1. Scope

2. This specification applies to MWFC-C Series of wire wound molded SMD power Inductors

3. Product Description and Identification (Part Number)

1) Description

UPS0412H of wire wound molded SMD power Inductors

2) Product Identification (Part Number)

UPS	XXXX	H	XXX	M	T0
①	②	③	④	⑤	⑥

①Type	
UPS	Wire wound molded SMD power Inductors

②External Dimensions (L x W xH) (mm)	
0412	4.2*4.2*1.2

③Feature Type	
H	Standard

④Nominal Inductance	
Example	Nominal Value
4R7	4.7μH
100	10μH

⑤Inductance Tolerance	
M	±20%

⑥Packing	
T0	Tape Carrier Package

4. Electrical Characteristics

Please refer to **Appendix A**.

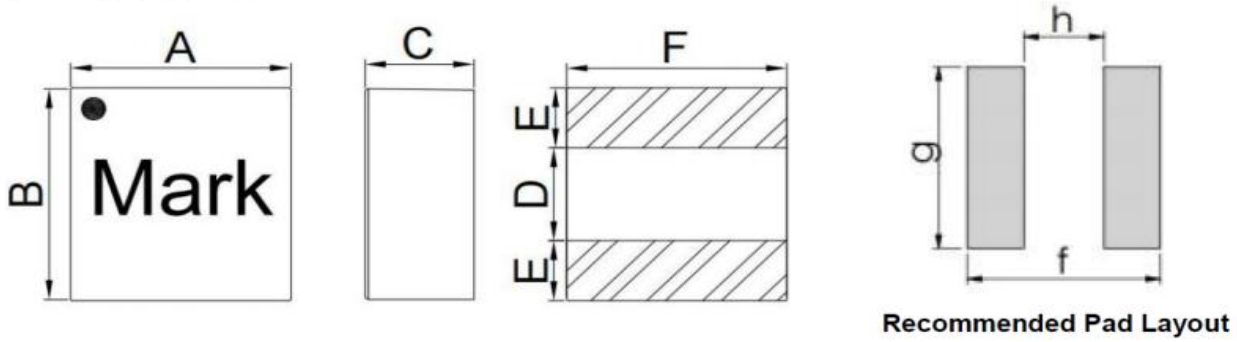
1) Operating and storage temperature range (individual chip without packing): -40℃ ~ +125℃

2) Storage temperature range (packaging conditions): -10℃~+40℃ and RH 70% (Max.)

5. Shape and Dimensions

1) Dimensions and recommended PCB pattern for reflow soldering: See **Fig.4-1** and **Table 4-1**

2) Structure: See **Table 4-2**



Recommended Pad Layout

Fig.4-1

Table 4-1

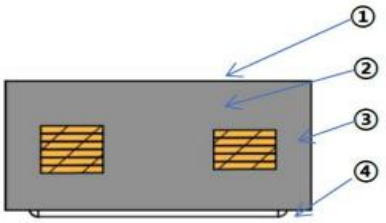
Unit: mm

Type		A	B	C	D	E	F	f	g	h
UPS0410H		4.0±0.2	4.0±0.2	1.0Max.	1.80±0.3	1.10±0.3	3.80Typ.	4.00 Typ.	4.00 Typ.	1.70Typ.
UPS412H	L≦1.0μH	4.1±0.2	4.1±0.2	1.2Max.	1.80±0.3	1.10±0.3	3.80Typ.	4.00 Typ.	4.00 Typ.	1.70Typ.
	L≧1.5μH	4.0±0.2	4.0±0.2	1.2Max.	1.80±0.3	1.10±0.3	3.80Typ.	4.00 Typ.	4.00 Typ.	1.70Typ.
UPS0420H		4.0±0.2	4.0±0.2	2.0Max.	1.80±0.3	1.10±0.3	3.80Typ.	4.00 Typ.	4.00 Typ.	1.70Typ.
UPS0430H		4.1±0.2	4.1±0.2	3.0Max.	1.80±0.3	1.10±0.3	3.80Typ.	4.00 Typ.	4.00 Typ.	1.70Typ.
UPS0530H		5.3±0.2	5.1±0.2	3.0Max.	1.70±0.3	1.70±0.3	4.80Typ.	5.50 Typ.	5.70 Typ.	1.70Typ.
UPS0630H		6.6±0.2	6.4±0.2	3.0Max.	2.10±0.3	2.10±0.3	6.00Typ.	6.80 Typ.	7.00 Typ.	1.80Typ.

Structure and Components: See **Table 4-2**

Table 4-2

No.	Components	Materials
①	Coating	See Appendix A
②	Core	Composite
③	Wire	Flat Enameled Copper Wire
④	Electrodes	Sn/Ag/Cu Alloy



6. Test and Measurement Procedures

5.1 Test Conditions

Unless otherwise specified, the standard atmospheric conditions for measurement/test as:

a. Ambient Temperature: 20±15℃
b. Relative Humidity: 65±20%
c. Air Pressure: 86kPa to 106kPa

If any doubt on the results, measurements/tests should be made within the following limits:

a. Ambient Temperature: 20±2℃
b. Relative Humidity: 65±5%
c. Air Pressure: 86kPa to 106kPa

5.2 Visual Examination

a. Inspection Equipment: 20× magnifier

5.3 Electrical Test

5.3.1 DC Resistance (DCR)

a. Refer to **Electrical Characteristics**.
b. Test equipment (Analyzer): High Accuracy Milliohmmeter-HIOKI RM3544 or equivalent.

5.3.2 Inductance (L)

a. Refer to **Electrical Characteristics**.
b. Test equipment: High Accuracy RF Impedance /Material Analyzer-WK 3260B or equivalent.
c. Test signal: 1V.
d. Test frequency refers to **Electrical Characteristics**.

5.3.3 Temperature Rise Current（Irms）

a. Refer to **Electrical Characteristics**.
b. Test equipment (see **Fig. 5.3.3-1**): Electric Power, Electric current meter, Thermometer.
c. Measurement method (see **Fig. 5.3.3-1**):
   1. Set test current to be 0 mA.
   2. Measure initial temperature of chip surface.
   3. Gradually increase voltage and measure chip temperature for corresponding current.
   4. Definition of Temperature Rise Current（Irms）: Irms is direct electric current as chip surface temperature rose just 40℃ against chip initial surface temperature (Ta) (see **Fig. 5.3.3-2**)

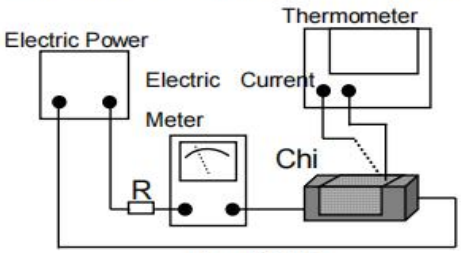


Fig. 5.3.3-1

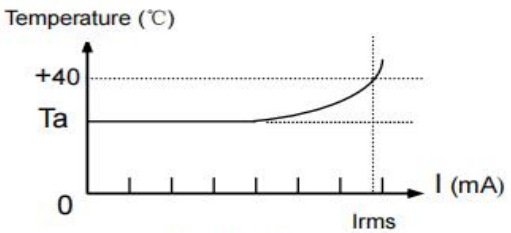


Fig. 5.3.3-2

5.3.4 Saturation Current（Isat）

a. Refer to **Electrical Characteristics**.
b. Test equipment: High Accuracy RF Impedance /Material Analyzer- WK 3260B or equivalent
c. Measurement method:
   1. Measurement conditions of initial inductance L: Measuring Frequency: 1MHz.
      Test Current: 1mA.
   2. Definition of Saturation Current（Isat）: Isat is the value of DC current as inductance L (μH) decreased just 30% against initial value (see **Fig. 5.3.4-1**).

