THP201210W-R24M	0.24	20	23	6.7	7.2	6.4	7.0
THP201210W-R33M	0.33	20	32	6.0	6.5	5.0	5.5
THP201210W-R47M	0.47	20	36	5.0	5.5	4.3	4.7
THP201210W-R68M	0.68	20	43	4.5	5.0	4.0	4.3
THP201210W-1R0M	1.0	20	63	3.5	4.0	3.5	3.9
THP201210W-1R5M	1.5	20	85	2.7	3.2	2.6	3.1
THP201210W-2R2M	2.2	20	150	2.4	2.7	1.7	2.0
THP201210W-6R8M	6.8	20	520	1.2	1.45	1.3	1.5
THP201210W-100M	10.0	20	660	1.0	1.2	0.9	1.0

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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

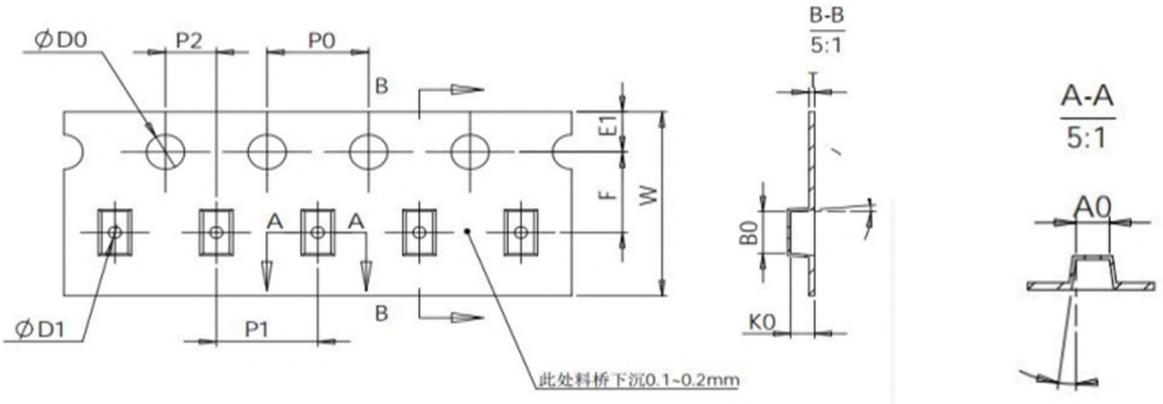
Note 5: The part temperature (ambient + temp rise) should not exceed 125℃ under the worst case operating condition. Circuit design, component, PCB trace size and thickness airflow and other cooling provisions all could affect the part temperature. Part temperature should be verified in the end application.

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

* 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.

Packaging Information

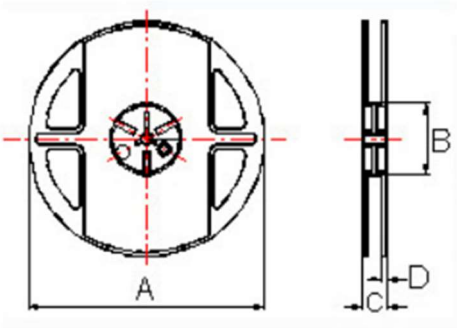
(1) Tape Packaging Dimensions（Unit：mm）



Taping Drawings (UNIT: mm)

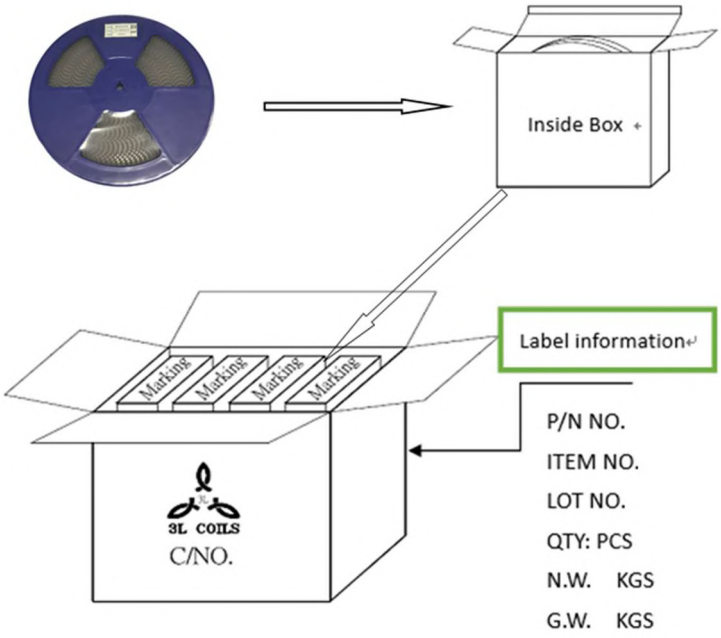
Tape dimensions (mm)												
P/N	W	P0	P1	P2	D	D1	T	A0	B0	K0	E1	F
THP201208W	8±0.3	4±0.1	4±0.1	2±0.1	1.5+0.1/-0	1.0	0.23±0.05	1.50±0.05	2.35±0.05	1.00±0.05	1.75±0.1	3.50±0.1
THP201210W	8±0.3	4±0.1	4±0.1	2±0.1	1.5+0.1/-0	1.0	0.23±0.05	1.50±0.05	2.35±0.05	1.20±0.05	1.75±0.1	3.50±0.1

