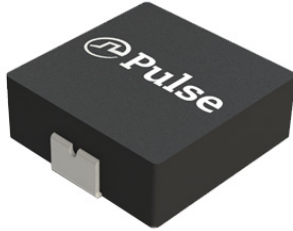


# SMT Power Inductor

High Current Molded Power Inductor - PA4342.XXXNLT Series



-  **Height:** 4.0mm Max
-  **Footprint:** 11.5mm x 10.3mm Max
-  **Current Rating:** up to 43.0A
-  **Inductance Range:** 0.15uH to 68.0uH
-  Shielded construction and compact design
-  High current, low DCR, and high efficiency
-  Minimized acoustic noise and minimized leakage flux
-  200Vdc Isolation between terminal and core

Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C

| Part Number   | Inductance<br>100KHz, 1V<br><br>uH | Rated Current<br><br>A | DC Resistance |      | Saturation Current Max.<br><br>A | Mechanical  |
|---------------|------------------------------------|------------------------|---------------|------|----------------------------------|-------------|
|               |                                    |                        | MAX.          | TYP. |                                  |             |
|               |                                    |                        | mΩ            | mΩ   |                                  |             |
| PA4342.151NLT | 0.15±30%                           | 43.0                   | 0.6           | 0.5  | 75.0                             | Footprint 1 |
| PA4342.221NLT | 0.22±20%                           | 35.0                   | 1.0           | 0.8  | 60.0                             | Footprint 1 |
| PA4342.271NLT | 0.27±20%                           | 33.0                   | 1.0           | 0.82 | 60.0                             | Footprint 1 |
| PA4342.361NLT | 0.36±20%                           | 31.0                   | 1.2           | 1.05 | 60.0                             | Footprint 1 |
| PA4342.391NLT | 0.39±20%                           | 30.0                   | 1.3           | 1.1  | 60.0                             | Footprint 1 |
| PA4342.451NLT | 0.45±20%                           | 29.0                   | 1.5           | 1.3  | 45.0                             | Footprint 1 |
| PA4342.471NLT | 0.47±20%                           | 28.0                   | 1.5           | 1.3  | 43.0                             | Footprint 1 |
| PA4342.561NLT | 0.56±20%                           | 25.0                   | 1.8           | 1.6  | 40.0                             | Footprint 1 |
| PA4342.681NLT | 0.68±20%                           | 22.0                   | 2.7           | 2.4  | 39.0                             | Footprint 1 |
| PA4342.102NLT | 1.00±20%                           | 18.0                   | 3.3           | 3.0  | 36.0                             | Footprint 1 |
| PA4342.122NLT | 1.20±20%                           | 17.0                   | 3.8           | 3.3  | 33.0                             | Footprint 1 |
| PA4342.152NLT | 1.50±20%                           | 16.0                   | 4.6           | 4.0  | 33.0                             | Footprint 2 |
| PA4342.222NLT | 2.20±20%                           | 12.0                   | 7.0           | 6.5  | 27.0                             | Footprint 2 |
| PA4342.252NLT | 2.50±20%                           | 11.5                   | 8.7           | 7.9  | 23.0                             | Footprint 2 |
| PA4342.332NLT | 3.30±20%                           | 11.0                   | 11.8          | 10.8 | 20.0                             | Footprint 2 |
| PA4342.402NLT | 4.00±20%                           | 10.2                   | 15.0          | 13.0 | 18.0                             | Footprint 2 |
| PA4342.472NLT | 4.70±20%                           | 10.0                   | 15.5          | 15.0 | 17.0                             | Footprint 2 |
| PA4342.562NLT | 5.60±20%                           | 9.0                    | 19.3          | 17.0 | 14.0                             | Footprint 2 |
| PA4342.682NLT | 6.80±20%                           | 8.5                    | 23.3          | 17.5 | 13.5                             | Footprint 2 |