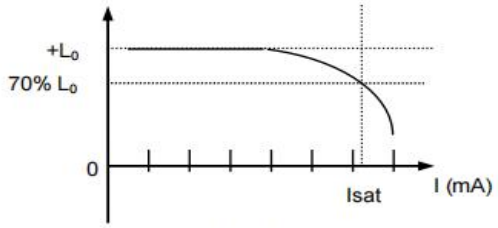
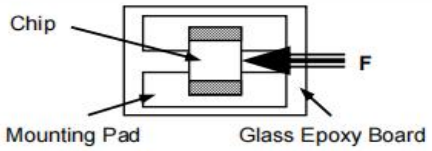
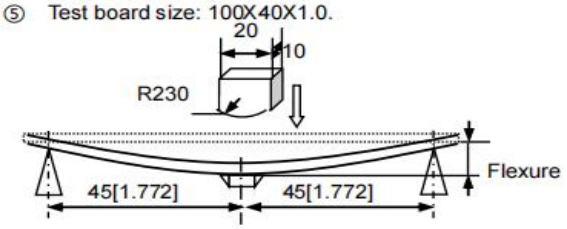
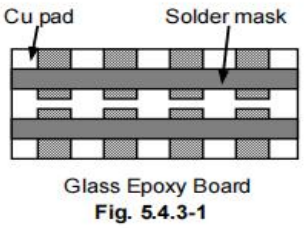


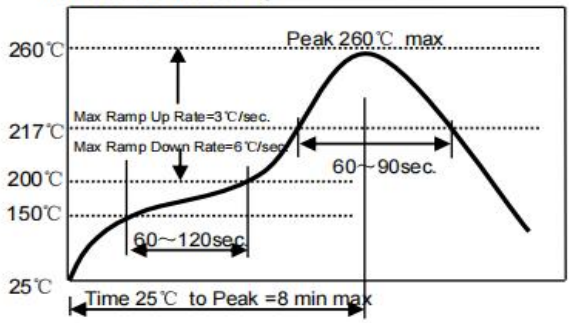
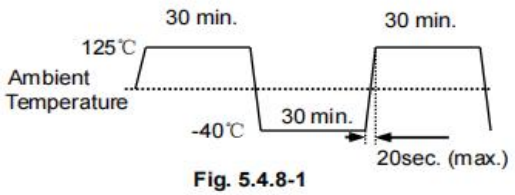
Fig. 5.3.4-1

5.3.5 Self-Resonant Frequency (SRF)

a. Refer to **Electrical Characteristics**.
b. Test equipment: High Accuracy RF Impedance /Material Analyzer--WK3260B or equivalent.
c. Test signal: 0.1V.

5.4 Reliability Test

Items	Requirements	Test Methods and Remarks
5.4.1 Terminal Strength	No removal or split of the termination or other defects shall occur.  **Fig.5.4.1-1**	① Solder the inductor to the testing jig (glass epoxy board shown in **Fig.5.4.1-1**) using eutectic solder. Then apply a 10N force in the direction of the arrow. ② Keep time: 10±1s. ③ Speed: 1.0mm/s.
5.4.2 Resistance to Flexure	No visible mechanical damage.	① Solder the inductor to the test jig (glass epoxy board shown in **Fig.5.4.2-1**) Using a eutectic solder. Then apply a force in the direction shown **Fig. 5.4.2-2.** ② Flexure: 2mm. ③ Pressurizing Speed: 0.5mm/sec. ④ Keep time: 30 sec. ⑤ Test board size: 100X40X1.0.  **Fig. 5.4.2-2**
5.4.3 Vibration	① No visible mechanical damage. ② Inductance change: Within ±10%.  **Fig. 5.4.3-1**	① Solder the inductor to the testing jig (glass epoxy board shown in **Fig.5.4.3-1**) using eutectic solder. ② The inductor shall be subjected to a simple harmonic motion having total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 55 Hz. ③ The frequency range from 10 to 55 Hz and return to 10 Hz shall be traversed in approximately 1 minute. This motion shall be applied for a period of 2 hours in each 3mutually perpendicular directions (total of 6 hours).
5.4.4 Dropping	① No visible mechanical damage. ② Inductance change: Within ±10%.	Drop chip inductor 10 times on a concrete floor from a height of 100 cm.
5.4.5 Temperature	Inductance change should be within ±20% of initial value measuring at 20℃.	Temperature range: -40℃~ +125℃ Reference temperature: +25℃
5.4.6 Solderability	① No visible mechanical damage. ② Wetting shall exceed 90% coverage.	① Solder temperature: 245±2℃ ② Duration: 3 sec. ③ Solder: Sn/3.0Ag/0.5Cu. ④ Flux: 25% Resin and 75% ethanol in weight.

5.4.7 Resistance to Soldering Heat	① No visible mechanical damage. ② Inductance change: Within ±10%.	① Re-flowing Profile: Please refer to **Fig. 5.4.7-1**. ② Test board thickness: 1.0mm ③ Test board material: glass epoxy resin ④ The chip shall be stabilized at normal condition for 1~2 hours before measuring 
5.4.8 Thermal Shock	① No mechanical damage. ② Inductance change: Within ±10%.  **Fig. 5.4.8-1**	① Temperature, Time: (See **Fig.5.4.8-1**) -40℃ for 30±3 min→ 125℃ for 30±3min. ② Transforming interval: 20 sec.(max.). ③ Tested cycle: 100 cycles. ④ The chip shall be stabilized at normal condition for 1~2 hours before measuring.
5.4.9 Resistance to Low Temperature	① No mechanical damage. ② Inductance change: Within ±10%.	① Temperature: -40±2℃ ② Duration: 1000^{+24} hours. ③ The chip shall be stabilized at normal condition for 1~2 hours before measuring.
5.4.10 Resistance to High Temperature	① No mechanical damage. ② Inductance change: Within ±10%.	① Temperature: 125±2℃ ② Duration: 1000^{+24} hours. ③ The chip shall be stabilized at normal condition for 1~2 hours before measuring.
5.4.11 Damp Heat (Steady States)	① No visible mechanical damage. ② Inductance change: Within ±10%.	① Temperature: 60±2℃ ② Humidity: 90% to 95% RH. ③ Duration:1000^{+24} hours. ④ The chip shall be stabilized at normal condition for 1~2 hours before measuring.
5.4.12 Loading Under Damp Heat	① No visible mechanical damage. ② Inductance change: Within ±10%.	① Temperature: 85℃ ② Humidity: 85% RH. ③ Duration: 1000+24 hours. ④ Applied current: Rated current. ⑤ The chip shall be stabilized at normal condition for 1~2 hours before measuring.
5.4.13 Loading at High Temperature (Life Test)	① No visible mechanical damage. ② Inductance change: Within ±10%.	① Temperature: 85±2℃ ② Duration: 1000+24 hours. ③ Applied current: Rated current. ④ The chip shall be stabilized at normal condition for 1~2 hours before measuring.