(2) Reel Dimensions（Unit：mm）



Reel dimensions (mm)					PCS / REEL
P/N	A	B	C	D	
THP201208W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000
THP201210W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000

(3) Package Specifications



The Outside Carton Package quantity		
P/N	**PCS / Inside Box**	**PCS / Outside Carton**
THP201208W	**12000**	**144000**
THP201210W	**12000**	**144000**

Storage Conditions:

a) Temperature and humidity conditions: <35℃ and < 35-65%.

b) Recommendation: inductors should be used within 6 months from the time or delivery

c) Cartons must be placed in correct direction which indicated on carton, otherwise the reel or wire will be deformed.

d) Storage conditions as below are inappropriate:

①. Stored in high electrostatic environment

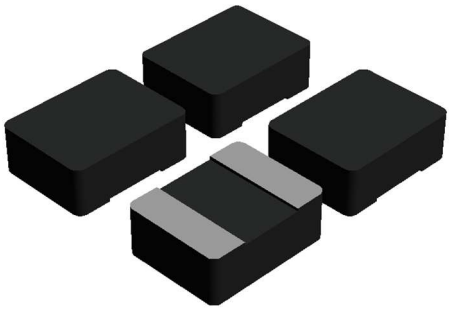
②. Stored in direct sunshine, rain, snow or condensation.

③. Exposed to sea wind or corrosive gases, such as Cl2, H2S, NH3, SO2, NO2, etc.

e) The products are used in circuit board thickness greater than 1.6mm. If customers use less than the thickness of the circuit board that you should confirm with the company, in order to recommend a more suitable product.

THP2016-W SERIES

HIGH POWER INDUCTOR



Applications:

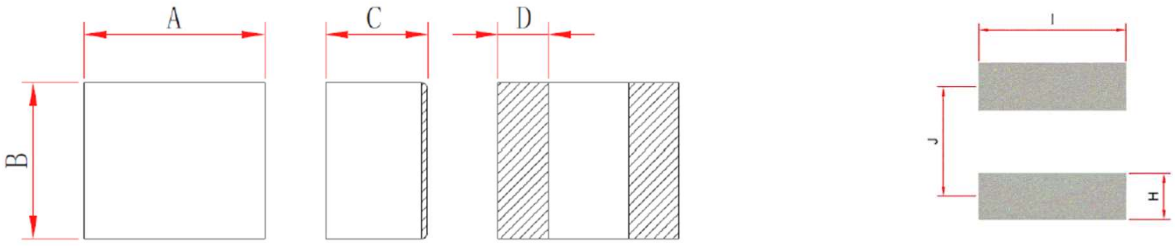
· DC/DC converter for CPU in Notebook PC

· 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	H	I	J
THP201608W	2.00±0.2	1.60±0.2	0.80Max	0.70±0.2	0.80	1.70	1.30
THP201610W	2.00±0.2	1.60±0.2	1.00 Max	0.70±0.2	0.80	1.70	1.30
THP201612W	2.00±0.2	1.60±0.2	1.20 Max	0.70±0.2	0.80	1.70	1.30

Features :

· High performance (Isat) realized by metal dust core.

· Low loss realized with low DCR

· Magnetically Shielded.

· Meet 100% lead(Pb) free meet RoHS standard.

Characteristics:

· Saturation Current (Isat) : The current causes L_0 dropped approximately 30% typically.

· Temperature Rise Current(Irms) : The current will causes the coil temperature rised approximately △T=40℃

· Operating Temperature : -55℃ to 125℃.

Handling and precautions :

· Please contact us before cleaning this product.

Product Identification :

THP 201608 W – 1R0 M

(1) (2) (3) (4) (5)

(1) Product Symbol

(2) Dimensions Code

（201608：length=2.0mm width=1.6mm，Thickness=0.8mm）

(3) Product Series（W）

(4) Inductance（1R0：1.0uH）

(5) Inductance tolerance（M: ± 20%）

Test equipments :

· L: WK3260,WK3265B,WK6500,WK6565 LCR Meter.

· DCR: Chroma16502, Hioki 3545 Milliohm Meter

● THP201608W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP201608W-R22M	0.22	20	19	5.6	6.1	5.9	6.6
THP201608W-R24M	0.24	20	20	5.5	6.0	5.8	6.5
THP201608W-R33M	0.33	20	24	5.3	5.8	4.8	5.5
THP201608W-R47M	0.47	20	27	5.0	5.5	4.4	4.6
THP201608W-R68M	0.68	20	44	4.2	4.6	3.5	3.8
THP201608W-1R0M	1.0	20	60	3.1	3.3	3.3	3.6
THP201608W-1R5M	1.5	20	85	2.8	3.0	2.8	3.1
THP201608W-2R2M	2.2	20	140	2.3	2.5	2.0	2.2
THP201608W-3R3M	3.3	20	220	1.8	2.1	1.5	1.8
THP201608W-4R7M	4.7	20	290	1.5	1.7	1.4	1.6
THP201608W-100M	10.0	20	800	0.9	1.0	0.9	1.0

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component,PCB trace size and thickness airflow and other cooling provisions all could 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.

