

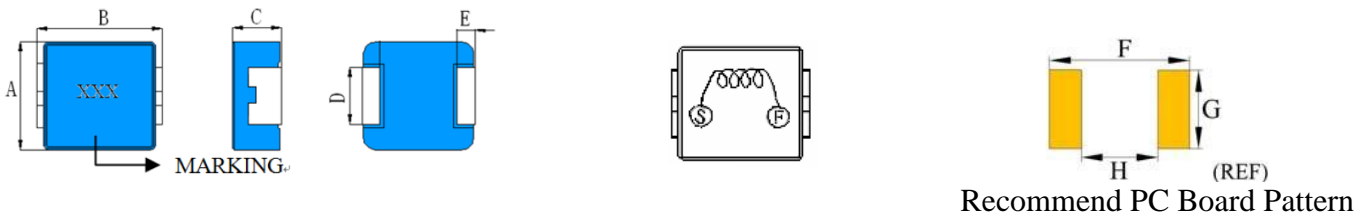
BCIHP5415/18/20/30 Series

● Photograph picture



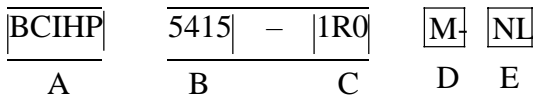
BCIHP5415/18/20/30

● Dimensions



ITEM	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)
BCIHP5415-Series	5.20±0.2	5.70±0.3	1.5MAX	2.00±0.3	1.00±0.3	6.25	2.35	2.30
BCIHP5418-Series	5.20±0.2	5.70±0.3	1.8MAX	2.00±0.3	1.00±0.3	6.25	2.35	2.30
BCIHP5420-Series	5.20±0.2	5.70±0.3	2.0MAX	2.00±0.3	1.00±0.3	6.25	2.35	2.30
BCIHP5430-Series	5.20±0.2	5.70±0.3	3.0MAX	2.00±0.3	1.00±0.3	6.25	2.35	2.30

● Part Numbering



- A:Series(系列代號)
 - B:Dimension(尺寸)
 - C:Inductance(電感值)
 - D:Inductance Tolerance(電感值公差)
 - E: RoHS Compliant
- B×C
1R0=1.0uH
M=±20%

Features

1. Compliance with RoHs.
2. Lowest DCR.
3. Frequency range up to 3.0MHz.
4. Handles high transient current spikes without saturation
5. Ultra low buzz noise, due to composite construction.

● 特點

1. 符合 RoHs.
2. 低電阻.
3. 頻率可達到 3.0 MHz.

● Applications

1. DC/DC converter for CPU in Notebook PC
2. Battery powered devices
3. Cellular phones LCD displays, HDDs, DVCs, DSCs, PDA etc.
4. Thin type on-board power supply module.

● 應用

1. 用於筆記本電腦處理器的DC/DC轉換設備.
2. 電源,電池設備.
3. 適用於手機液晶屏顯示,HDD, DVC, DSC, PDA 等.
4. 薄型車載電源模組.