7. Packaging and Storage

6.1 Packaging

Tape Carrier Packaging:

Packaging code: T

a. Tape carrier packaging are specified in attached figure **Fig.6.1-1~3**

b. Tape carrier packaging quantity please see the following table:

Type	Reel (Pcs)
UPS0410H	3K
UPS0412H	3K
UPS0420H	3K
UPS0430H	2K
UPS0530H	2K
UPS0630H	1K

c. Reel shall be packaged in vinyl bag.

(1) Taping Drawings (Unit: mm)

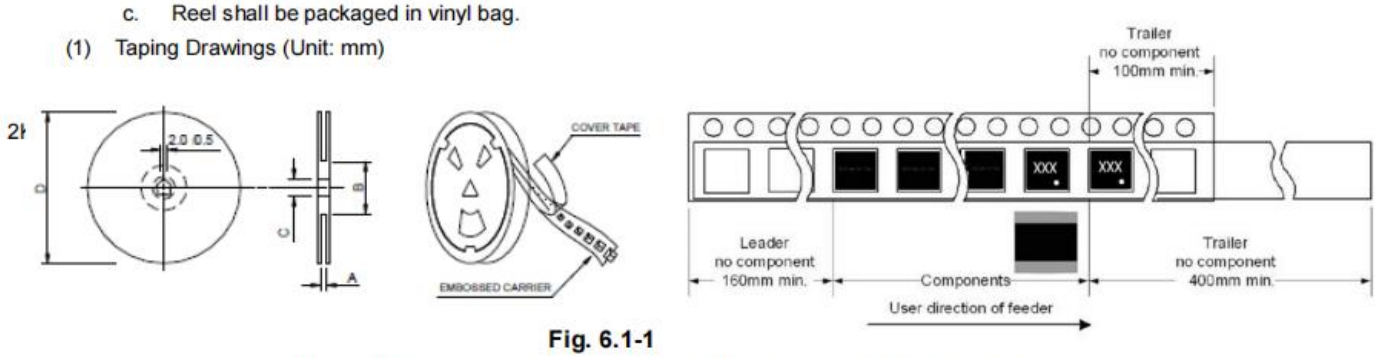


Fig. 6.1-1

Remark: The sprocket holes are to the right as the tape is pulled toward the user.

(2) Taping Dimensions (Unit: mm)

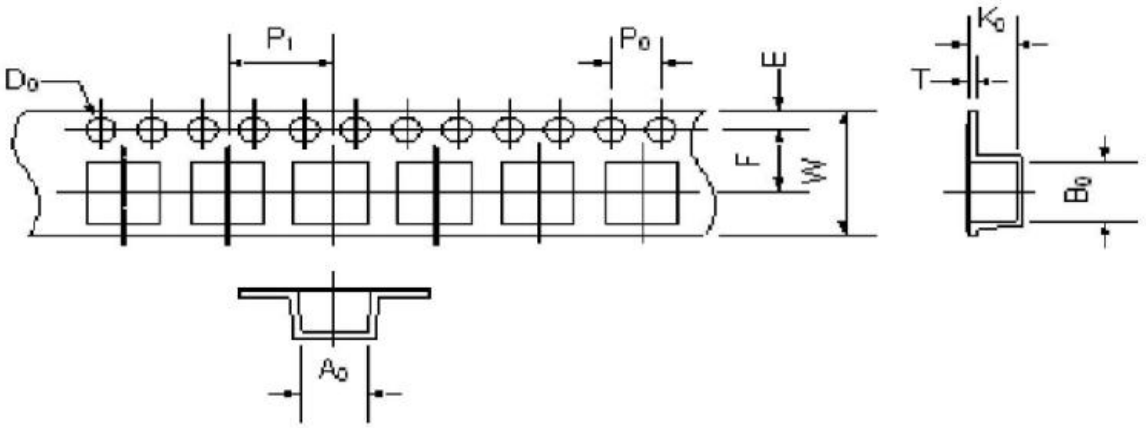
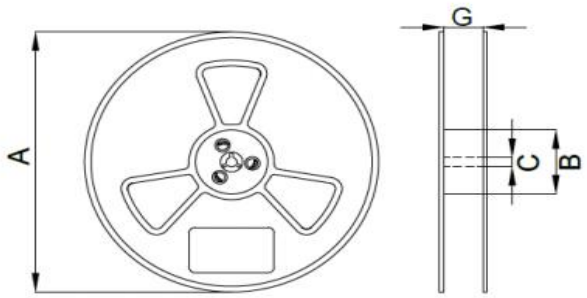


Fig. 6.1-2

Type	mm									
	B0 ±0.1	A0 ±0.1	K0 ±0.1	W ±0.1	P1 ±0.1	P0 ±0.1	E ±0.1	F ±0.05	T ±0.03	D0 +0.1
UPS0410H	4.35	4.35	1.4	12	8	4.0	1.75	5.5	0.35	1.5
UPS0412H	4.35	4.35	1.4	12	8	4.0	1.75	5.5	0.35	1.5
UPS0420H	4.50	4.50	2.5	12	8	4.0	1.75	5.5	0.35	1.5
UPS0430H	4.35	4.35	3.4	12	8	4.0	1.75	5.5	0.35	1.5
UPS0530H	5.55	5.75	3.4	12	8	4.0	1.75	5.5	0.35	1.5
UPS0630H	7.0	7.2	3.6	16	12	4.0	1.75	7.5	0.35	1.5

(3) Reel Dimensions (Unit: mm)



Symbol	Dimension（mm）	
	UPS04/05	UPS06
A	330±2	330±2
B	100±2	100±2
C	13.5±0.2	13.5±0.2
G	12.5±0.5	16.5±0.5

6.2 Storage

a. To maintain the solderability of terminal electrodes and to keep the packing material in good condition, temperature and humidity in the storage area should be controlled.

b. Recommended conditions: -10℃~40℃, 70%RH (Max.)

c. Even under ideal storage conditions, solderability of products electrodes may decrease as time passes. For this reason, product should be used with one year from the time of delivery.

d. In case of storage over 12 months, solderability shall be checked before actual usage.