● THP201610W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP201610W-R10M	0.10	20	12	8.4	9.0	8.0	8.5
THP201610W-R15M	0.15	20	14	8.0	8.7	7.0	7.6
THP201610W-R22M	0.22	20	18	7.5	8.2	6.3	6.9
THP201610W-R24M	0.24	20	19	7.4	8.0	6.2	6.8
THP201610W-R33M	0.33	20	22	6.5	7.0	5.3	5.7
THP201610W-R47M	0.47	20	25	5.5	6.3	5.0	5.5
THP201610W-R68M	0.68	20	32	4.7	5.2	4.3	4.6
THP201610W-1R0M	1.0	20	43	4.2	4.6	4.1	4.5
THP201610W-1R5M	1.5	20	100	2.9	3.2	2.3	2.6
THP201610W-2R2M	2.2	20	130	2.8	3.0	2.1	2.5
THP201610W-3R3M	3.3	20	170	2.0	2.3	1.5	1.7
THP201610W-4R7M	4.7	20	220	1.8	2.0	1.4	1.6
THP201610W-100M	10.0	20	580	1.1	1.4	0.7	1.0

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component,PCB trace size and thickness airflow and other cooling provisions all could 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.

● THP201612W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP201612W-R10M	0.10	20	6.0	11.5	13.0	10.0	12.0
THP201612W-R15M	0.15	20	10	10.5	12.0	9.0	10.0
THP201612W-R24M	0.24	20	11	8.7	9.2	8.6	9.1
THP201612W-R33M	0.33	20	15	7.3	7.8	7.2	7.7
THP201612W-R47M	0.47	20	17	6.0	6.7	6.0	6.7
THP201612W-R68M	0.68	20	23	5.3	6.0	5.3	6.0
THP201612W-1R0M	1.0	20	36	4.5	5.0	4.5	5.0
THP201612W-1R5M	1.5	20	50	3.5	4.0	3.5	4.0
THP201612W-2R2M	2.2	20	90	2.7	3.1	2.9	3.3
THP201612W-3R3M	3.3	20	165	2.3	2.7	2.0	2.4

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component,PCB trace size and thickness airflow and other cooling provisions all could affect the part temperature. Part temperature should be verified in the end application.

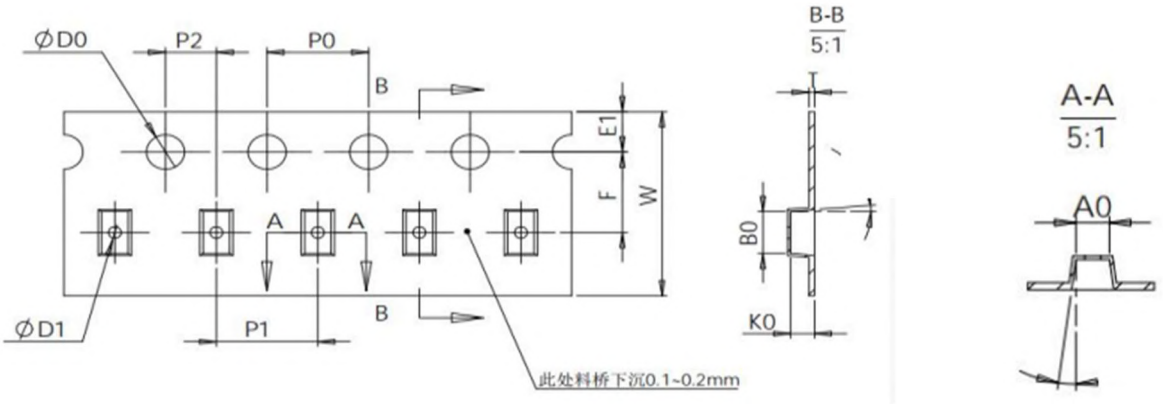
Note 6.: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

* 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.

Packaging Information

RoHS COMPLIANT

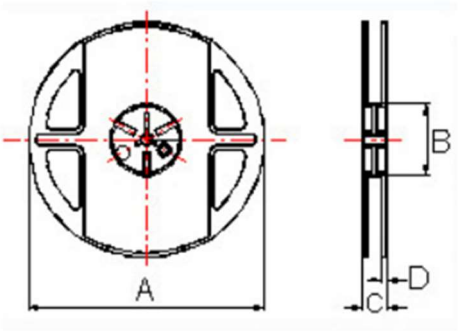
(1) Tape Packaging Dimensions（Unit：mm）



Taping Drawings (UNIT:mm)