USA 858 674 8100

Germany 49 2354 777 100

Singapore 65 6287 8998

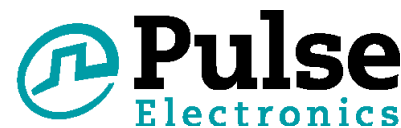
Shanghai 86 21 62787060

China 86 755 33966678

Taiwan 886 3 4356768

# SMT Power Inductor

High Current Molded Power Inductor - PA4342.XXXNLT Series



## Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C

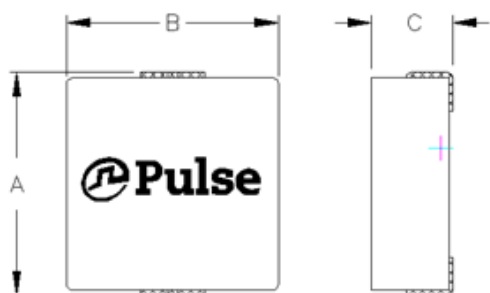
| Part Number   | Inductance<br>100KHz, 1V<br><br>uH | Rated Current<br><br>A | DC Resistance |       | Saturation Current Max.<br><br>A | Mechanical  |
|---------------|------------------------------------|------------------------|---------------|-------|----------------------------------|-------------|
|               |                                    |                        | MAX.          | TYP.  |                                  |             |
|               |                                    |                        | mΩ            | mΩ    |                                  |             |
| PA4342.822NLT | 8.20±20%                           | 8.0                    | 25.5          | 20.0  | 12.5                             | Footprint 2 |
| PA4342.103NLT | 10.0±20%                           | 7.5                    | 30.0          | 27.0  | 12.0                             | Footprint 2 |
| PA4342.153NLT | 15.0±20%                           | 6.25                   | 45.0          | 40.0  | 10.0                             | Footprint 2 |
| PA4342.223NLT | 22.0±20%                           | 5.0                    | 74.0          | 64.0  | 7.0                              | Footprint 2 |
| PA4342.273NLT | 27.0±20%                           | 4.0                    | 100.0         | 86.0  | 6.0                              | Footprint 2 |
| PA4342.333NLT | 33.0±20%                           | 3.5                    | 112.0         | 92.0  | 5.0                              | Footprint 2 |
| PA4342.473NLT | 47.0±20%                           | 3.0                    | 167.0         | 145.0 | 4.5                              | Footprint 2 |
| PA4342.683NLT | 68.0±20%                           | 2.0                    | 240.0         | 205.0 | 3.0                              | Footprint 2 |

### Notes:

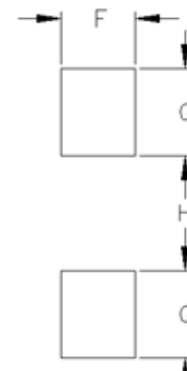
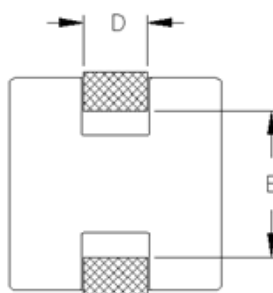
1. Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
2. The saturation current is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effect) to the component.
3. The rated current is the DC current required to raise the component temperature by approximately 40°C. Take note that the components' performance varies depending on the system condition. It is suggested that the component be tested at the system level, to verify the temperature rise of the component during system operation.
4. The part temperature (ambient+temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

## Mechanical

### PA4342.XXXNLT



Final Layout



SUGGESTED PAD LAYOUT

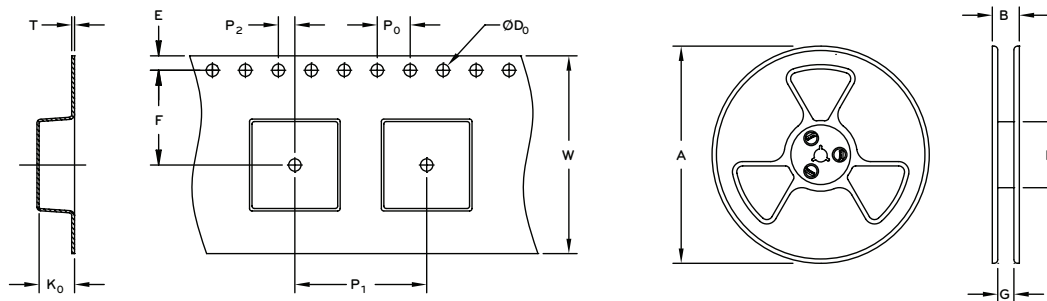
| Series        | Mechanical  | A        | B        | C       | D     | E     | F     | G     | H     |
|---------------|-------------|----------|----------|---------|-------|-------|-------|-------|-------|
| PA4342.XXXNLT | Footprint 1 | 11.5 Max | 10.3 Max | 4.0 Max | (2.5) | (6.4) | (3.0) | (4.1) | (5.4) |
| PA4342.XXXNLT | Footprint 2 | 11.5 Max | 10.3 Max | 4.0 Max | (3.0) | (6.4) | (3.5) | (4.1) | (5.4) |

All Dimensions in mm.