7. Warning and Attentions

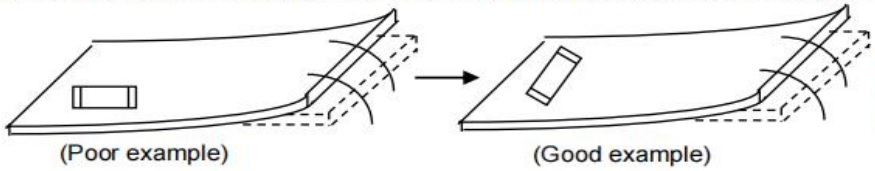
7.1 Precautions on Use

(1) Always wear static control bands to protect against ESD.
(2) Any devices used with the products (soldering irons, measuring instruments) should be properly grounded.
(3) Keep bare hands and metal conductors (i.e., metal desk) away from electrodes or conductive areas that lead to electrodes.
(4) Preheat when soldering.
(5) Don't apply current in excess of the rated current value. It may reduce the impedance or inductance, or cause damage to components due to over-current.
(6) For magnetic products, keep clear of anything that may generate magnetic fields such as speakers and coils. Use non-magnetic tweezers when handing the chips.
(7) When soldering, the electrical characteristics may be varied due to hot energy and mechanical stress.
(8) When coating products with resin, the relatively high resin curing stress may change the electrical characteristics. For exterior coating, select resin carefully so that electrical and mechanical performance of the product is not affected. Before using, please evaluate reliability with the product mounted in your application set.
(9) When mount chips with adhesive in preliminary assembly, do appropriate check before the soldering stage, i.e., the size of land pattern, type of adhesive, amount applied, hardening of the adhesive on proper usage and amounts of adhesive to use.
(10) Mounting density: Add special attention to radiating heat of products when mounting other components nearby. The excessive heat by other products may cause deterioration at joint of this product with substrate.
(11) Since some products are constructed like an open magnetic circuit, narrow spacing between components may cause magnetic coupling.
(12) Please do not give the product any excessive mechanical shocks in transportation.
(13) Please do not touch wires by sharp terminals such as tweezers to avoid causing any damage to wires.
(14) Please do not add any shock and power to the soldered product to avoid causing any damage to chip body.
(15) Please do not touch the electrodes by naked hand as the solderability of the external electrodes may deteriorate by grease or oil on the skin.

7.2 PCB Bending Design

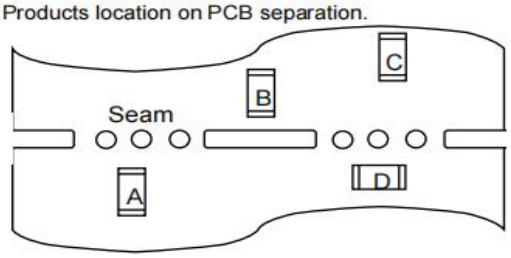
The following shall be considered when designing and laying out PCB's.

(1) PCB shall be designed so that products are not subjected to the mechanical stress from board warp or deflection.



Products shall be located in the sideways direction to the mechanical stress

(2) Products location on PCB separation.



Product shall be located carefully because they may be subjected to the mechanical stress in order of A>C=B>D.

(3) When splitting the PCB board, or insert (remove) connector, or fasten thread after mounting components, care is required so as not to give any stress of deflection or twisting to the board. Because mechanical force may cause deterioration of the bonding strength of electrode and solder, even crack of product body. Board separation should not be done manually, but by using appropriate devices.

7.3 Recommended PCB Design for SMT Land-Patterns

When chips are mounted on a PCB, the amount of solder used (size of fillet) can directly affect chip performance. Therefore, the following items must be carefully considered in the design of solder land patterns:

(1) The amount of solder applied can affect the ability of chips to withstand mechanical stresses which may lead to breaking or cracking. Therefore, when designing land-patterns it is necessary to consider the appropriate size and configuration of the solder pads which in turn determines the amount of solder necessary to form the fillets.

(2) When more than one part is jointly soldered onto the same land or pad, the pad must be designed that each component's soldering point is separated by solder-resist.

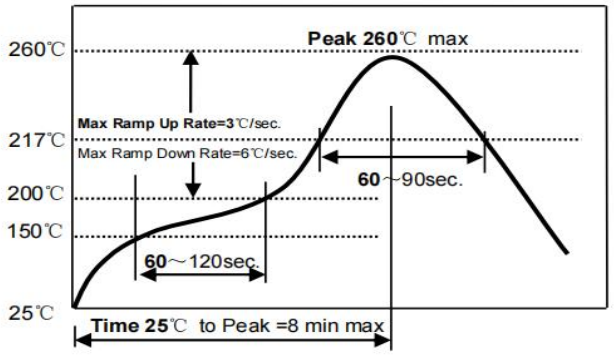
Recommended land dimensions please refer to product specification.

8. Recommended Soldering Technologies

8.1 Reflowing Profile:

△ Preheat condition : 150 ~200℃/60~120sec.
△ Allowed time above 217℃: 60~90sec.
△ Max temp: 260℃
△ Max time at max temp: 10sec.
△ Solder paste: Sn/3.0Ag/0.5Cu
△ Allowed Reflow time: 2x max

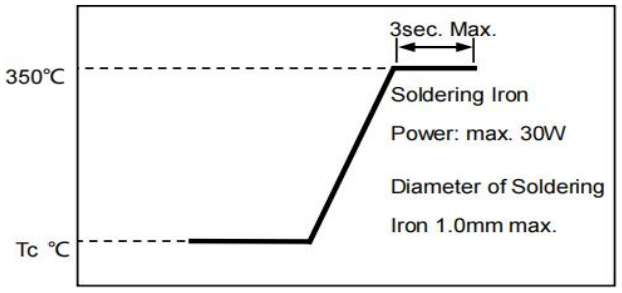
[Note: The reflow profile in the above table is only for qualification and is not meant to specify board assembly profiles. Actual board assembly profiles must be based on the customer's specific board design, solder paste and process, and should not exceed the parameters as the Reflow profile shows.]



8.2 Iron Soldering Profile.

△ Iron soldering power: Max.30W
△ Pre-heating: 150℃ / 60sec.
△ Soldering Tip temperature: 350℃Max.
△ Soldering time: 3sec Max.
△ Solder paste: Sn/3.0Ag/0.5Cu
△ Max.1 times for iron soldering

[Note: Take care not to apply the tip of the soldering iron to the terminal electrodes.]



Appendix A: Electrical Characteristics

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current		Marking	Coating
	1MHz/0.1V	Max.	Typ.	Max.	Typ.	Max.	Typ.		
Units	μH	mΩ		A		A			
Symbol	L	DCR		Isat		Irms			
UPS0410H-100M-T0	10±20%	265	220	2.5	2.9	1.8	2.0	˙100	Grey

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current		Marking	Coating
	1MHz/0.1V	Max.	Typ.	Max.	Typ.	Max.	Typ.		
Units	μH	mΩ		A		A			
Symbol	L	DCR		Isat		Irms			
UPS0412H-R10M-T0	0.10±20%	2.5	2.1	28	33.0	18.0	20.0	˙R10	Grey
UPS0412H-R33M-T0	0.33±20%	9.5	7.7	15	17.4	11.3	12.5	˙R33	Grey
UPS0412H-R47M-T0	0.47±20%	14.5	13	6.5	7.0	8.0	9.0	˙R47	Grey
UPS0412H-R68M-T0	0.68±20%	18.5	16	6.0	6.5	7.5	8.5	˙R68	Grey
UPS0412H-1R0M-T0	1.0±20%	27.6	23	7.5	8.5	6.5	7.0	˙1R0	Grey
UPS0412H-1R5M-T0	1.5±20%	34.5	29	7.0	8.0	5.0	6.0	˙1R5	Grey