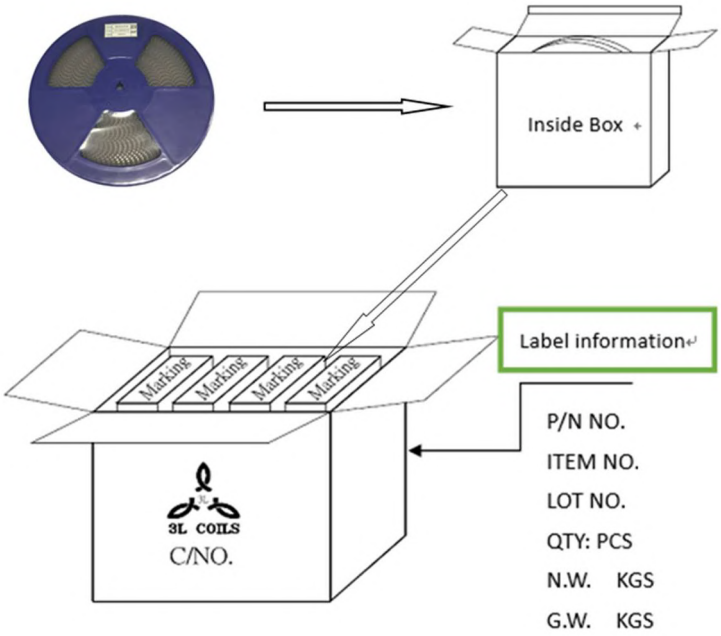
Tape dimensions (mm)												
P/N	W	P0	P1	P2	D	D1	T	A0	B0	K0	E1	F
THP201608W	8±0.3	4±0.1	4±0.1	2±0.1	1.5+0.1/-0	1.0	0.23±0.05	1.90±0.05	2.35±0.05	1.00±0.05	1.75±0.1	3.50±0.1
THP201610W	8±0.3	4±0.1	4±0.1	2±0.1	1.5+0.1/-0	1.0	0.23±0.05	1.90±0.05	2.35±0.05	1.20±0.05	1.75±0.1	3.50±0.1
THP201612W	8±0.3	4±0.1	4±0.1	2±0.1	1.5+0.1/-0	1.0	0.23±0.05	1.90±0.05	2.35±0.05	1.40±0.05	1.75±0.1	3.50±0.1

(2) Reel Dimensions（Unit：mm）



Reel dimensions (mm)					PCS / REEL
P/N	A	B	C	D	
THP201608W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000
THP201610W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000
THP201612W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000

(3) Package Specifications



The Outside Carton Package quantity		
P/N	**PCS / Inside Box**	**PCS / Outside Carton**
THP201608W	**12000**	**144000**
THP201610W	**12000**	**144000**
THP201612W	**12000**	**144000**

Storage Conditions:

a) Temperature and humidity conditions: <35℃ and < 35-65%.

b) Recommendation: inductors should be used within 6 months from the time or delivery

c) Cartons must be placed in correct direction which indicated on carton, otherwise the reel or wire will be deformed.

d) Storage conditions as below are inappropriate:

①. Stored in high electrostatic environment

②. Stored in direct sunshine, rain, snow or condensation.

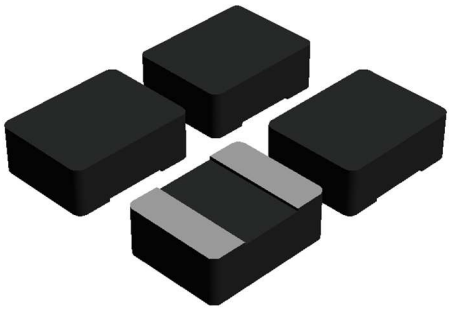
③. Exposed to sea wind or corrosive gases, such as Cl2, H2S, NH3, SO2, NO2, etc.

e) The products are used in circuit board thickness greater than 1.6mm. If customers use less than the thickness of the circuit board that you should confirm with the company, in order to recommend a more suitable product.

THP2520-W SERIES

RoHS COMPLIANT

HIGH POWER INDUCTOR



Applications:

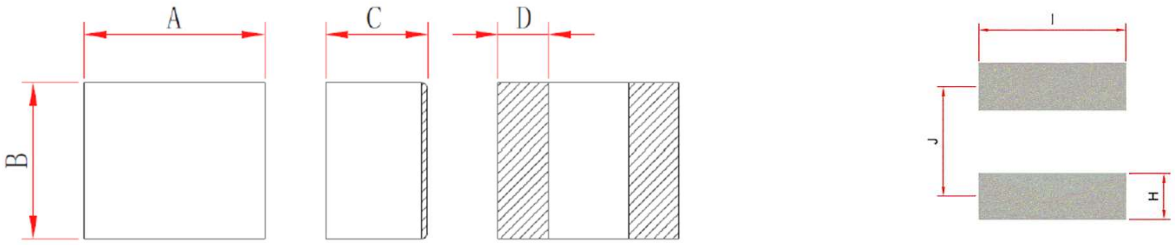
· DC/DC converter for CPU in Notebook PC

· 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	H	I	J
THP252008W	2.50±0.2	2.00±0.2	0.80 Max	0.90±0.2	0.95	2.10	1.65
THP252010W	2.50±0.2	2.00±0.2	1.00 Max	0.90±0.2	0.95	2.10	1.65
THP252012W	2.50±0.2	2.00±0.2	1.20 Max	0.90±0.2	0.95	2.10	1.65

Features :

· High performance (Isat) realized by metal dust core.

· Low loss realized with low DCR

· Magnetically Shielded.

· Meet 100% lead(Pb) free meet RoHS standard.