# SMT Power Inductor

High Current Molded Power Inductor - PA4342.XXXNLT Series

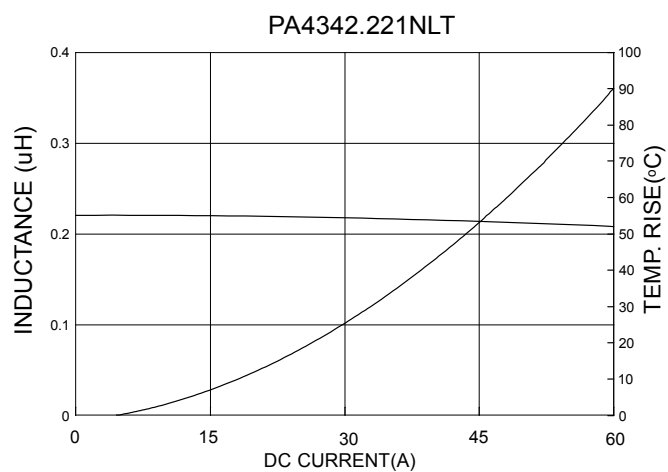
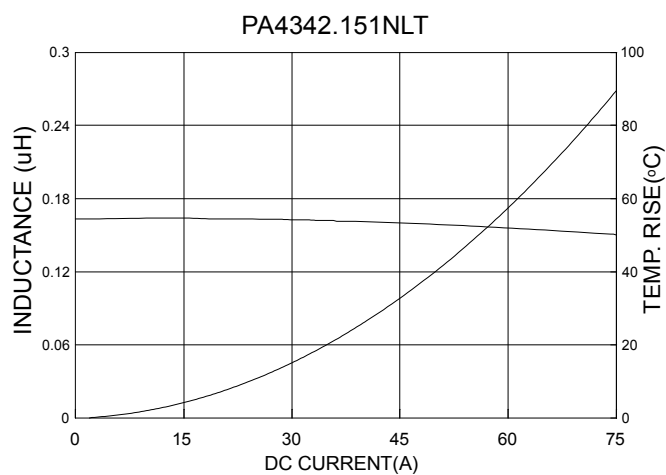
## TAPE & REEL INFO



## SURFACE MOUNTING TYPE, REEL/TAPE LIST

|               | REEL SIZE (mm) |     |    |     | TAPE SIZE (mm) |      |                |                |                |                |    |      |                | QTY      |
|---------------|----------------|-----|----|-----|----------------|------|----------------|----------------|----------------|----------------|----|------|----------------|----------|
|               | A              | B   | G  | N   | E              | F    | D <sub>0</sub> | P <sub>1</sub> | P <sub>0</sub> | P <sub>2</sub> | W  | T    | K <sub>0</sub> | PCS/REEL |
| PA4342.XXXNLT | Ø330           | N/A | 24 | 100 | 1.75           | 11.5 | 1.5            | 16             | 4              | 2              | 24 | 0.35 | 4.5            | 500      |

