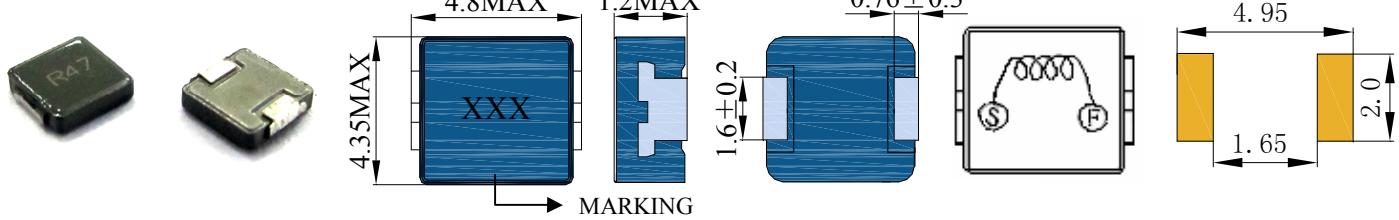


## BCIHP0412 Series



### Features

- 100% lead (Pb)-free.
- Lowest DCR.
- Frequency range up to 1. 0MHZ.
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction.

### Applications

- Notebook/Desktop/Server applications.
- Low profile, high current power supplies.
- Battery powered devices.
- DC/DC converter for Field Programmable Gate Array (FPGA).

### 特點

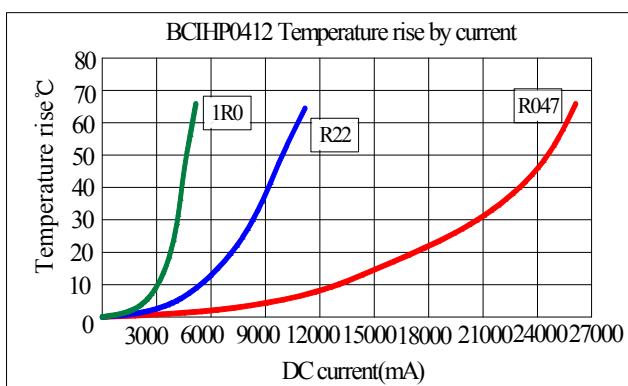
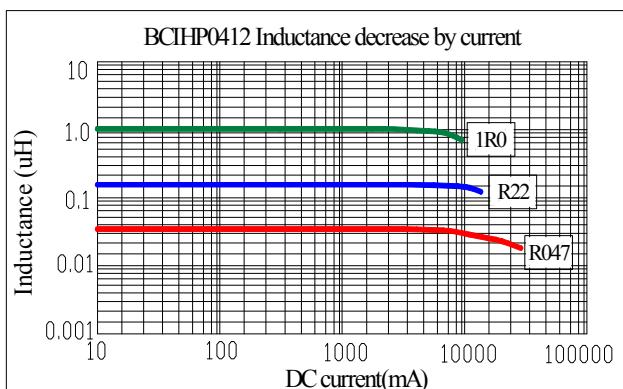
- 符合 RoHs.
- 低電阻.
- 頻率可達到 1.0 MHZ.
- 可處理在未飽和時的高瞬間電流.
- 設計緊湊/超低噪音

### 應用

- 筆記本型電腦/伺服器等設.
- 備形體小,可耐高電流.
- 電源,電池設備.
- 用於 FPGA 領域中的 DC/DC 轉換設備

## ELECTRICAL CHARACTERISTICS FOR 電氣特性

Part Number 料號	Lo INDUCTANCE uH @200KHZ, 0.25V,0A <sup>(1)</sup>	DCR mΩ MAX 25°C	HEAT RATING CURRENT DCAMPS <sup>(4)</sup> TYPICAL	SATURATION CURRENT DC AMPS <sup>(5)</sup> TYPICAL
BCIHP0412-R047	0.047	3.75	13.0	32.0
BCIHP0412-R20	0.20	10.8	9.0	13.5
BCIHP0412-R22	0.22	12.0	8.5	12.0
<b>BCIHP0412-R47</b>	<b>0.47</b>	<b>22.0</b>	<b>6.0</b>	<b>7.0</b>
BCIHP0412-1R0	1.0	55.5	4.0	4.5



(1) Tolerance of Inductance: N=±30%,M=±20%.

(2) All test data is referenced to 25°C ambient.

(3) Operating Temperature Range-40°C to +125°C.

(4) DC current(A)that will cause an approximate  $\Delta T$  of 40°C.

(5) DC current(A)that will cause Lo to drop approximately 20%.

(6) 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=±30%,M=±20%.

(2) 所有的測試資料應該是在 25°C 的環境溫度下測試.

(3) 操作溫度範圍 -40°C 到 +125°C.

(4) 加 DC 電流值(A)會導致  $\Delta T$  40°C 左右的變化.

(5) 加 DC 電流值(A)會導致初始值下降 20%左右.

(6) 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.