





# Shielded Drum Core Inductor

PA4322, PA4318, PA4319 Series



-  **Height:** PA4322 (3.1mm Max), PA4318 (3.2mm Max), PA4319 (4.1mm Max)
-  **Footprint:** PA4322 (5.1x5.1mm Max), PA4318 (6.1x6.1mm Max), PA4319 (7.3x7.3mm Max)
-  **Current Rating:** up to 3.98A
-  **Inductance Range:** 2.2uH to 680uH

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

PART NUMBER	INDUCTANCE 100 KHz, 100 mV ( $\mu\text{H} \pm 20\%$ )	RATED CURRENT (A)	DCR (mOHMS MAX)	SATURATION CURRENT (TYPICAL) A			HEATING CURRENT	
				10% DROP	20% DROP	30% DROP	20°C Rise	40°C Rise
<b>PA4322NL SERIES</b>								
PA4322.222NLT	2.2	2.08	20	1.76	2.08	2.30	2.00	3.30
PA4322.472NLT	4.7	1.32	38	1.08	1.32	1.42	1.40	2.50
PA4322.103NLT	10	0.98	70	0.85	0.98	1.13	1.00	1.90
PA4322.223NLT	22	0.64	145	0.54	0.64	0.70	0.87	1.30
PA4322.473NLT	47	0.46	270	0.38	0.46	0.51	0.70	0.95
PA4322.683NLT	68	0.38	368	0.31	0.38	0.42	0.60	0.75
PA4322.104NLT	100	0.30	580	0.26	0.30	0.33	0.45	0.69
PA4322.224NLT	220	0.21	1100	0.18	0.21	0.23	0.39	0.40
PA4322.394NLT	390	0.15	1800	0.12	0.15	0.16	0.25	0.35
<b>PA4318NL SERIES</b>								
PA4318.472NLT	4.7	2.60	43	2.18	2.60	2.84	2.30	3.10
PA4318.682NLT	6.8	2.12	52	1.80	2.12	2.30	1.90	2.40
PA4318.103NLT	10	1.64	70	1.36	1.64	1.84	1.75	2.30
PA4318.153NLT	15	1.42	106	1.16	1.42	1.56	1.45	1.90
PA4318.223NLT	22	1.12	158	0.97	1.12	1.22	1.00	1.50
PA4318.473NLT	47	0.86	300	0.72	0.86	0.93	0.75	0.95
PA4318.683NLT	68	0.63	410	0.55	0.63	0.69	0.55	0.80
PA4318.104NLT	100	0.54	660	0.45	0.54	0.59	0.45	0.65

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PART NUMBER	INDUCTANCE <sup>4</sup> 100 KHz, 100 mV ( $\mu\text{H} \pm 20\%$ )	RATED CURRENT (A)	DCR (mOHMS MAX)	SATURATION CURRENT (TYPICAL) A			HEATING CURRENT	
				10% DROP	20% DROP	30% DROP	20°C Rise	40°C Rise
<b>PA4319NL SERIES</b>								
PA4319.332NLT	3.3*	3.28	18	2.74	3.28	3.72	3.95	5.00
PA4319.103NLT	10	1.92	38	1.64	1.92	2.10	2.55	3.20
PA4319.153NLT	15	1.60	55	1.36	1.60	1.78	1.90	2.60
PA4319.223NLT	22	1.26	82	1.02	1.26	1.42	1.35	2.00
PA4319.333NLT	33	1.04	124	0.91	1.04	1.16	1.05	1.50
PA4319.473NLT	47	0.92	155	0.74	0.92	1.00	1.00	1.35
PA4319.104NLT	100	0.64	310	0.54	0.64	0.71	0.70	0.90
PA4319.224NLT	220	0.41	710	0.35	0.41	0.47	0.40	0.55
PA4319.684NLT	680*	0.29	1980	0.22	0.27	0.29	0.25	0.32

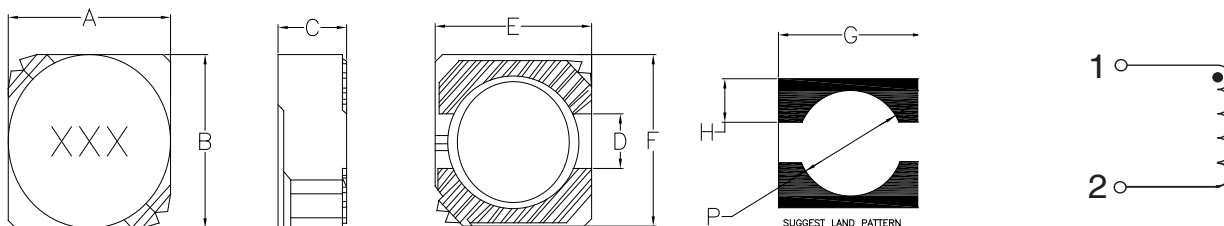
### NOTES:

- Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
- The Saturation Current is the current at which the initial inductance drops approximately 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 Rated Current is the DC current required to raise the component temperature by approximately the value listed. Take note that the component's performance varies depending on the system condition. It is suggested that the component be tested at the system level, to verify the temperature rise of the component during system operation.
- Please note that the inductance tolerance is  $\pm 20\%$  for all parts except PA4319.332NLT ( $\pm 30\%$ ) and PA4319.684NLT ( $\pm 10\%$ ).