Characteristics:

· Saturation Current (Isat) : The current causes L_0 dropped approximately 30% typically.

· Temperature Rise Current(Irms) : The current will causes the coil temperature rised approximately △T=40℃

· Operating Temperature : -55℃ to 125℃.

Handling and precautions :

· Please contact us before cleaning this product.

Product Identification :

THP 252008 W – 1R0 M

(1) (2) (3) (4) (5)

(1) Product Symbol

(2) Dimensions Code

（252008：length=2.5mm width=2.0mm，Thickness=0.8mm）

(3) Product Series（W）

(4) Inductance（1R0：1.0uH）

(5) Inductance tolerance（M: ± 20%）

Test equipments :

· L: WK3260,WK3265B,WK6500,WK6565 LCR Meter.

· DCR: Chroma16502, Hioki 3545 Milliohm Meter

● THP252008W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP252008W-R47M	0.47	20	27	5.3	6.0	6.0	6.5
THP252008W-1R0M	1.0	20	40	4.0	4.5	4.0	4.3
THP252008W-1R5M	1.5	20	75	3.0	3.5	3.0	3.4
THP252008W-2R2M	2.2	20	77	2.6	3.0	2.6	3.0
THP252008W-3R3M	3.3	20	180	2.1	2.5	2.1	2.5

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component,PCB trace size and thickness airflow and other cooling provisions all could 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.

RoHS COMPLIANT

● THP252010W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP252010W-R22M	0.22	20	17	7.9	8.6	6.5	6.8
THP252010W-R24M	0.24	20	17.5	7.8	8.5	6.4	6.7
THP252010W-R33M	0.33	20	19	7.2	7.6	6.2	6.5
THP252010W-R47M	0.47	20	22	6.5	6.9	5.6	6.1
THP252010W-R68M	0.68	20	27	5.5	5.9	5.0	5.6
THP252010W-1R0M	1.0	20	30	4.8	5.3	4.1	4.5
THP252010W-1R5M	1.5	20	55	3.9	4.3	3.0	3.4
THP252010W-2R2M	2.2	20	70	3.0	3.3	2.1	2.4
THP252010W-3R3M	3.3	20	100	2.5	2.8	2.1	2.5
THP252010W-4R7M	4.7	20	180	2.0	2.6	1.6	2.0
THP252010W-6R8M	6.8	20	320	1.9	2.4	1.4	1.6
THP252010W-100M	10.0	20	560	1.4	1.55	0.95	1.05

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component,PCB trace size and thickness airflow and other cooling provisions all could 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.

RoHS COMPLIANT

● THP252012W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP252012W-R10M	0.1	20	10	12.5	13.5	10.5	12.0
THP252012W-R15M	0.15	20	11	12.0	13.0	10.0	11.5
THP252012W-R22M	0.22	20	14	9.0	9.6	7.6	8.2
THP252012W-R24M	0.24	20	15	8.8	9.3	7.5	8.0
THP252012W-R33M	0.33	20	17	7.8	8.3	6.4	6.8
THP252012W-R47M	0.47	20	19	7.0	7.5	6.0	6.5
THP252012W-R68M	0.68	20	23	6.0	6.5	5.5	6.3
THP252012W-R82M	0.82	20	24	5.8	6.5	5.3	5.8
THP252012W-1R0M	1.0	20	42	5.0	5.6	3.6	4.0
THP252012W-1R5M	1.5	20	50	4.1	4.5	3.2	3.7
THP252012W-2R2M	2.2	20	65	3.3	3.8	2.7	3.0
THP252012W-3R3M	3.3	20	97	2.7	3.0	1.8	2.3
THP252012W-4R7M	4.7	20	170	2.1	2.4	1.5	1.8
THP252012W-6R8M	6.8	20	270	1.7	2.0	1.4	1.6
THP252012W-100M	10.0	20	400	1.45	1.6	1.05	1.2

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component,PCB trace size and thickness airflow and other cooling provisions all could affect the part temperature. Part temperature should be verified in the end application.

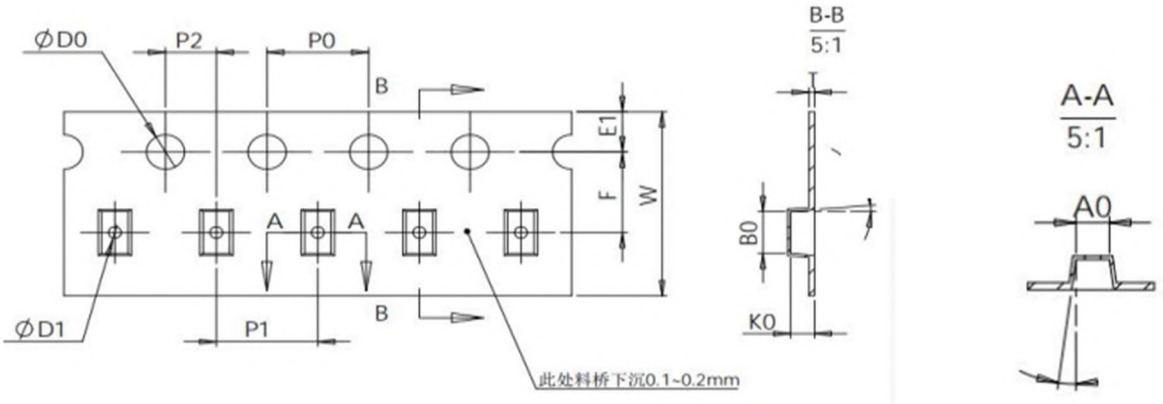
Note 6.：The rated current as listed is either the saturation current or the heating current depending on which value is lower.