BCIHP5415/18/20/30 Series

● Specification

ITEM	INDUCTANCE μ H @200KHZ,0.25V,0A ⁽¹⁾	DCR $m\Omega$ 25°C MAX.	DCR $m\Omega$ 25°C Typ.	HEAT RATING CURRENT DC AMPS ⁽⁵⁾ TYPICAL (Irms)	SATURATION CURRENT DC AMPS ⁽⁶⁾ TYPICAL (Isat)
BCIHP5415-1R0M-NL	1.00	25.80	22.80	7.00	10.00
BCIHP5415-2R5M-NL	2.50	82.00	72.00	4.50	6.00
BCIHP5415-4R7M-NL	4.70	118.0	108.0	3.50	4.00
BCIHP5415-6R8M-NL	6.80	171.0	161.0	3.00	3.50
BCIHP5418-R56M-NL	0.56	10.00	8.00	9.50	15.00
BCIHP5418-1R0M-NL	1.00	17.00	15.00	8.00	9.00
BCIHP5418-1R2M-NL	1.20	20.00	17.00	7.50	8.00
BCIHP5418-2R2M-NL	2.20	35.00	31.50	6.00	6.00
BCIHP5418-3R3M-NL	3.30	68.00	60.00	4.50	5.00
BCIHP5418-4R7M-NL	4.70	95.00	89.00	3.50	4.00
BCIHP5418-6R8M-NL	6.80	130.0	125.0	2.80	3.40
BCIHP5418-100M-NL	10.0	165.0	150.0	2.50	3.00
BCIHP5420-R10M-NL	0.10	3.90	3.60	17.0	45.0
BCIHP5420-R22M-NL	0.22	5.20	4.90	15.0	22.0
BCIHP5420-R33M-NL	0.33	8.20	7.60	12.0	25.0
BCIHP5420-R47M-NL	0.47	9.40	8.30	11.0	21.0
BCIHP5420-R56M-NL	0.56	10.80	10.00	10.5	17.0
BCIHP5420-R68M-NL	0.68	12.40	11.20	10.0	18.0
BCIHP5420-1R0M-NL	1.00	20.00	18.90	7.00	16.0
BCIHP5420-1R0M-01-NL	1.00	20.00	18.90	10.0	14.5
BCIHP5420-1R5M-NL	1.50	35.00	30.00	6.00	9.00
BCIHP5420-2R2M-NL	2.20	50.10	46.00	5.50	7.00
BCIHP5420-3R3M-NL	3.30	75.00	68.00	4.50	6.00
BCIHP5420-4R7M-NL	4.70	85.00	77.00	4.00	5.00
BCIHP5420-5R6M-NL	5.60	122.0	105.0	2.50	4.50
BCIHP5420-5R6M-01-NL	5.60	130.0	106.0	3.20	4.00
BCIHP5420-6R8M-NL	6.80	138.0	120.0	2.80	3.40
BCIHP5420-8R2M-NL	8.20	185.0	160.0	2.40	4.10
BCIHP5420-100M-NL	10.00	155.0	142.0	2.50	3.20
BCIHP5430-R10M-NL	0.10	3.30	3.00	23.0	27.0
BCIHP5430-R22M-NL	0.22	4.80	4.50	15.5	21.0
BCIHP5430-R33M-NL	0.33	6.50	5.80	13.0	20.0
BCIHP5430-R47M-NL	0.47	9.00	8.30	12.0	19.0
BCIHP5430-R68M-NL	0.68	12.00	10.00	8.80	14.0
BCIHP5430-1R0M-NL	1.00	14.50	13.00	7.00	11.0
BCIHP5430-1R5M-NL	1.50	25.00	20.00	6.00	10.0
BCIHP5430-2R2M-NL	2.20	35.00	29.00	5.50	9.50
BCIHP5430-3R3M-NL	3.30	38.00	34.00	5.00	7.50
BCIHP5430-4R7M-NL	4.70	60.00	50.00	3.50	6.00
BCIHP5430-5R6M-NL	5.60	79.00	71.00	3.00	5.50
BCIHP5430-100M-NL	10	168.0	140.0	2.50	3.50
BCIHP5430-150M-NL	15	265.0	220.0	1.90	2.50
BCIHP5430-220M-NL	22	345.0	300.0	1.80	2.20
BCIHP5430-330M-NL	33	440.0	420.0	1.60	1.60

BCIHP5415/18/20/30 Series

Note:

- (1) Tolerance of Inductance: N= $\pm 30\%$,M= $\pm 20\%$.
 - (2) All test data is referenced to 25°C ambient.
 - (3) Inductance is measured at 200KHz. 25°C ambient.
 - (4) Operating Temperature Range-40°C to +125°C.
 - (5) DC current (I_{rms}) (A) that will cause an approximate ΔT of 40°C.
 - (6) DC current (I_{sat}) (A) that will cause L_o to drop approximately 20%.
BCIHP5418-Series DC current (I_{sat}) (A) that will cause L_o to drop approximately 30%.
 - (7) The part Temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.
- (1) 電感的公差：N= $\pm 30\%$,M= $\pm 20\%$.
 - ② 所有的測試資料應該是在 25°C 的環境溫度下測試.
 - ③ 感值測試頻率 200KHz.
 - (4) 操作溫度範圍 - 40°C 到 +125°C .
 - ⑤ 加 DC(I_{rms}) 電流值(A) 會導致 ΔT 40°C 左右的變化.
 - ⑥ 加 DC(I_{sat}) 電流值(A) 會導致初始值下降 20% 左右.
BCIHP5418-Series 加 DC(I_{sat}) 電流值(A) 會導致初始值下降 30% 左右.
 - ⑦ 產品的溫度不能超過 125°C，即使在最壞的操作情況下，基板設計，元件放置，PWB 尺寸和厚度，氣流和一些冷卻設備都會影響產品溫度，產品溫度要在最終應用時才被驗證.

BCIHP5415/18/20/30 Series

● Material List

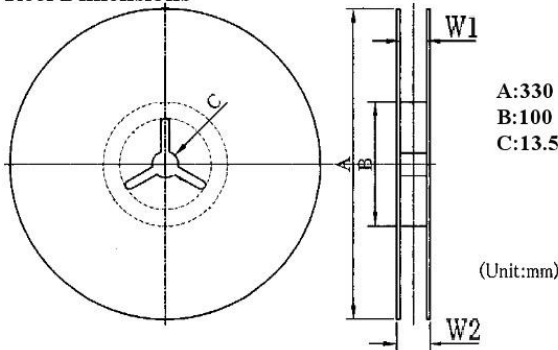


NO	ITEM	Materials
1	Core	Magnetic Metal Powder or equivalen
2	Wire	Polyester Wire or equivalen
3	External Electode	Copper
	Electroplating	Ni/Sn
4	Paint	Epoxy resin

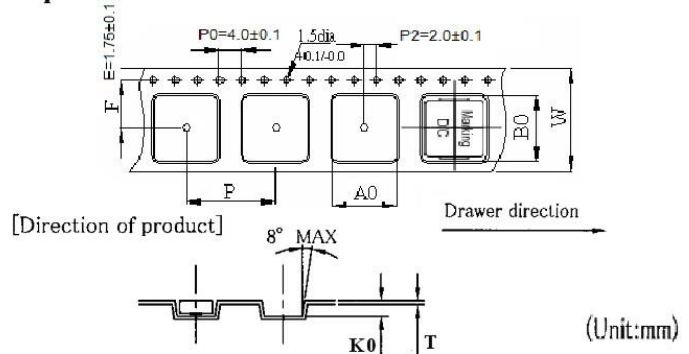
● Packaging Information

(1) Reel Dimension & Tape Dimension / Packaging Quantity

Reel Dimensions

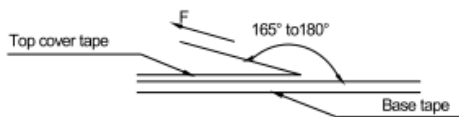


Tape Dimensions



ITEM	DIMENSIONS (m/m)									
	Q*TY (PCS)	W1±0.3	W2±0.5	W±0.3	A0±0.1	B0±0.1	K0±0.1	P±0.1	F±0.1	T±0.05
BCIHP5415	4,000	16.80	21.00	16.00	5.50	6.10	1.50	8.00	7.50	0.30
BCIHP5418	3,000	16.80	21.00	16.00	5.50	6.10	1.80	8.00	7.50	0.30
BCIHP5420	3,000	16.80	21.00	16.00	5.50	6.10	2.20	8.00	7.50	0.30
BCIHP5430	2,000	16.80	21.00	16.00	5.50	6.10	3.50	8.00	7.50	0.30

(2) Tearing Off Force



Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

The force tearing off cover 10 to 130 grams (0.1N to 1.3N) in the arrow direction under the following conditions.

