

# Shielded Drum Core Inductor

PA4330.XXXNLT Series



- ⊕ **Height:** 1.0mm Max
- ⊕ **Footprint:** 2.2mm x 1.8mm Max
- ⊕ **Current Rating:** up to 3.1A
- ⊕ **Inductance Range:** 0.47uH to 2.2uH
- ⊕ *Shielded magnetic circuit reduces leakage flux, Fe base metal core enables high saturation and metalized core termination results in excellent shock resistance*

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

PART NUMBER	INDUCTANCE 1MHz, 1V uH +/-20%	RATED CURRENT A	MIN. SELF-RESONANT FREQUENCY MHz	DC RESISTANCE		SATURATION CURRENT (20°C) A	HEATING CURRENT	
				MAX.	TYP.		20°C Rise	40°C Rise
				mΩ	mΩ		A	A
PA4330.471NLT	0.47	3.1	102	49	41	3.8	2.7	3.1
PA4330.681NLT	0.68	2.8	77	65	57	3.5	2.5	2.8
PA4330.102NLT	1	2.35	70	90	75	3.35	2.05	2.35
PA4330.222NLT	2.2	1.7	39	170	142	1.8	1.45	1.7

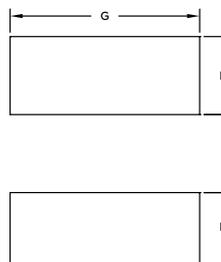
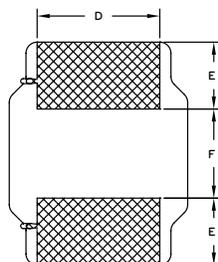
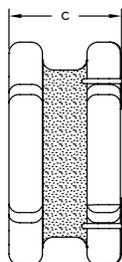
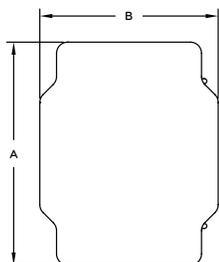
### NOTES:

- Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
- The rated current as listed is either the saturation current (20°C) or the heating current (40°C Rise) depending on which value is lower.
- The saturation current is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effect) to the component.
- The heating current is the DC current required to raise the component temperature by approximately 20°C or 40°C. Take note that the components' performance varies depending on the system conditions. It is suggested that the component be tested at the system level, to verify the temperature rise of the component during system operation.
- Maximum voltage across terminals to be limited to <25Vdc.

## Mechanical

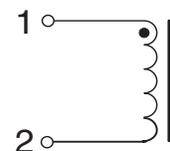
## Schematic

### PA4330.XXXNLT



FINAL OUTLINE

SUGGESTED PAD LAYOUT



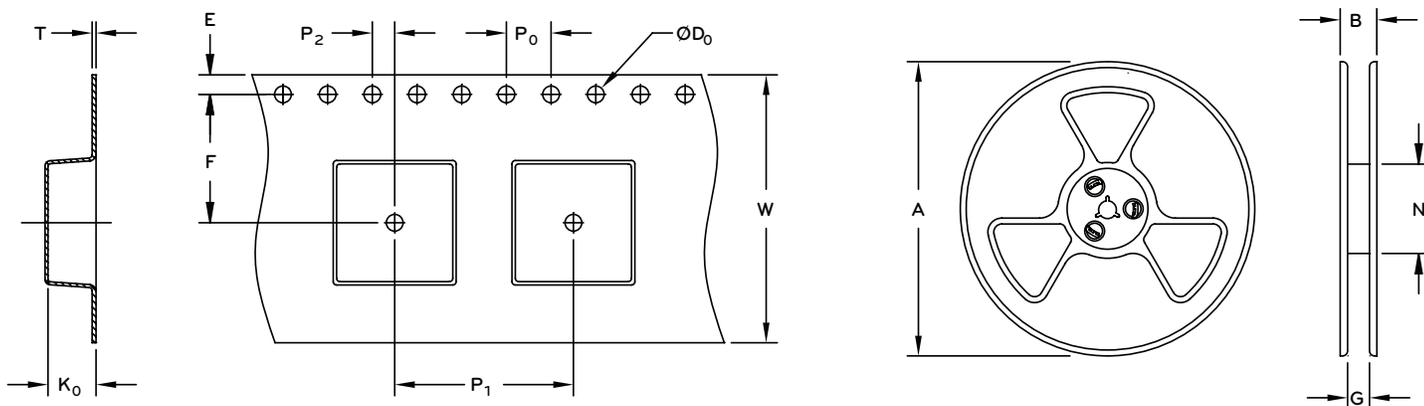
Part Number	A (max)	B (max)	C	D	E	F	G	H	J
PA4330.XXXNLT	2.2 MAX	1.8 MAX	1.0 MAX	(1.5)	(0.6)	(0.8)	(1.70)	(0.7)	(0.7)

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## TAPE & REEL INFO



### SURFACE MOUNTING TYPE, REEL/TAPE LIST

TYPE	REEL SIZE (mm)				TAPE SIZE (mm)									QTY
	A	B	G	N	E	F	D <sub>0</sub>	P	P <sub>0</sub>	P <sub>2</sub>	W	T	K <sub>0</sub>	PCS/REEL
PA4330.XXXNLT	Ø178	14.4	8.4	58	1.75	3.5	1.5	4	4	2	8	0.25	1.2	2000

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