

# SMT POWER INDUCTORS

## Unshielded Drum Core - PG0015NL Series



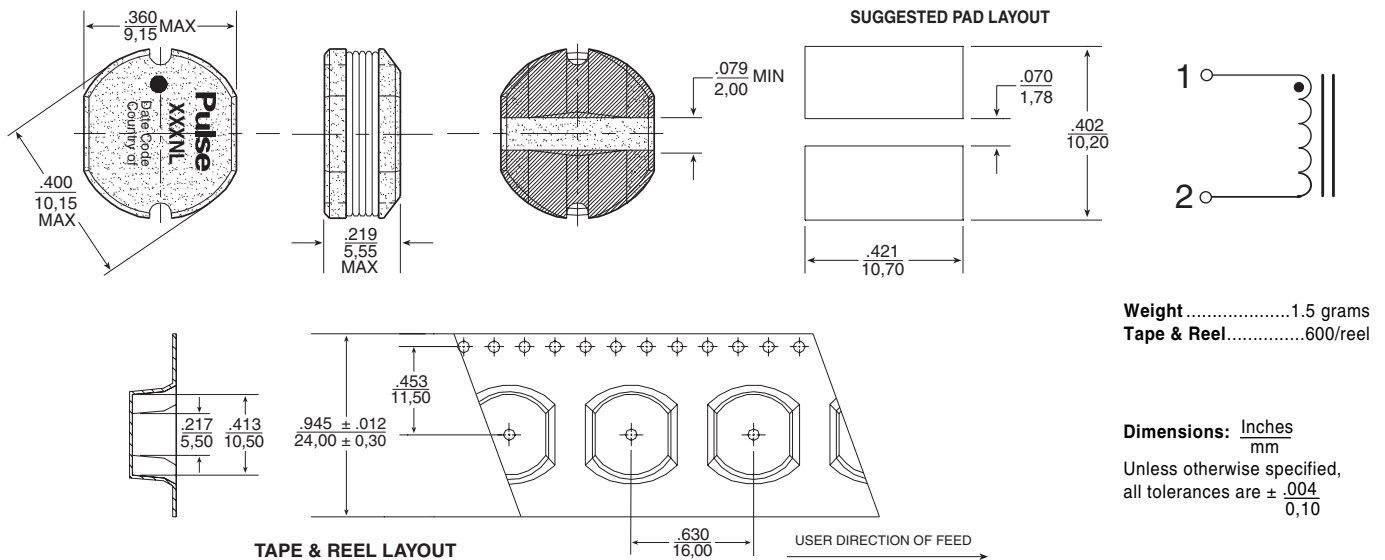
- Height:** 5.55mm Max
- Footprint:** 10.15mm x 9.15mm Max
- Current Rating:** up to 2.6A
- Inductance Range:** 10 $\mu$ H to 820 $\mu$ H
- 260°C reflow peak temperature qualified**

### Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C<sup>5</sup>

Part <sup>4</sup> Number	Inductance @0Adc ( $\mu$ H $\pm$ 20%)	I <sub>rated</sub> <sup>1</sup> (A)	DCR (m $\Omega$ MAX)	Saturation <sup>2</sup> Current I <sub>sat</sub> (A)	Heating <sup>3</sup> Current I <sub>dc</sub> (A)	SRF (MHz TYP)
PG0015.103NL	10	2.6	60	2.6	4.8	20
PG0015.123NL	12	2.45	70	2.45	4.5	19
PG0015.153NL	15	2.27	80	2.27	4.3	18
PG0015.183NL	18	2.15	90	2.15	4.1	16
PG0015.223NL	22	1.95	100	1.95	4.0	14
PG0015.273NL	27	1.76	110	1.76	3.7	12
PG0015.333NL	33	1.50	120	1.50	3.4	12
PG0015.393NL	39	1.37	140	1.37	3.2	10
PG0015.473NL	47	1.28	170	1.28	3.1	9.0
PG0015.563NL	56	1.17	190	1.17	3.0	8.1
PG0015.683NL	68	1.11	220	1.11	2.7	7.6
PG0015.823NL	82	1.00	250	1.00	2.4	6.8
PG0015.104NL	100	0.97	350	0.97	2.2	6.2
PG0015.124NL	120	0.89	400	0.89	1.9	5.0
PG0015.154NL	150	0.78	470	0.78	1.8	4.5
PG0015.184NL	180	0.72	630	0.72	1.5	4.5
PG0015.224NL	220	0.66	730	0.66	1.3	4.0
PG0015.274NL	270	0.57	970	0.57	1.2	3.6
PG0015.334NL	330	0.52	1150	0.52	1.1	3.1
PG0015.394NL	390	0.48	1300	0.48	1.1	2.8
PG0015.474NL	470	0.42	1480	0.42	1.0	2.6
PG0015.564NL	560	0.32	1900	0.32	0.9	2.2
PG0015.684NL	680	0.28	2250	0.28	0.9	2.2
PG0015.824NL	820	0.24	2550	0.24	0.5	2.0

### Mechanical

### Schematic



Weight .....1.5 grams  
Tape & Reel.....600/reel

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
Unless otherwise specified,  
all tolerances are  $\pm \frac{.004}{0,10}$

### Notes from Tables

1. The rated current as listed is either the saturation current @ 25°C or the heating current depending on which value is lower.
2. The saturation current  $I_{sat}$  is the current which causes the inductance to drop by 10% Max at an ambient temperature of 25°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.
3. The heating current  $I_{dc}$  is the dc current which causes the temperature rise of the part to increase approximately 40°C. This current is determined by mounting the component on a typical application PCB and applying the current to the device for 30 minutes.
4. Optional Tape and Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PG0015.103NL becomes PG0015.103NLT). Pulse complies to industry standard tape and reel specification EIA481.
5. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

### Typical Inductance vs Current Characteristics