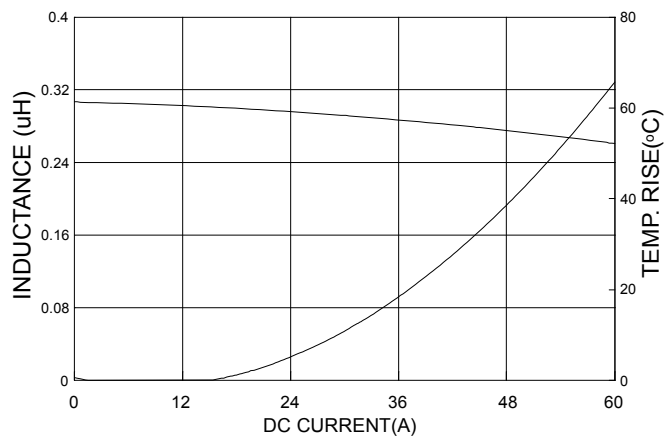
## Typical Performance Curves



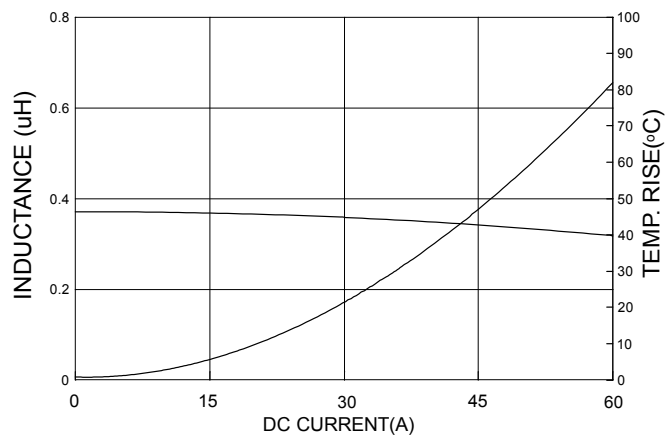
# SMT Power Inductor

High Current Molded Power Inductor - PA4342.XXXNLT Series

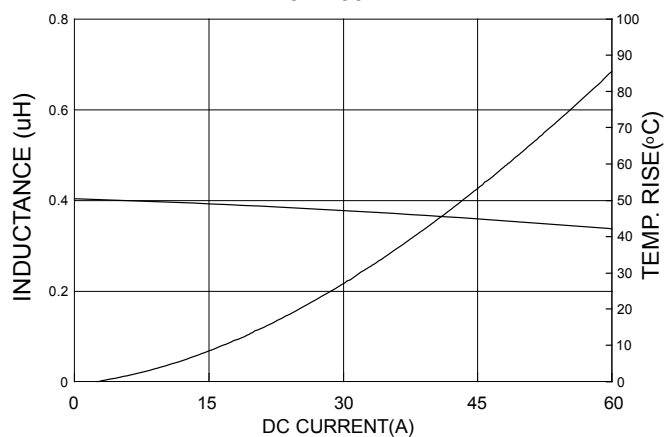
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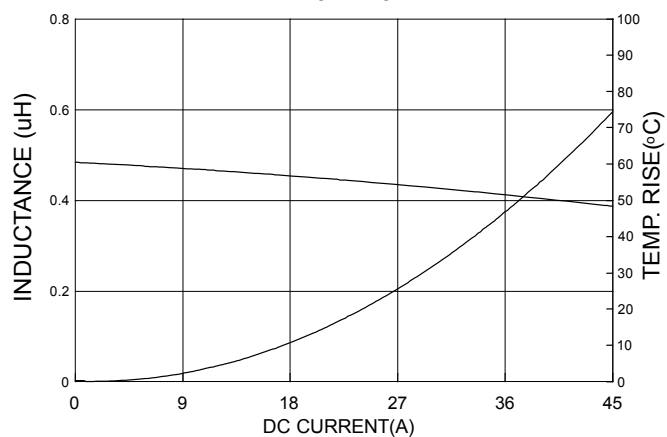
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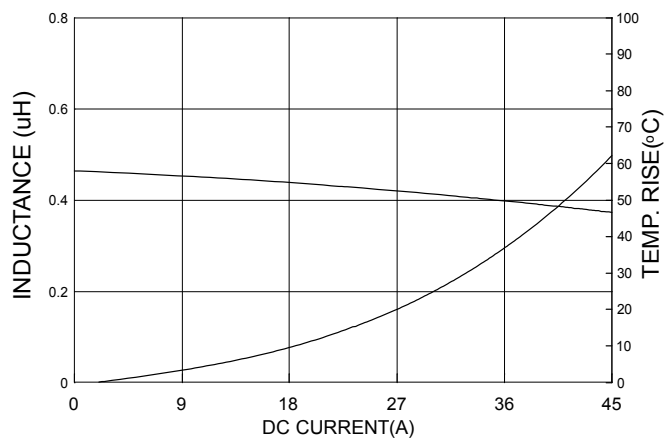
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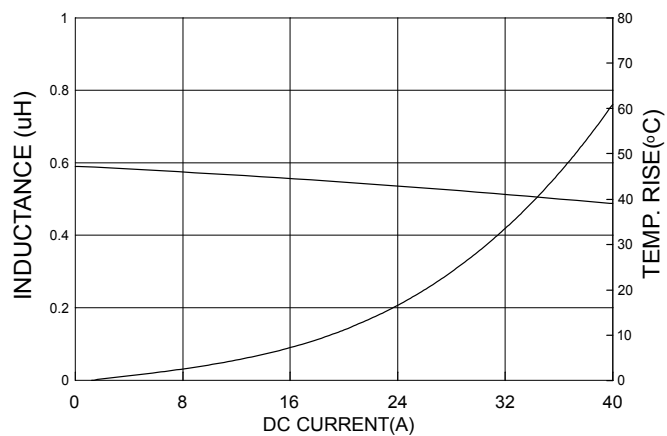
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PA4342.471NLT



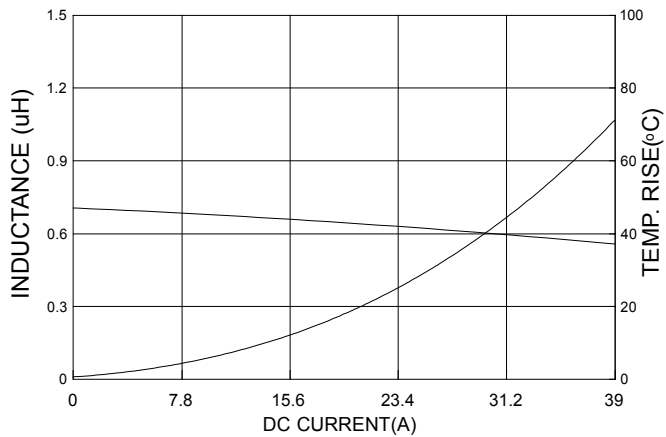
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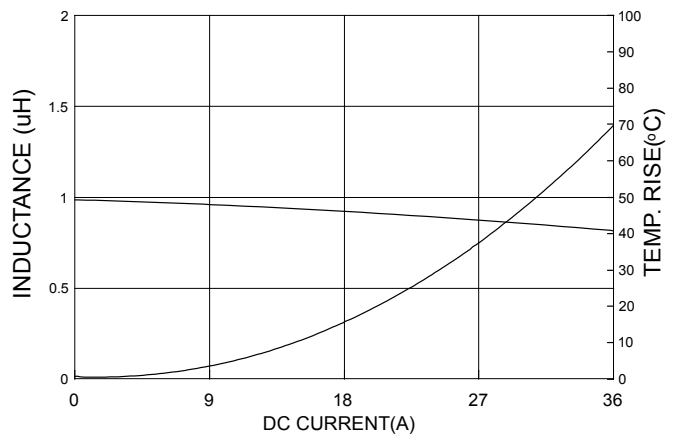
# SMT Power Inductor