UPS0412H-2R2M-T0	2.2±20%	50	45	4.4	4.8	4.0	5.0	· 2R2	Grey
UPS0412H-3R3M-T0	3.3±20%	65	55	3.8	4.2	3.5	4.0	· 3R3	Grey
UPS0412H-4R7M-T0	4.7±20%	100	85	2.9	3.2	2.4	2.6	· 4R7	Grey
UPS0412H-100M-T0	10±20%	235	200	2.5	2.8	2.0	2.5	No printing	**Black**

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current		Marking	Coating
	1MHz/0.1V	Max.	Typ.	Max.	Typ.	Max.	Typ.		
Units	μH	mΩ		A		A			
Symbol	L	DCR		Isat		Irms			
UPS0420H-R10M-T0	0.10±20%	1.6	1.3	30.0	35.0	30.5	34.0	· R10	Grey
UPS0420H-R20M-T0	0.20±20%	2.4	2.0	17.5	20.5	24.3	27.0	· R20	Grey
UPS0420H-R22M-T0	0.22±20%	2.7	2.2	17.0	20.0	23.4	26.0	· R22	Grey
UPS0420H-R33M-T0	0.33±20%	3.3	2.7	14.5	17.0	20.5	23.0	· R33	Grey
UPS0420H-R47M-T0	0.47±20%	4.8	4.0	12.5	14.5	17.7	19.7	· R47	Grey
UPS0420H-R56M-T0	0.56±20%	5.6	4.7	11.0	12.7	16.5	18.4	· R56	Grey
UPS0420H-R68M-T0	0.68±20%	6.4	5.4	10.2	12.0	15.0	16.6	· R68	Grey
UPS0420H-1R0M-T0	1.0±20%	9.0	7.5	8.2	9.5	12.6	14.0	· 1R0	Grey
UPS0420H-1R2M-T0	1.2±20%	11.5	9.6	7.5	8.7	11.2	12.5	· 1R2	Grey
UPS0420H-1R5M-T0	1.5±20%	14.0	11.5	6.8	8.0	10.0	11.2	· 1R5	Grey
UPS0420H-2R2M-T0	2.2±20%	21.0	17.5	5.4	6.4	8.0	9.0	· 2R2	Grey
UPS0420H-100M-T0	10±20%	125	100	3.7	4.0	2.3	2.6	· 100	Grey

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current		Marking	Coating
	1MHz/0.1V	Max.	Typ.	Max.	Typ.	Max.	Typ.		
Units	μH	mΩ		A		A			
Symbol	L	DCR		Isat		Irms			
UPS0430H-R10M-T0	0.10±20%	1.1	0.9	34.0	40.0	35.0	39.0	· R12	Grey
UPS0430H-R22M-T0	0.22±20%	2.4	2.0	25.0	29.0	24.7	27.2	· R22	Grey
UPS0430H-R33M-T0	0.33±20%	3.0	2.5	21.0	25.0	21.0	23.5	· R33	Grey
UPS0430H-R47M-T0	0.47±20%	3.8	3.2	18.0	21.0	19.0	21.0	· R47	Grey
UPS0430H-R68M-T0	0.68±20%	5.2	4.4	16.0	19.0	16.0	17.8	· R68	Grey
UPS0430H-1R0M-T0	1.0±20%	7.2	6.0	10.0	11.6	13.5	15.0	· 1R0	Grey
UPS0430H-1R5M-T0	1.5±20%	21.8	18.2	6.5	7.5	8.0	8.8	· 3R3	Grey
UPS0430H-2R2M-T0	2.2±20%	38.0	31.0	5.0	5.8	5.9	6.6	· 4R7	Grey

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current		Marking	Coating
	1MHz/0.1V	Max.	Typ.	Max.	Typ.	Max.	Typ.		
Units	μH	mΩ		A		A			
Symbol	L	DCR		Isat		Irms			
UPS0530H-R10M-T0	0.10±20%	0.82	0.68	45	52.0	41.4	46.0	· R10	Grey
UPS0530H-R15M-T0	0.15±20%	0.96	0.85	41	45.0	35.0	38.0	· R15	Grey
UPS0530H-R15M0R747-T0	0.15±20%	0.74±7%		41	45.0	35.0	38.0	· R15	Grey
UPS0530H-R15M0R857-T0	0.15±20%	0.85±7%		41	45.0	35.0	38.0	· R15	Grey
UPS0530H-R24M-T0	0.24±20%	1.5±7%		32	38	30	33	· R24	Grey
UPS0530H-R24M-T0	0.24±20%	1.36±7%		32	38	30	33	· R24	Grey
UPS0530H-R33M-T0	0.33±20%	2.2	1.8	27.5	32.0	25.5	28.5	· R33	Grey
UPS0530H-R47M-T0	0.47±20%	3.0	2.5	22.5	26.0	21.5	24.0	· R47	Grey

UPS0530H-R56M-T0	0.56±20%	3.6	3.0	21.0	24.0	20.0	22.0	' R56	Grey
UPS0530H-R68M-T0	0.68±20%	4.6	3.8	18.5	21.5	17.5	19.5	' R68	Grey
UPS0530H-1R0M-T0	1.0±20%	6.0	5.0	15.5	18.0	15.5	17.0	' 1R0	Grey
UPS0530H-1R2M-T0	1.2±20%	6.0	5.0	13.8	16.0	15.5	17.0	' 1R2	Grey
UPS0530H-1R5M-T0	1.5±20%	8.7	7.2	13.0	15.0	12.5	14.0	' 1R5	Grey
UPS0530H-2R2M-T0	2.2±20%	11.8	9.8	9.5	11.0	10.5	12.0	' 2R2	Grey

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current		Marking	Coating
	1MHz/0.1V	Max.	Typ.	Max.	Typ.	Max.	Typ.		
Units	μH	mΩ		A		A			
Symbol	L	DCR		Isat		Irms			
UPS0630H-R15M-T0	0.15±20%	0.75	0.70	67.0	74.0	40.0	44.0	' R15	Grey
UPS0630H-R15M-T0	2.2±20%	13.0	10.7	15.5	18.0	10.3	11.5	' 2R2	Grey

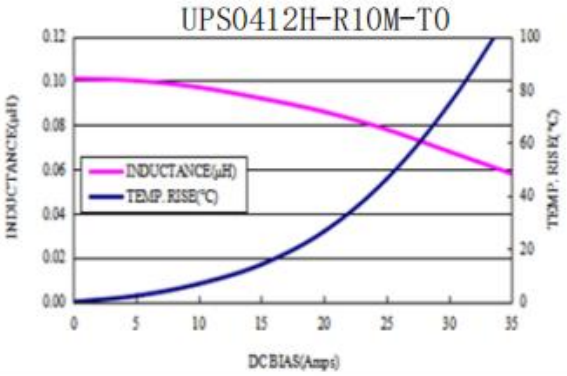
Remark: In order to distinguish it from special products, the 4R7 suffix of the series is added with R01 (there is no need to distinguish the starting line)

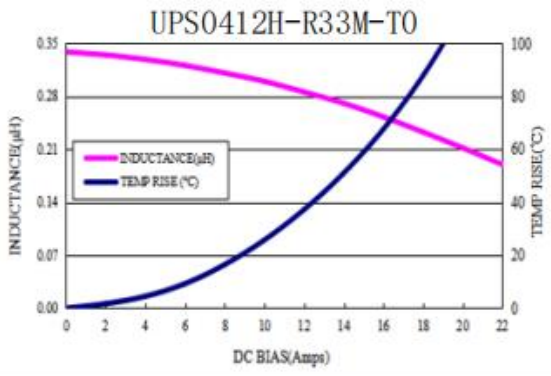
※ Rated current: Isat or Irms, whichever is smaller.