* 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.

Packaging Information

RoHS COMPLIANT

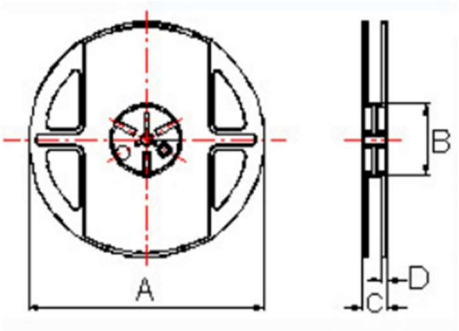
(1) Tape Packaging Dimensions（Unit：mm）



Taping Drawings (UNIT:mm)

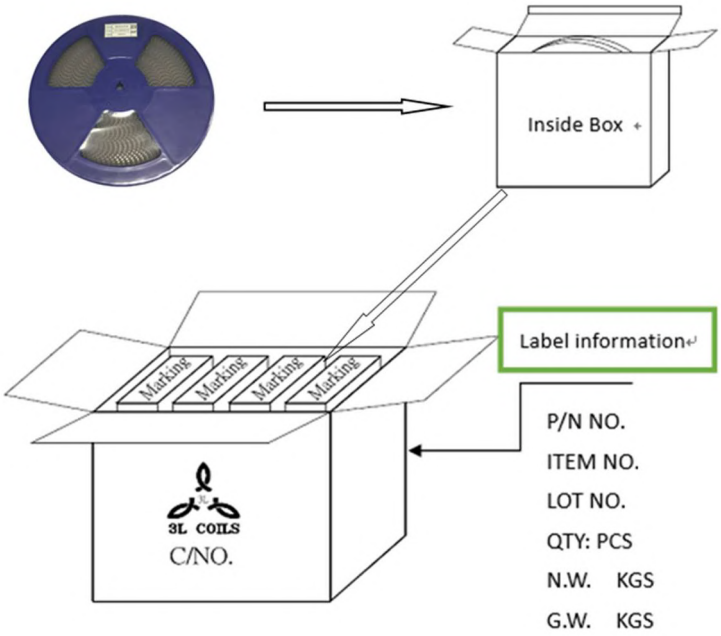
Tape dimensions (mm)												
P/N	W	P0	P1	P2	D	D1	T	A0	B0	K0	E1	F
THP252008W	8±0.3	4±0.1	4±0.1	2±0.1	1.5+0.1/-0	1.0	0.23±0.05	2.40±0.05	2.85±0.05	1.00±0.05	1.75±0.1	3.50±0.1
THP252010W	8±0.3	4±0.1	4±0.1	2±0.1	1.5+0.1/-0	1.0	0.23±0.05	2.40±0.05	2.85±0.05	1.20±0.05	1.75±0.1	3.50±0.1
THP252012W	8±0.3	4±0.1	4±0.1	2±0.1	1.5+0.1/-0	1.0	0.23±0.05	2.40±0.05	2.85±0.05	1.40±0.05	1.75±0.1	3.50±0.1

(2) Reel Dimensions（Unit：mm）



Reel dimensions (mm)					PCS / REEL
P/N	A	B	C	D	
THP252008W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000
THP252010W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000
THP252012W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000

(3) Package Specifications



The Outside Carton Package quantity		
P/N	**PCS / Inside Box**	**PCS / Outside Carton**
THP252008W	**12000**	**144000**
THP252010W	**12000**	**144000**
THP252012W	**12000**	**144000**

Storage Conditions:

a) Temperature and humidity conditions: <35℃ and < 35-65%.

b) Recommendation: inductors should be used within 6 months from the time or delivery

c) Cartons must be placed in correct direction which indicated on carton, otherwise the reel or wire will be deformed.

d) Storage conditions as below are inappropriate:

①. Stored in high electrostatic environment

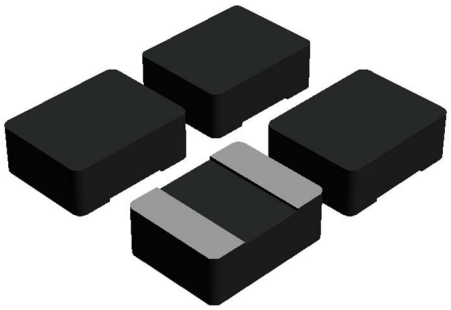
②. Stored in direct sunshine, rain, snow or condensation.

③. Exposed to sea wind or corrosive gases, such as Cl2, H2S, NH3, SO2, NO2, etc.

e) The products are used in circuit board thickness greater than 1.6mm. If customers use less than the thickness of the circuit board that you should confirm with the company, in order to recommend a more suitable product.

