



- Current Rating:** Over 75A<sub>pk</sub>
- Inductance Range:** 120nH to 360nH
- Height:** 6.0mm Max
- Footprint:** 12.1mm x 10.0mm Max

### Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C<sup>7</sup>

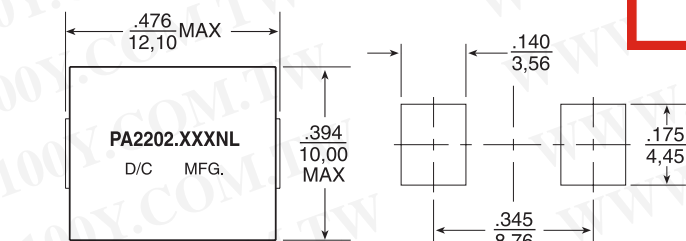
Part Number	Inductance @0ADC (nH ±15%)	Inductance @I <sub>rated</sub> (nH TYP)	I <sub>rated</sub> <sup>1</sup> (A <sub>DC</sub> )	DCR <sup>2</sup> (mΩ)	Inductance @I <sub>sat</sub> (nH TYP)	Inductance @I <sub>sat</sub> (nH MIN)	Saturation Current <sup>3</sup> (A TYP)		Heating <sup>4</sup> Current (A TYP)
							25°C	100°C	
PA2202.121NL	120	120	36	0.48 ± 6.5%	96	78	84	75	36
PA2202.181NL	180	180	36		144	117	64	52	
PA2202.211NL	215	215	36		172	140	53	47	
PA2202.231NL	230	230	36		184	150	47	44	
PA2202.321NL	325	282	31		260	211	34	31	
PA2202.361NL	365	315	27		292	237	30	27	

#### NOTES:

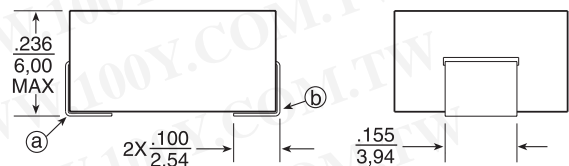
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- The nominal DCR is measured from point (a) to point (b), as shown below on the mechanical drawing.
- The saturation current is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C and 100°C). Inductance at I<sub>sat</sub> is the minimum inductance when measured at I<sub>sat</sub> (25°C and 100°C). This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effects) to the component.
- The heating current is the DC current which causes the part temperature to increase by approximately 40°C. This current is determined by soldering the component on a typical application PCB, and then applying the current to the device for 30 minutes.
- In high volt\*time applications, additional heating in the component can occur due to core losses in the inductor which may necessitate derating the current in order to limit the temperature rise of the component. To determine the approximate total losses (or temperature rise) for a given application, the coreloss and temperature rise curves can be used.
- Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PA2202.121NL becomes PA2202.121NLT). Pulse complies to industry standard tape and reel specification EIA481.
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

### Mechanical

#### PA2202.XXXNL



#### SUGGESTED PAD LAYOUT

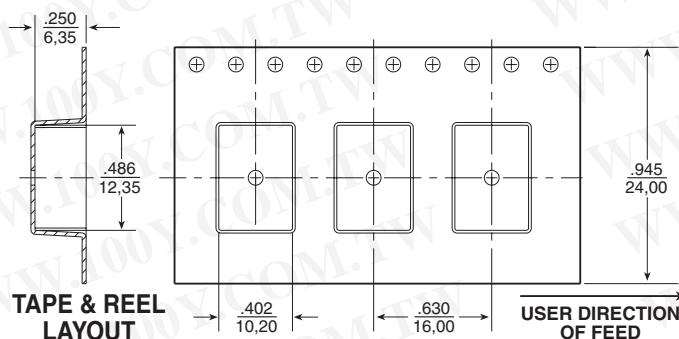
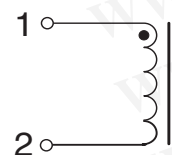


Weight ..... 2.7 grams  
Tape & Reel ..... 600/reel

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
Unless otherwise specified,  
all tolerances are  $\pm \frac{.010}{0,25}$