High Current Molded Power Inductor - PA4342.XXXNLT Series

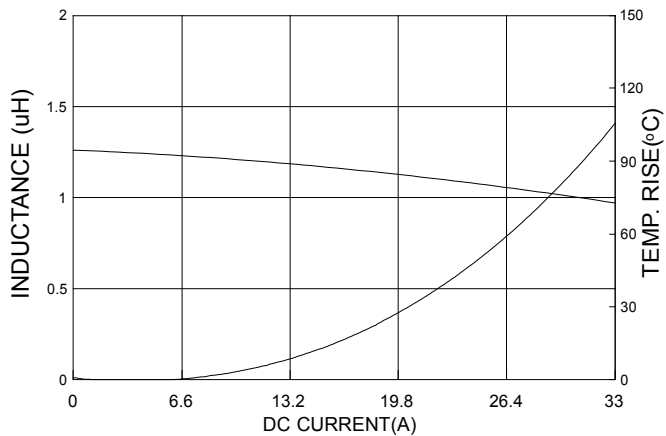
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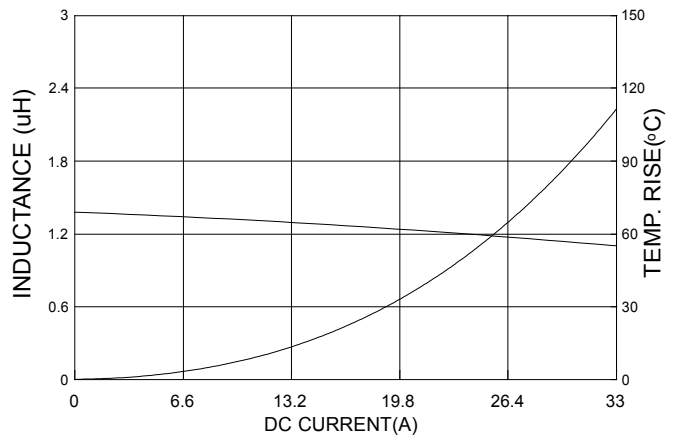
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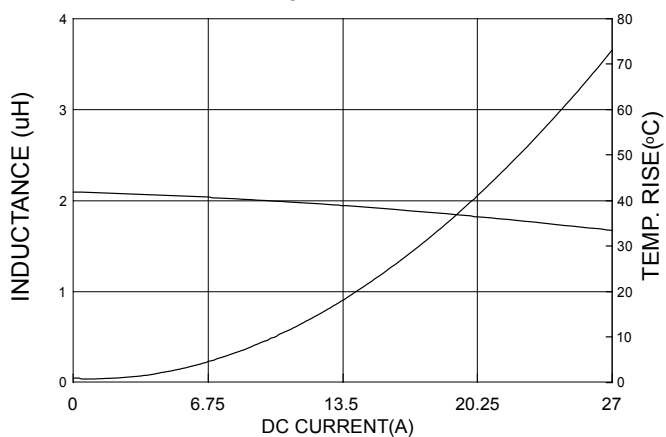
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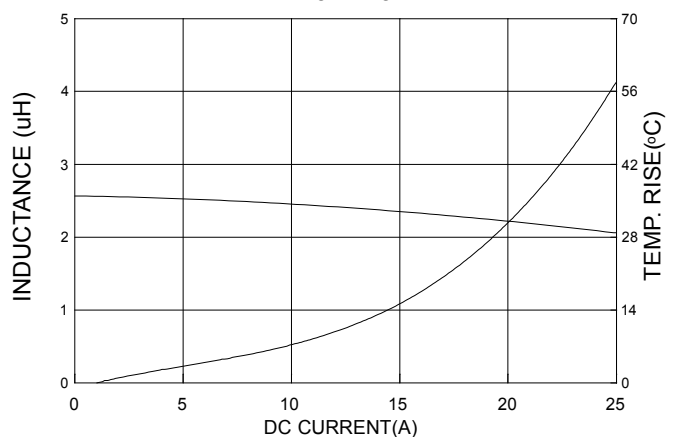
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PA4342.222NLT