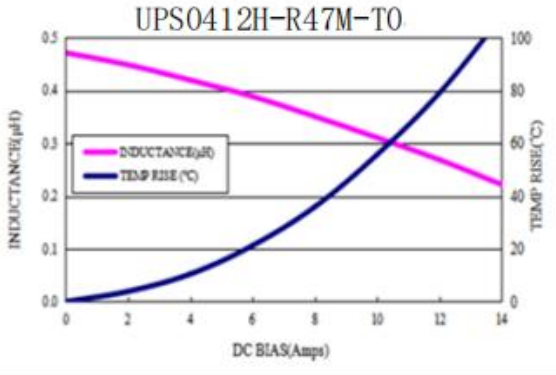
※ Saturation Current: Max.Value, DC current at which the inductance drops less than 30% from its value without current;
Typ. Value, DC current at which the inductance drops 30% from its value without current.

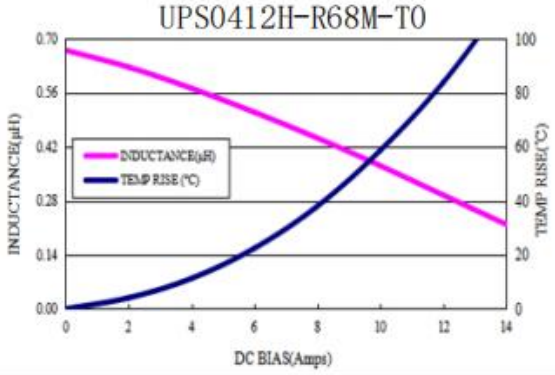
※ Temperature Rise Current: DC current that causes the temperature rise (ΔT) from 20°C ambient.
For Typ. Value, ΔT is approximate 40°C.
Rated Voltage: 40V

Test Instruments	Test Condition
Wayne kerr 3260B/G LCR Meter Wayne kerr 3265B Bias Current Source	Temperature: 26 ± 3°C, Humidity: < 70% RH Frequency: 1MHz, 0.1V









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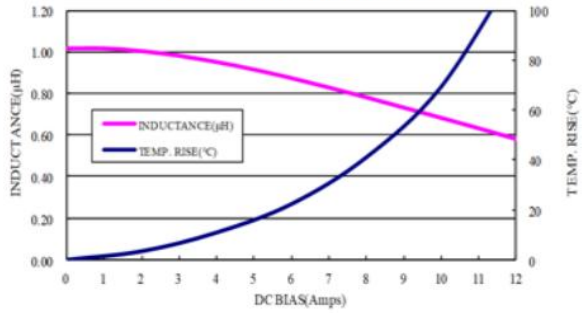

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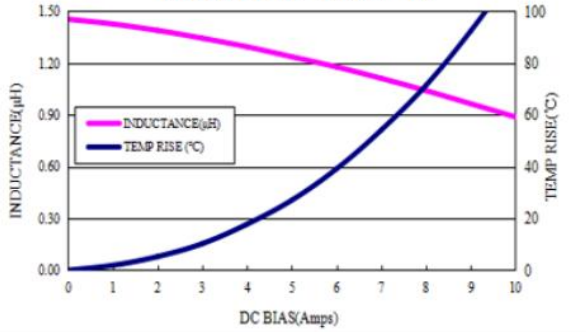

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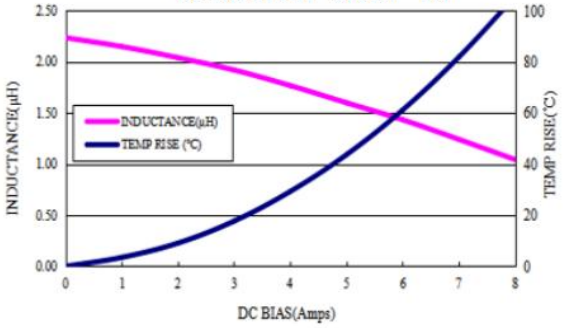

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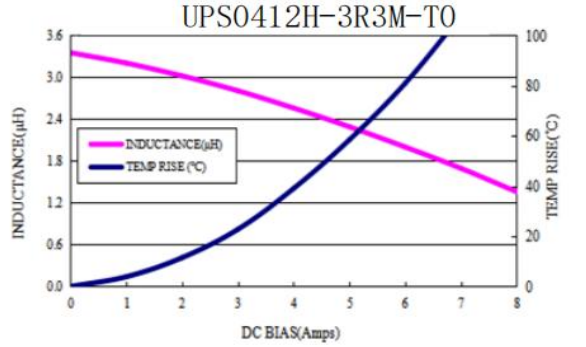

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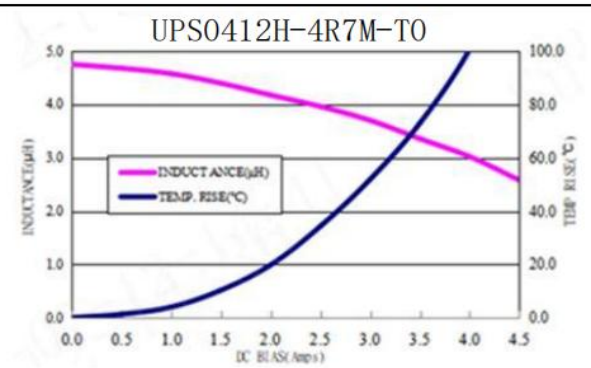

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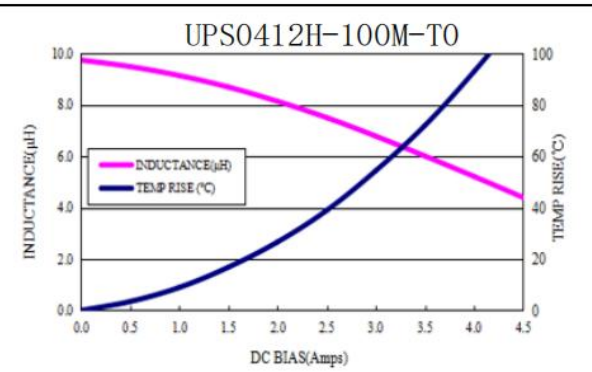

