SMT Power Inductors

Unshielded Drum Core - PF0580NL Series

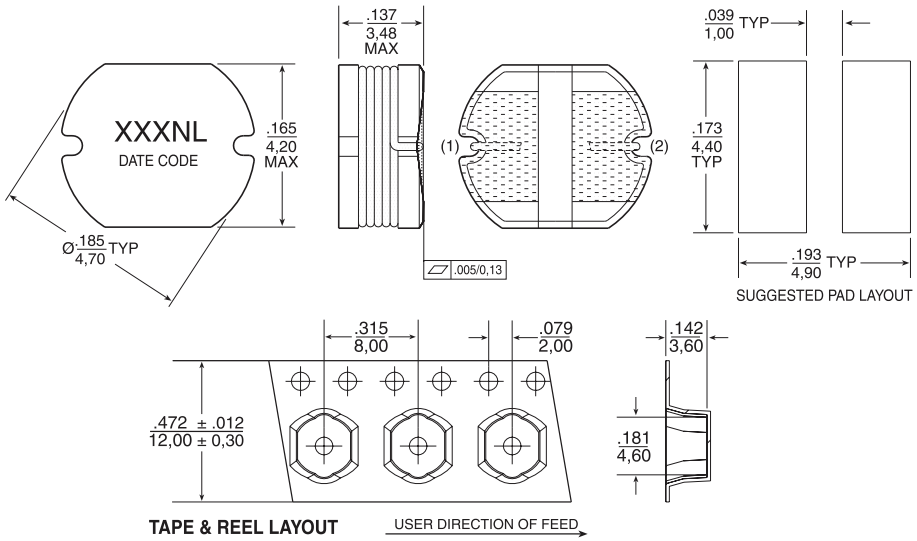
- ***Height:*** *3.48mm Max*
- ***Footprint:*** *4.7mm Typ x 4.2mm Max*
- ***Current Rating:*** *up to 3.1A*
- ***Inductance Range:*** *1µH to 65µH*
- *260°C reflow peak temperature qualified*

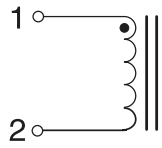
Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C[6]						
Part[5] Number	Inductance[1] @ Irated (µH TYP)	Irated[2] (A)	DCR (MAX) (mΩ MAX)	Inductance @ 0ADC (µH ± 15%)	Saturation Current[3] ISAT (A)	Heating Current[4] IDC (A)
PF0580.102NL	1.0	3.1	35	1.0	3.6	3.1
PF0580.152NL	1.4	2.7	40	1.5	2.7	2.7
PF0580.182NL *	1.7	2.4	45	1.8	2.4	2.6
PF0580.222NL	2.1	2.2	49	2.2	2.2	2.4
PF0580.272NL *	2.6	2.0	58	2.7	20	2.3
PF0580.332NL	3.1	1.8	63	3.3	1.8	2.25
PF0580.382NL	3.6	1.7	68	3.8	1.7	2.2
PF0580.472NL	4.5	1.6	77	4.7	1.6	2.0
PF0580.562NL	5.3	1.4	90	5.6	1.4	1.9
PF0580.682NL	6.5	1.3	100	6.8	1.3	1.8
PF0580.822NL	7.8	1.2	111	8.2	1.2	1.6
PF0580.103NL	9.5	1.1	132	10	1.1	1.5
PF0580.123NL	11	1.0	160	12	1.0	1.4
PF0580.153NL	14	0.85	197	15	0.85	1.3
PF0580.183NL *	17	0.80	255	18	0.80	1.1
PF0580.223NL	21	0.75	280	22	0.75	1.0
PF0580.273NL *	26	0.65	384	27	0.65	0.90
PF0580.333NL	31	0.58	427	33	0.58	0.85
PF0580.393NL	37	0.55	490	39	0.55	0.80
PF0580.473NL	45	0.50	645	47	0.50	0.70
PF0580.563NL	53	0.46	700	56	0.46	0.67
PF0580.683NL	65	0.41	827	68	0.41	0.62

Mechanical

Schematic

PF0580.XXXNL





Weight .....6.0 grams
Tape & Reel 160/reel
Dimensions: Inches / mm

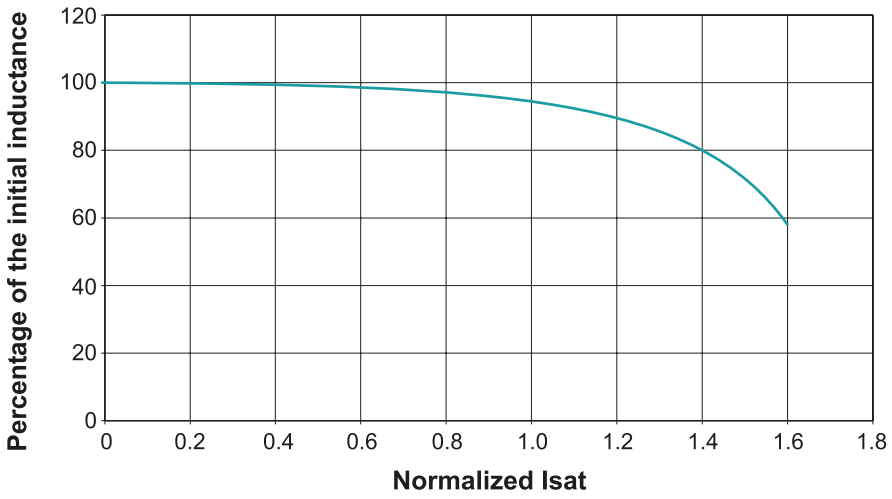
Unless otherwise specified, all tolerances are ± .004 / 0,10

Notes from Tables:

1. Inductance at Irated is a typical inductance value measured when the inductor is subjected to the rated current.
2. The rated current listed is the lower of the saturation current @ 25°C or the heating current.
3. The saturation current, Isat, is the current at which the component inductance drops by 20% (maximum) 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.
4. The heating current, I_{DC}, is the DC current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
5. Optional Tape & Reel packaging can be ordered by adding a "**T**" suffix to the part number (i.e. PF0504.681NL becomes PF0504.681NL**T**). Pulse complies to industry standard tape and reel specification EIA481.
6. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

* Contact Pulse for availability

Typical Inductance vs Current Characteristics



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PF0580.103NL