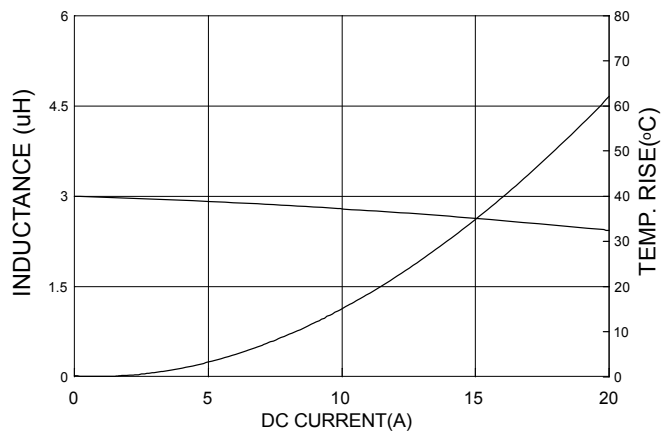
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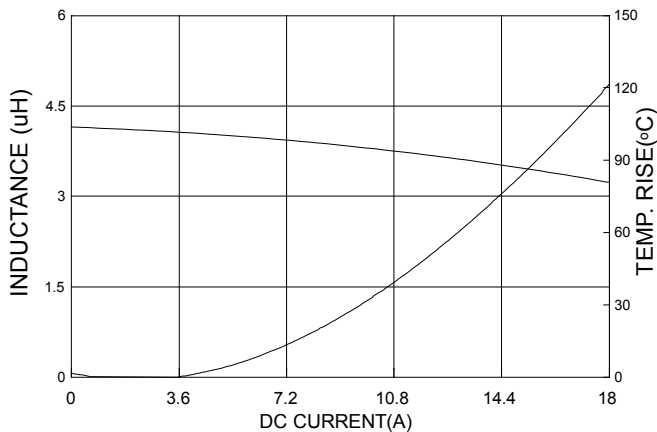
# SMT Power Inductor

High Current Molded Power Inductor - PA4342.XXXNLT Series

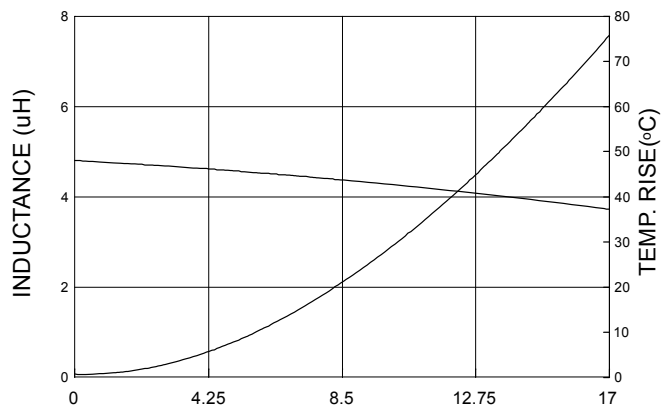
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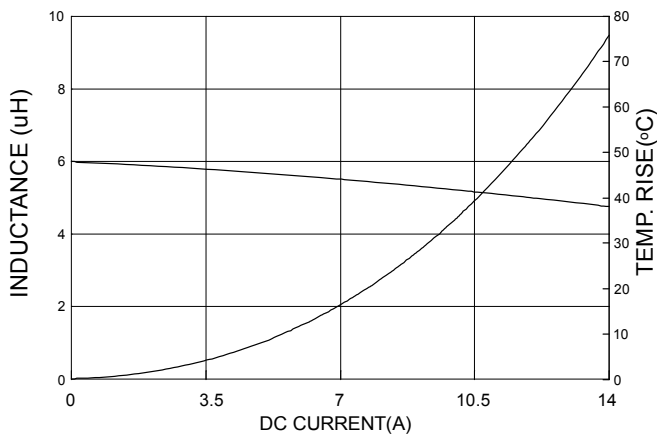
PA4342.402NLT



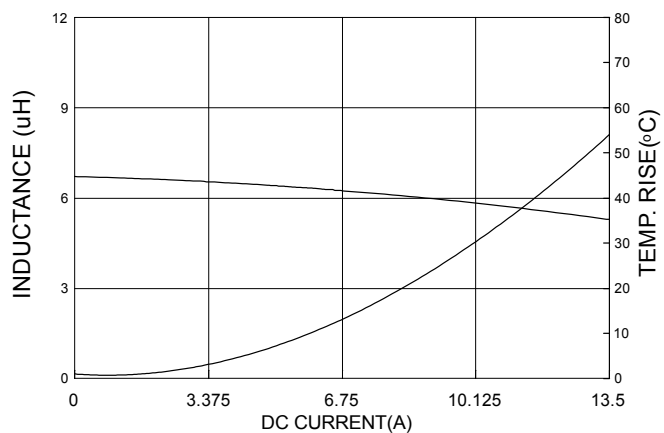
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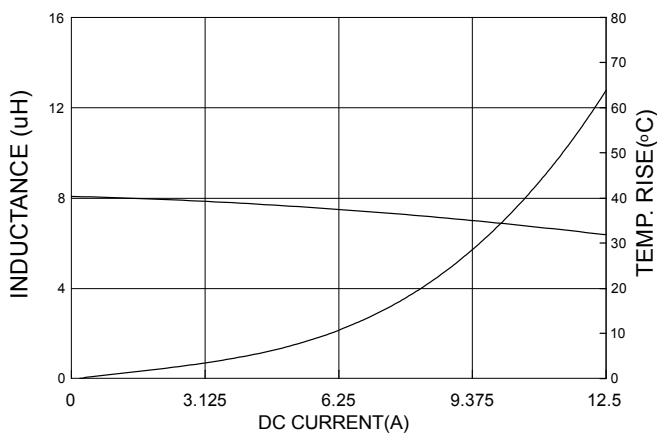
PA4342.562NLT