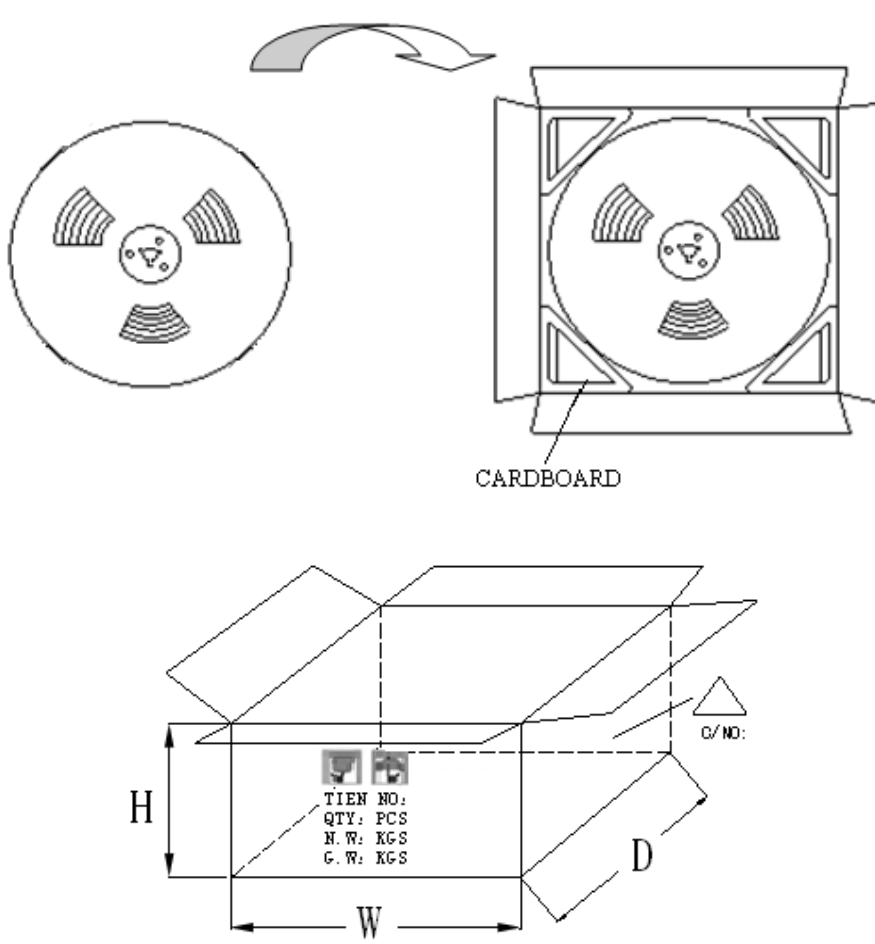
● Storage conditions/Note things

(1) Storage temperature and humidity conditions :

1. Product packing with Carrier tape: +5°C ~+40°C and less than 60% RH.
2. Product alone: -20°C ~+60°C and less than 60% RH.
- (2) Products should be used within 6 months.
- (3) The packaging material should be kept where no chlorine or sulfur exists in the air.
- (4) Do not touch the electrodes (soldering terminals) with fingers as this may lead to deterioration of solder ability.
- (5) The use of tweezers or vacuum pick-ups is strongly recommended for individual components.
- (6) Bulk handling should ensure that abrasion and mechanical shock are minimized.

BCIHP5415/18/20/30 Series

● Package for standard

ITEM			
Packing method & Dimensions			Box Size
			<p>W=345mm D=345mm H=185mm</p>
ITEM	Packing Quantity	Reel Quantity	Total Quantity
BCIHP5415	4,000 Pcs/Reel (0.63Kg _(Ref))	6 Reel/Box	24,000 Pcs/Box (5.70Kg _(Ref))
BCIHP5418	4,000 Pcs/Reel (0.72Kg _(Ref))	6 Reel/Box	24,000 Pcs/Box (6.30Kg _(Ref))
BCIHP5420	3,000 Pcs/Reel (0.83Kg _(Ref))	6 Reel/Box	18,000 Pcs/Box (6.85Kg _(Ref))
BCIHP5430	2,000 Pcs/Reel (0.86Kg _(Ref))	6 Reel/Box	12,000 Pcs/Box (7.05Kg _(Ref))