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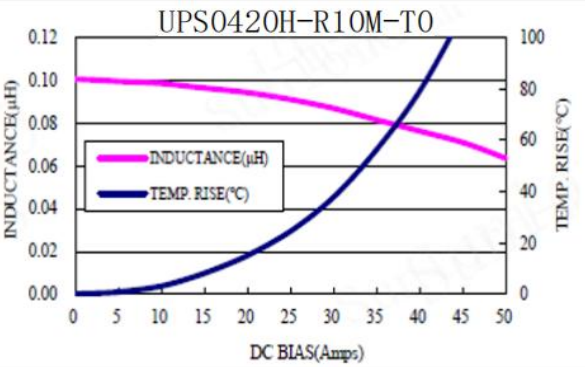

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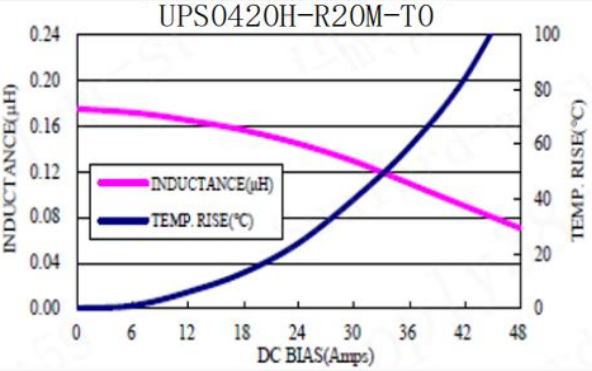

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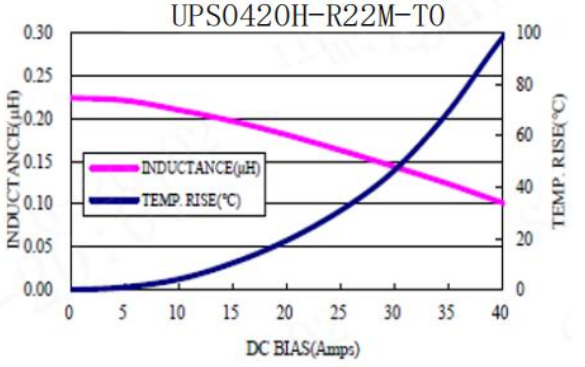

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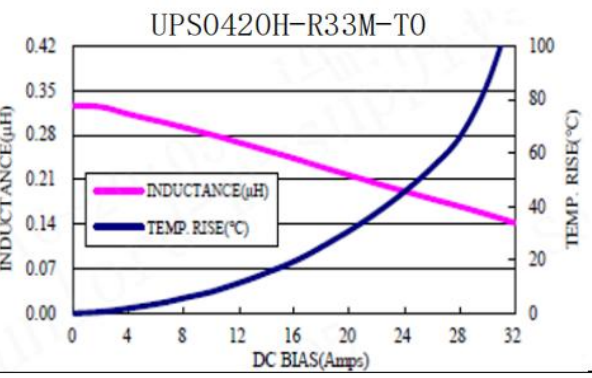

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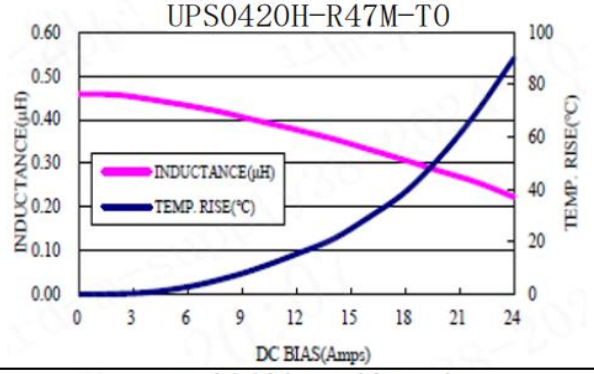

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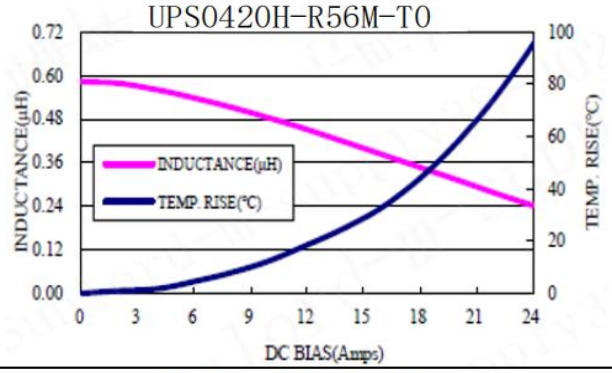

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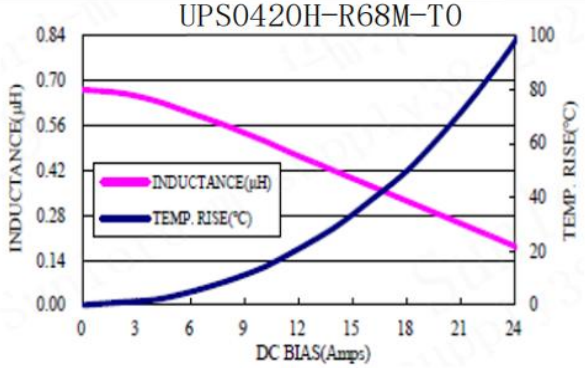

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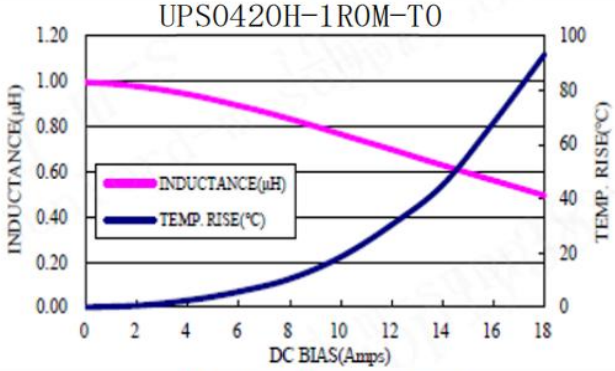

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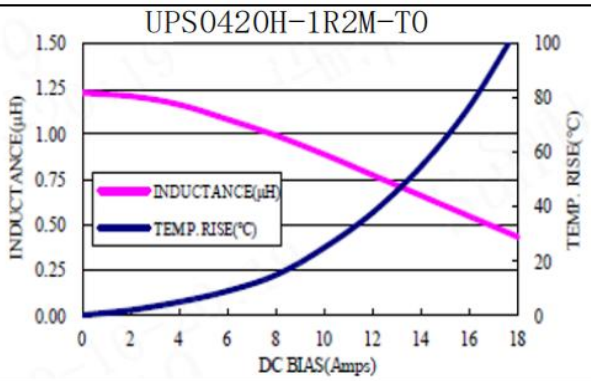