PA4342.682NLT

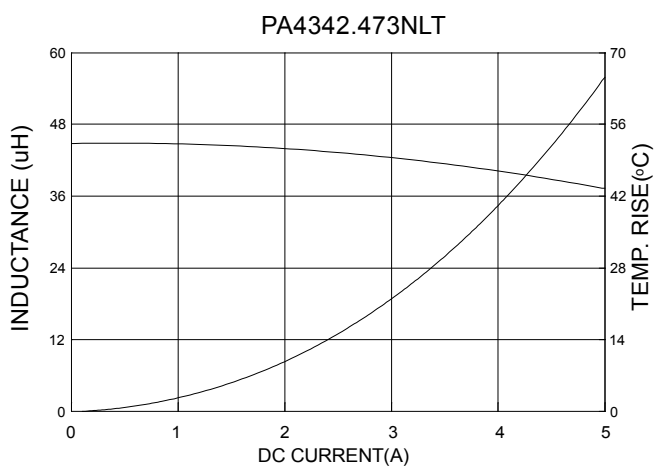
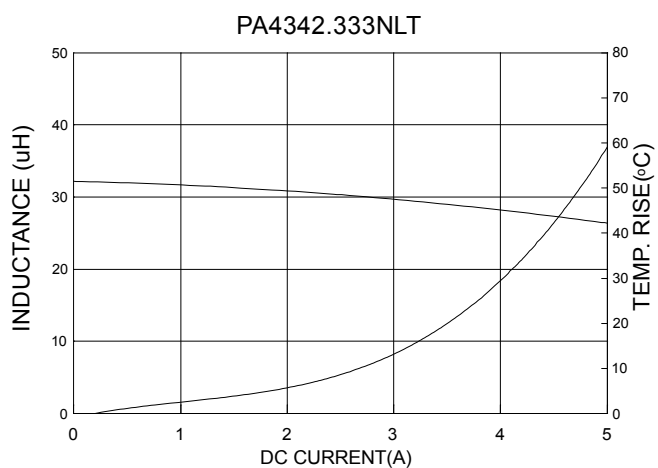
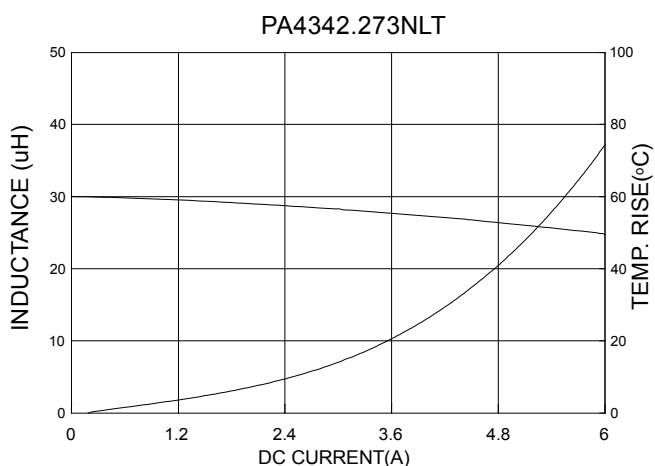
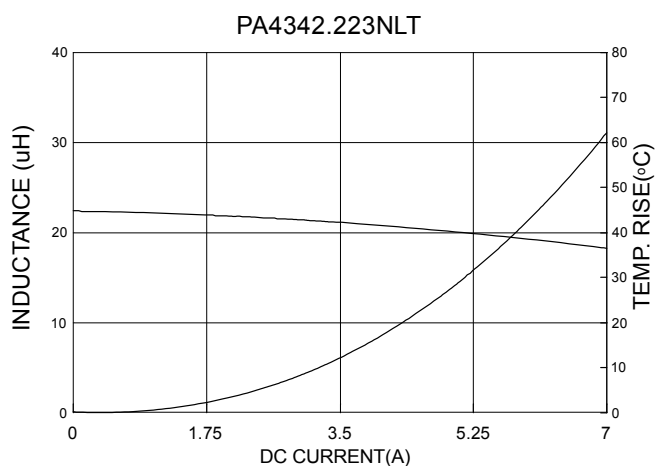
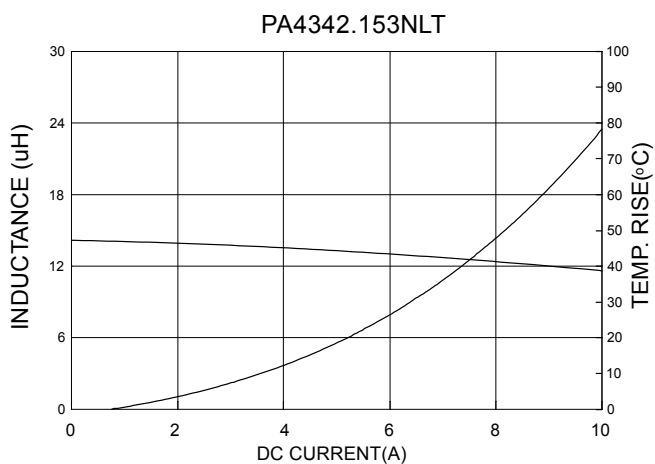
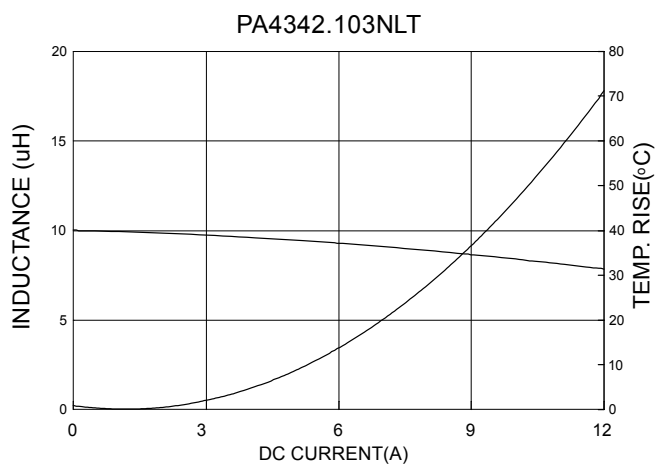