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

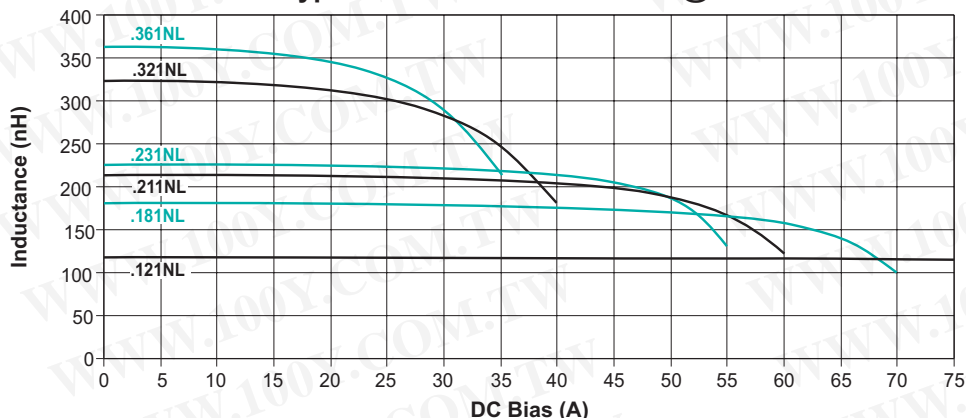
### Schematic



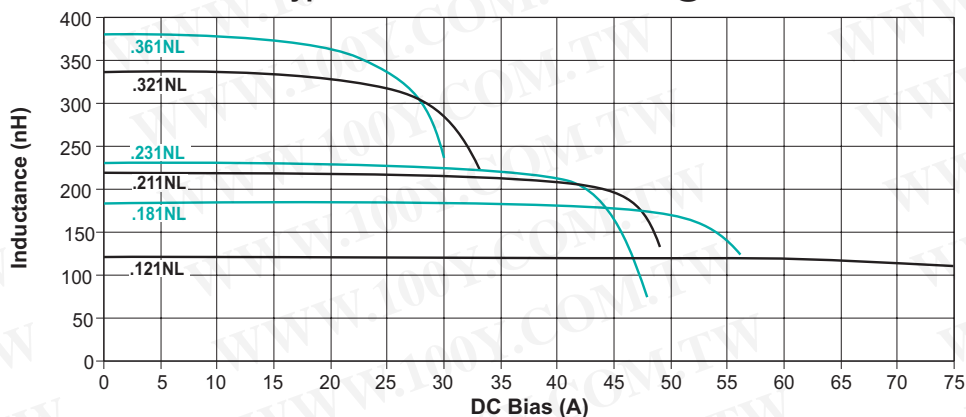
#### TAPE & REEL LAYOUT

USER DIRECTION OF FEED

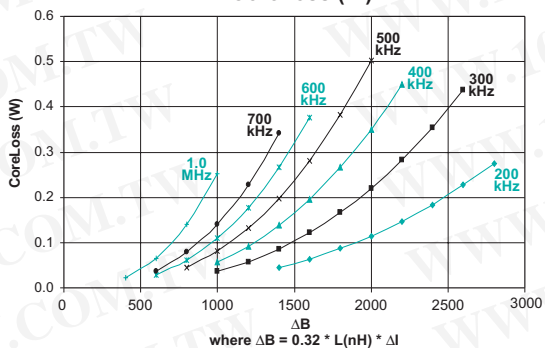
Typical Inducance vs DC Bias @ 25°C



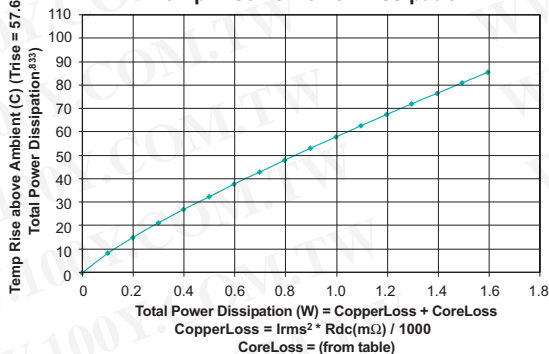
Typical Inducance vs DC Bias @ 100°C



CoreLoss (W)



Temp Rise vs Power Dissipation



## For More Information

### Pulse Worldwide Headquarters

12220 World Trade Drive  
 San Diego, CA 92128  
 U.S.A.

Tel: 858 674 8100  
 Fax: 858 674 8262

### Pulse Europe

Einsteinstrasse 1  
 D-71083 Herrenberg  
 Germany

Tel: 49 7032 7806 0  
 Fax: 49 7032 7806 135

### 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 2162786973

### 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)

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2013. Pulse Electronics, Inc. All rights reserved.