THP3225-W SERIES

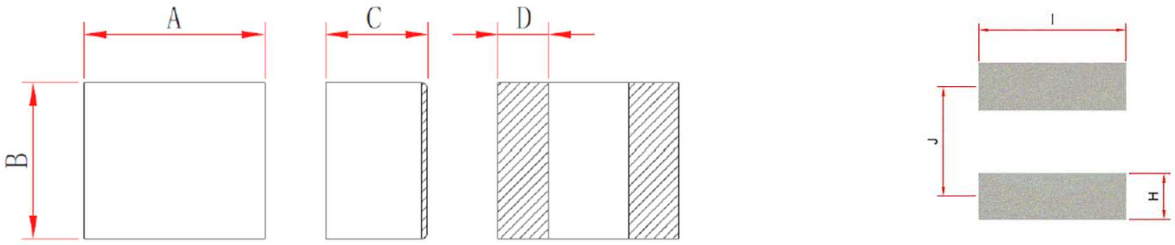
HIGH POWER INDUCTOR



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	H	I	J
THP322510W	3.20±0.2	2.50±0.2	1.00 Max	1.15±0.2	1.18	2.55	2.08
THP322512W	3.20±0.2	2.50±0.2	1.20 Max	1.15±0.2	1.18	2.55	2.08

Features :

- High performance (Isat) realized by metal dust core.
- Low loss realized with low DCR
- Magnetically Shielded.
- Meet 100% lead(Pb) free meet RoHS standard.

Characteristics:

- Saturation Current (Isat) : The current causes L_0 dropped approximately 30% typically.
- Temperature Rise Current(Irms) : The current will causes the coil temperature rised approximately △T=40℃
- Operating Temperature : -55℃ to 125℃.

Handling and precautions :

- Please contact us before cleaning this product.

Product Identification :

THP 322510 W – 1R0 M

(1) (2) (3) (4) (5)

(1) Product Symbol

(2) Dimensions Code

（322510：length=3.2mm width=2.5mm，Thickness=1.0mm）

(3) Product Series（W）

(4) Inductance（1R0：1.0uH）

(5) Inductance tolerance（M: ± 20%）

Test equipments :

- L: WK3260,WK3265B,WK6500,WK6565 LCR Meter.
- DCR: Chroma16502, Hioki 3545 Milliohm Meter

RoHS COMPLIANT

● THP322510W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP322510W-R33M	0.33	20	15	7.8	8.3	7.8	8.3
THP322510W-R47M	0.47	20	22	7.6	8.3	5.9	6.4
THP322510W-R68M	0.68	20	28	7.0	7.5	5.7	6.2
THP322510W-1R0M	1.0	20	30	5.3	6.0	4.9	5.4
THP322510W-1R5M	1.5	20	42	4.4	5.0	3.6	4.0
THP322510W-2R2M	2.2	20	66	3.5	4.0	3.4	3.7
THP322510W-3R3M	3.3	20	120	3.3	3.7	2.3	2.7
THP322510W-4R7M	4.7	20	140	2.5	2.8	1.9	2.3
THP322510W-6R8M	6.8	20	320	2.0	2.4	1.6	1.9
THP322510W-100M	10.0	20	365	1.8	2.2	1.8	2.2

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component,PCB trace size and thickness airflow and other cooling provisions all could 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.

● THP322512W Series

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)	Isat(A)		Irms(A)	
			Max.	Max.	Typ.	Max.	Typ.
THP322512W-R10M	0.10	20	7.0	16.5	18.0	11.0	12.0
THP322512W-R22M	0.22	20	10	11.0	11.5	8.7	9.2
THP322512W-R24M	0.24	20	12	10.5	11.0	8.5	9.0
THP322512W-R33M	0.33	20	14	9.5	10.0	8.1	8.4
THP322512W-R47M	0.47	20	19	8.2	8.6	7.2	7.5
THP322512W-R68M	0.68	20	23	7.7	8.1	6.8	7.3
THP322512W-1R0M	1.0	20	30	5.8	6.6	4.8	5.3
THP322512W-1R5M	1.5	20	44	4.7	5.1	4.3	4.7
THP322512W-2R2M	2.2	20	70	4.2	4.6	3.0	3.6
THP322512W-3R3M	3.3	20	95	3.2	3.7	2.5	2.9
THP322512W-4R7M	4.7	20	135	2.6	2.9	2.0	2.3
THP322512W-6R8M	6.8	20	210	2.4	2.8	1.9	2.1
THP322512W-100M	10.0	20	230	1.9	2.3	1.8	2.2

If you require another part number please contact with us.

Note 1: Referenced ambient temperature 25℃.

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

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

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

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 condition. Circuit design, component,PCB trace size and thickness airflow and other cooling provisions all could affect the part temperature. Part temperature should be verified in the end application.