PA4342.822NLT



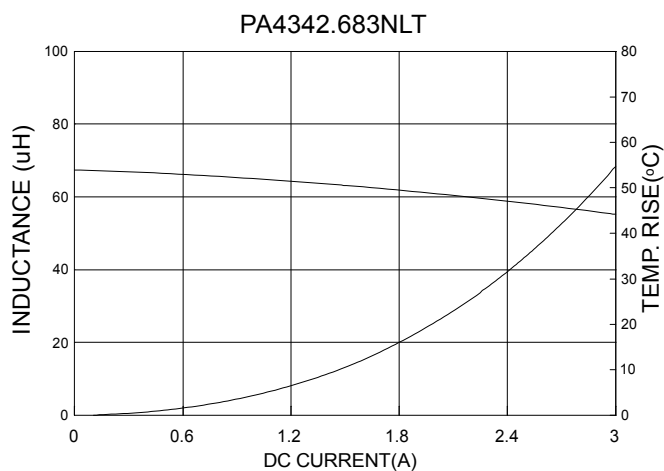
# SMT Power Inductor

High Current Molded Power Inductor - PA4342.XXXNLT Series



# SMT Power Inductor

High Current Molded Power Inductor - PA4342.XXXNLT Series



## For More Information

### Pulse Worldwide Headquarters

15255 Innovation Drive Ste 100  
San Diego, CA 92128  
U.S.A.

Tel: 858 674 8100  
Fax: 858 674 8262

### Pulse Europe

Pulse Electronics GmbH  
Am Rottland 12  
58540 Meinerzhagen  
Germany

Tel: 49 2354 777 100  
Fax: 49 2354 777 168

### Pulse China Headquarters

B402, Shenzhen Academy of  
Aerospace Technology Bldg.  
10th Kejinan Road  
High-Tech Zone  
Nanshan District  
Shenzhen, PR China 518057

Tel: 86 755 33966678  
Fax: 86 755 33966700

### Pulse North China

Room 2704/2705  
Super Ocean Finance Ctr.  
2067 Yan An Road West  
Shanghai 200336  
China

Tel: 86 21 62787060  
Fax: 86 21 62786973

### Pulse South Asia

135 Joo Seng Road  
#03-02  
PM Industrial Bldg.  
Singapore 368363

Tel: 65 6287 8998  
Fax: 65 6287 8998

### Pulse North Asia

3F, No. 198  
Zhongyuan Road  
Zhongli City  
Taoyuan County 320  
Taiwan R. O. C.

Tel: 886 3 4356768  
Fax: 886 3 4356823 (Pulse)  
Fax: 886 3 4356820 (FRE)

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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.