## Mechanical

## Schematic

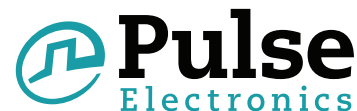
### PA43XX.XXXNLT



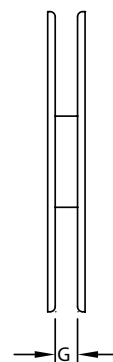
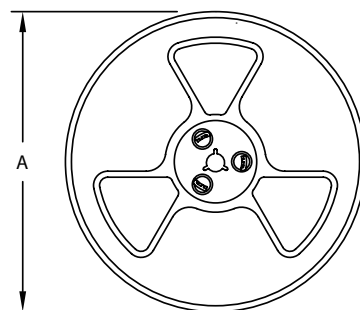
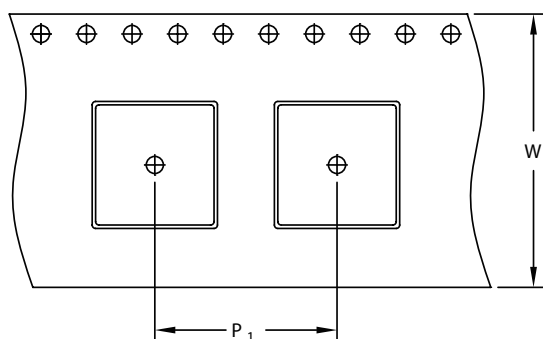
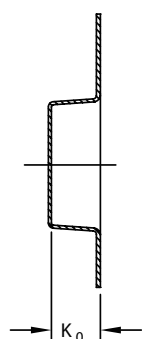
Part Number	A	B	C	D	E	F	G	H	J	P
PA4322.XXXNLT	5.1 MAX	5.1 MAX	3.1 MAX	1.6 TYP	4.6 TYP	4.6 TYP	5.08 TYP	1.74 TYP	5.08 TYP	4.05 TYP
PA4318.XXXNLT	6.1 MAX	6.1 MAX	3.2 MAX	2.0 TYP	5.6 TYP	5.6 TYP	6.0 MIN	2.0 TYP	6.0 MIN	4.85 TYP
PA4319.XXXNLT	7.3 MAX	7.3 MAX	4.1 MAX	2.1 TYP	6.6 TYP	6.6 TYP	7.1 TYP	2.5 TYP	7.1 TYP	5.65 TYP

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## TAPE & REEL INFO



### SURFACE MOUNTING TYPE, REEL/TAPE LIST

TYPE	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P <sub>1</sub>	W	K <sub>0</sub>	PCS/REEL
PA4322.XXXNLT	Ø330	12.5	8	12	3.3	2000
PA4318.XXXNLT	Ø330	16.5	8	16	3.3	2000
PA4319.XXXNLT	Ø330	16.5	12	16	4.3	1000

## For More Information

**Pulse Worldwide Headquarters**  
12220 World Trade Drive  
San Diego, CA 92128  
U.S.A.

**Pulse Europe**  
Pulse Electronics GmbH  
Am Rottland 12  
58540 Meinerzhagen  
Germany

**Pulse China Headquarters**  
B402, Shenzhen Academy of  
Aerospace Technology Bldg.  
10th Kejinan Road  
High-Tech Zone  
Nanshan District  
Shenzhen, PR China 518057

**Pulse North China**  
Room 2704/2705  
Super Ocean Finance Ctr.  
2067 Yan An Road West  
Shanghai 200336  
China

**Pulse South Asia**  
135 Joo Seng Road  
#03-02  
PM Industrial Bldg.  
Singapore 368363

**Pulse North Asia**  
3F, No. 198  
Zhongyuan Road  
Zhongli City  
Taoyuan County 320  
Taiwan R. O. C.

Tel: 858 674 8100  
Fax: 858 674 8262

Tel: 49 2354 777 100  
Fax: 49 2354 777 168

Tel: 86 755 33966678  
Fax: 86 755 33966700

Tel: 86 21 62787060  
Fax: 86 21 62786973

Tel: 65 6287 8998  
Fax: 65 6287 8998

Tel: 886 3 4356768  
Fax: 886 3 4356823 (Pulse)  
Fax: 886 3 4356820 (FRE)

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