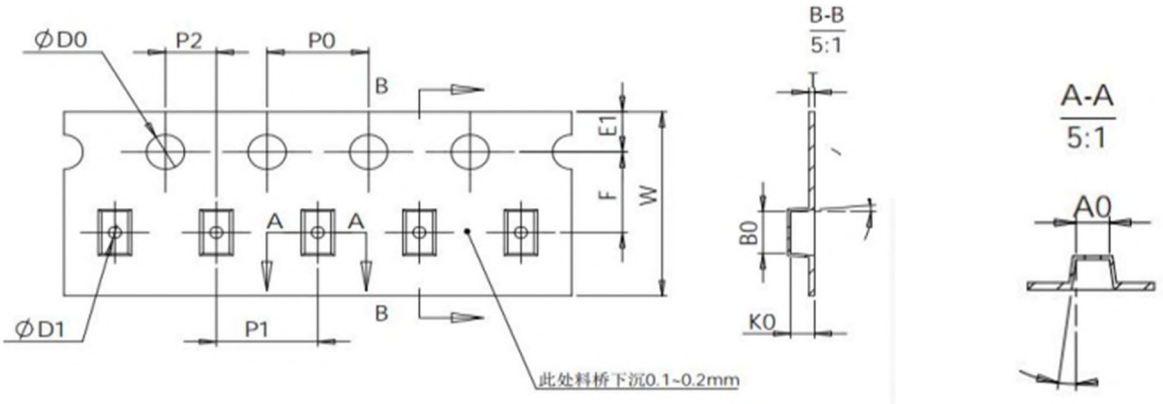
Note 6.: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

* 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.

Packaging Information

RoHS COMPLIANT

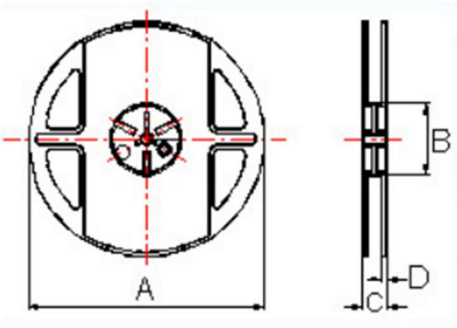
(1) Tape Packaging Dimensions（Unit：mm）



Taping Drawings (UNIT:mm)

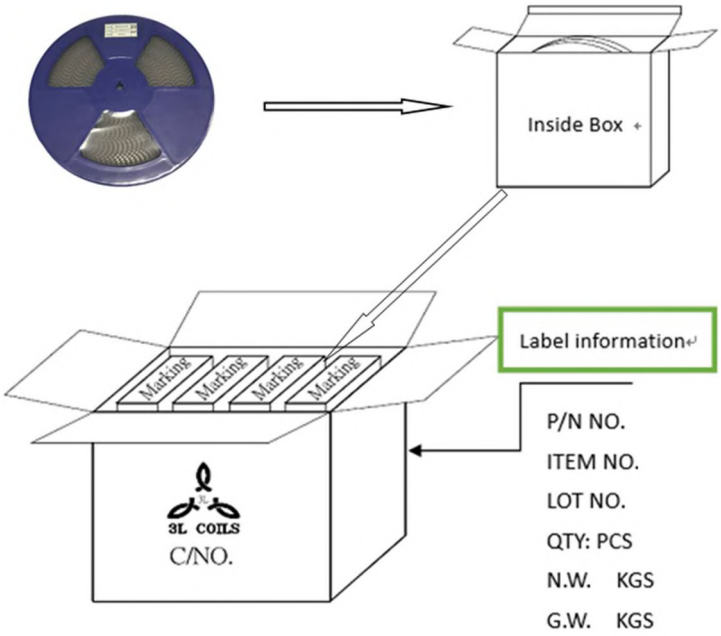
Tape dimensions (mm)												
P/N	W	P0	P1	P2	D	D1	T	A0	B0	K0	E1	F
THP322510W	8±0.3	4±0.1	4±0.1	2±0.1	1.5±0.1/-0	1.0	0.23±0.05	2.90±0.05	3.55±0.05	1.20±0.05	1.75±0.1	3.50±0.1
THP322512W	8±0.3	4±0.1	4±0.1	2±0.1	1.5±0.1/-0	1.0	0.23±0.05	2.90±0.05	3.55±0.05	1.40±0.05	1.75±0.1	3.50±0.1

(2) Reel Dimensions（Unit：mm）



Reel dimensions (mm)					PCS / REEL
P/N	A	B	C	D	
THP322510W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000
THP322512W	178+2.0	60±1.0	9.0±0.5	1.0+0.2	3000

(3) Package Specifications



The Outside Carton Package quantity		
P/N	**PCS / Inside Box**	**PCS / Outside Carton**
THP322510W	**12000**	**144000**
THP322512W	**12000**	**144000**

Storage Conditions:

a) Temperature and humidity conditions: <35℃ and < 35-65%.

b) Recommendation: inductors should be used within 6 months from the time or delivery

c) Cartons must be placed in correct direction which indicated on carton, otherwise the reel or wire will be deformed.

d) Storage conditions as below are inappropriate:

①. Stored in high electrostatic environment

②. Stored in direct sunshine, rain, snow or condensation.

③. Exposed to sea wind or corrosive gases, such as Cl2, H2S, NH3, SO2, NO2, etc.

e) The products are used in circuit board thickness greater than 1.6mm. If customers use less than the thickness of the circuit board that you should confirm with the company, in order to recommend a more suitable product.