THE DATASHEET OF

PA2202.181NLT

SMT Power Inductors

Power Beads - PA2202.XXXNL Series

Pulse Electronics

- **Current Rating:** *Over 75Apk*
- **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 [7]

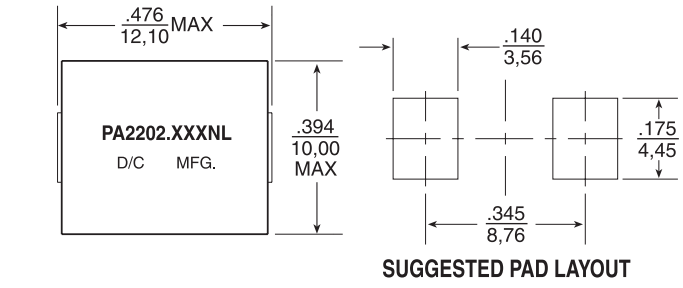
Part Number	Inductance @0ADC (nH ±15%)	Inductance @Irated (nH TYP)	Irated [1] (ADC)	DCR [2] (mΩ)	Inductance @Isat (nH TYP)	Inductance @Isat (nH MIN)	Saturation Current [3] (A TYP)		Heating [4] Current (A TYP)
							25°C	100°C	
PA2202.121NL	120	120	36	0.48 ± 6.5%	96	78	84	75	36
PA2202.181NL	180	180	36		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:

1. The rated current as listed is either the saturation current or the heating current depending on which value is lower.
2. The nominal DCR is measured from point ⓐ to point ⓑ, as shown below on the mechanical drawing.
3. 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 Isat is the minimum inductance when measured at Isat (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.
4. 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.
5. In high volt*time applications, additional heating in the component can occur due to core losses in the inductor which may neccessitate 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.
6. Optional Tape & Reel packaging can be ordered by adding a "**T**" suffix to the part number (i.e. PA2202.121NL becomes PA2202.121NL**T**). Pulse complies to industry standard tape and reel specification EIA481.
7. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

Mechanical

PA2202.XXXNL

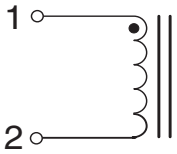


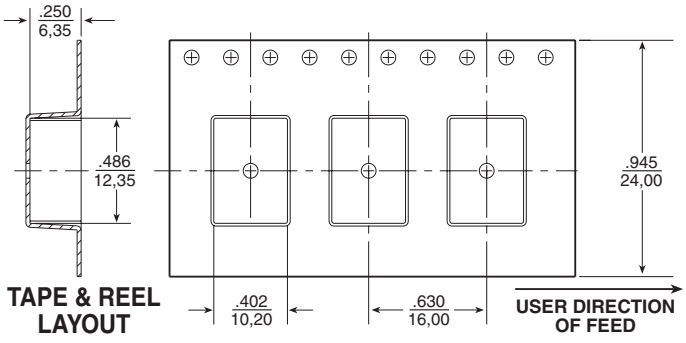
Weight ..... 2.7 grams
Tape & Reel 600/reel

Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

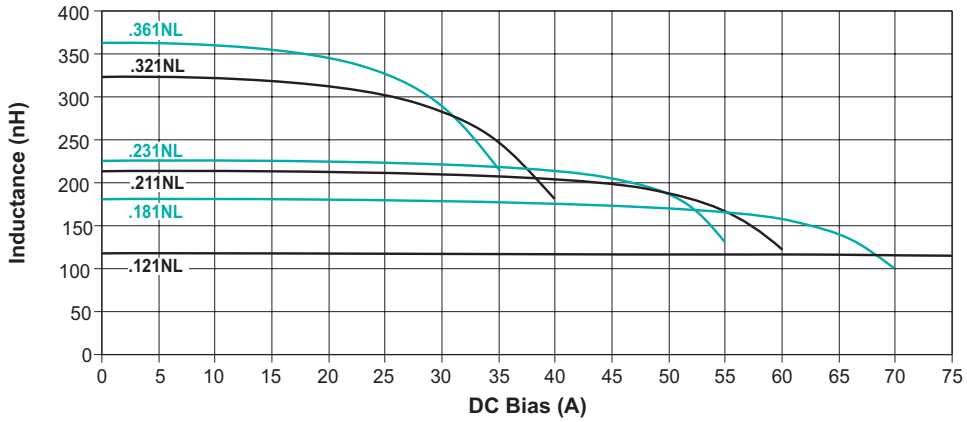
Schematic



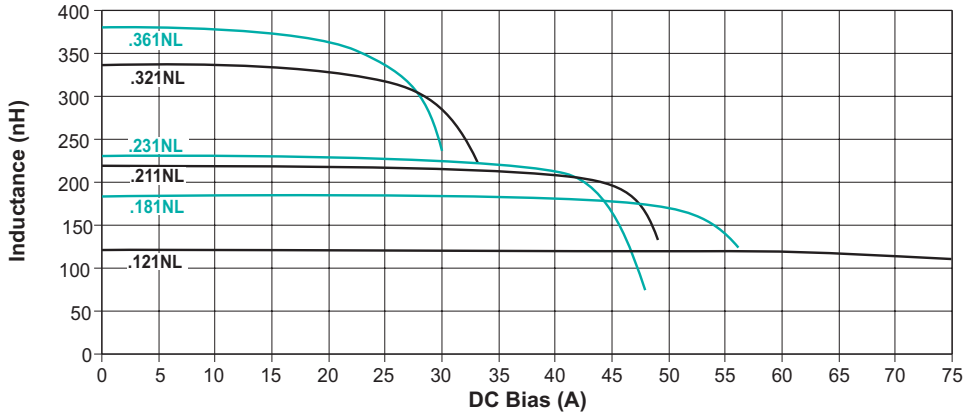


TAPE & REEL LAYOUT

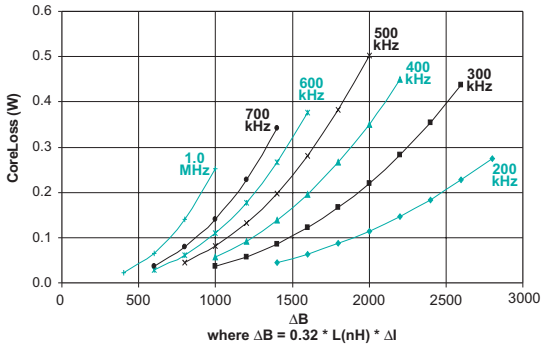
Typical Inducance vs DC Bias @ 25°C



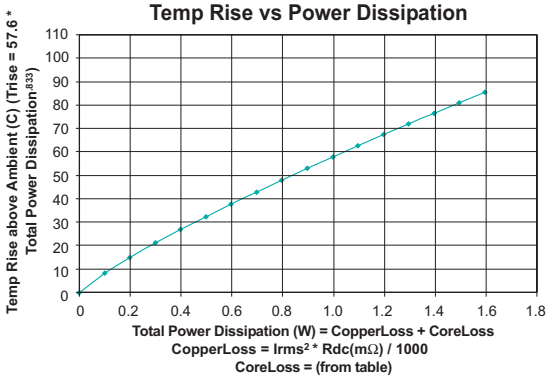
Typical Inducance vs DC Bias @ 100°C



CoreLoss (W)



Temp Rise vs Power Dissipation



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