

SMT Power Inductors

Unshielded Drum Core - PA0390NL Series



- ⌚ **Height:** 6.35mm Max
- ⌚ **Footprint:** 13.21mm Typ x 9.91mm Max
- ⌚ **Current Rating:** up to 17A
- ⌚ **Inductance Range:** 0.12μH to 10μH
- ⌚ 260°C reflow peak temperature qualified

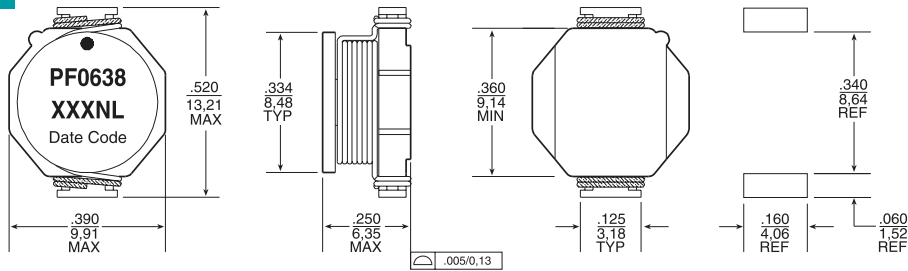
Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C

Part ⁴ Number	Inductance @ 0Adc (μH ±20%)	I _{rated} ¹ (A)	DCR (MAX) (mΩ MAX)	Saturation ² Current I _{sat} (A)	Heating Current ³ I _{bc} (A)	SRF (MHz TYP)
PF0638.121NL *	0.12	17	1.5	28	17	200
PF0638.331NL	0.33	16	2	20	16	200
PF0638.681NL *	0.68	12	5	13	12	150
PF0638.102NL	1.0	10	6	11	10	100
PF0638.152NL *	1.5	9	10	9	9	90
PF0638.222NL	2.2	7.4	11	7.8	7.4	80
PF0638.272NL *	2.7	6.6	12	7	6.6	65
PF0638.332NL *	3.3	5.9	14	6.4	5.9	60
PF0638.392NL	3.9	5.3	15	5.9	5.3	50
PF0638.472NL *	4.7	4.8	18	5.4	4.8	45
PF0638.682NL *	6.8	4.4	25	4.6	4.4	40
PF0638.103NL *	10	3.7	34	4	3.7	32

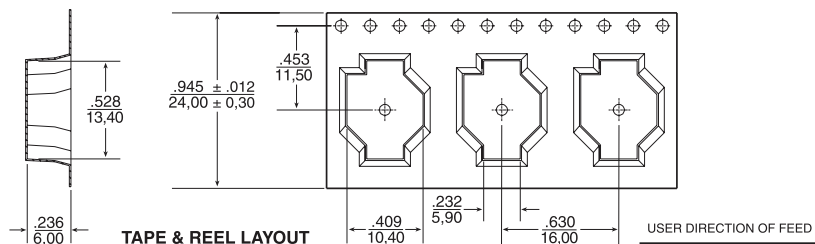
Mechanical

Schematic

PF0638.XXXNL



SUGGESTED PAD LAYOUT



TAPE & REEL LAYOUT

Weight1.3 grams

Tape & Reel600/reel

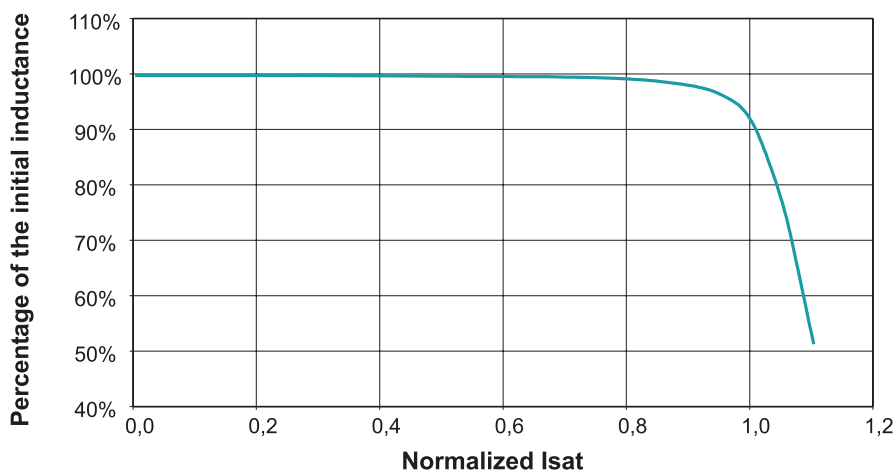
Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are $\pm \frac{.004}{0,10}$

Notes from Tables:

1. The rated current listed is the lower of the saturation current @ 25°C or the heating current.
 2. The saturation current, I_{sat} , is the current at which the component inductance drops by 10% (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.
 3. The heating current, I_{bc} , 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.
 4. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PF0638.103NL becomes PF0638.103NLT). Pulse complies to industry standard tape and reel specification EIA481.
- * Contact Pulse for availability

Typical Inductance vs Current Characteristics



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