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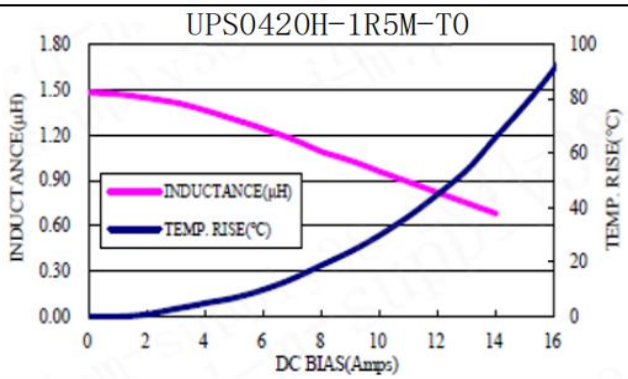

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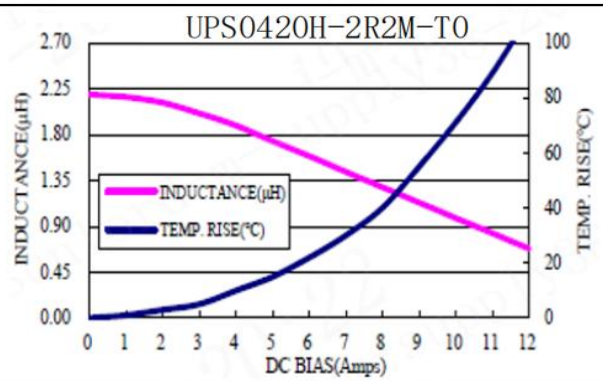

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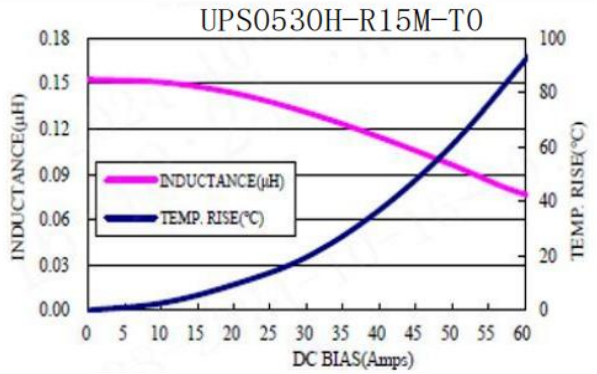

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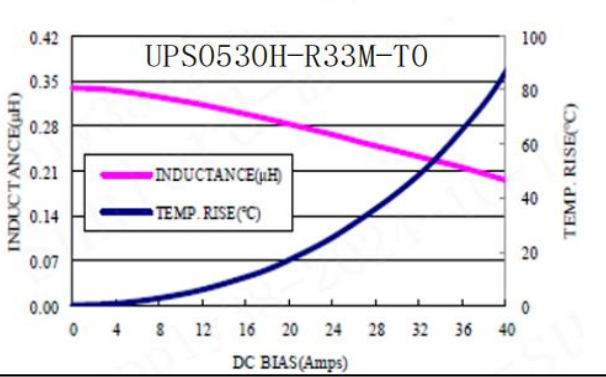

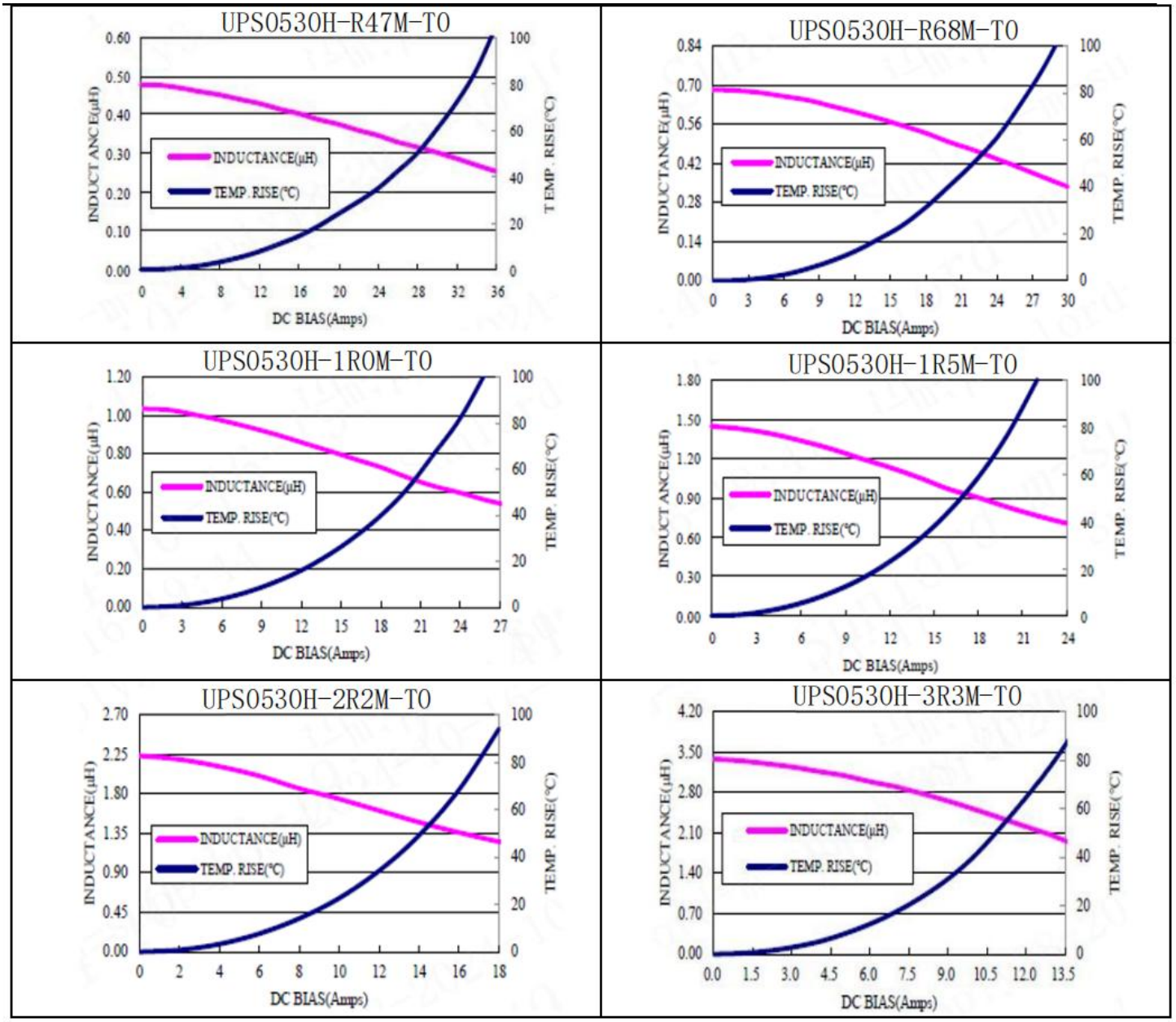
UPS0530H-R47M-T0
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)
UPS0530H-R68M-T0
UPS0530H-1R0M-T0
UPS0530H-1R5M-T0
UPS0530H-2R2M-T0
UPS0530H-3R3M-T0