

# SMT Power Inductor

Shielded Drum Core - PA4333.XXXNLT Series



- Height:** 3.2mm Max
- Footprint:** 7.4mm x 6.8mm Max
- Current Rating:** up to 14A
- Inductance Range:** 0.22uH to 22uH
- 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 $\pm 20\%$	Rated Current  A	Min. Self-Resonant Frequency  MHz	DC Resistance		Saturation Current (20°C)  A	Heating Current
				MAX.	TYP.		$\Delta T \approx 40^\circ\text{C}$
				m $\Omega$	m $\Omega$		A
PA4333.221NLT	0.22	14.00	108	4.0	3.3	18.00	14.00
PA4333.331NLT	0.33	12.40	78	5.1	4.3	17.00	12.40
PA4333.471NLT	0.47	11.00	71	6.6	5.5	16.50	11.00
PA4333.681NLT	0.68	9.50	57	8.7	7.3	12.80	9.50
PA4333.751NLT	0.75	9.50	55	8.7	7.3	11.50	9.50
PA4333.102NLT	1.0	9.50	41	8.7	7.3	9.50	9.50
PA4333.152NLT	1.5	6.00	37	13.8	11.5	8.00	6.00
PA4333.222NLT	2.2	5.65	24	18.0	15.0	6.50	5.65
PA4333.332NLT	3.3	4.60	23	30.5	25.5	4.60	4.60
PA4333.472NLT	4.7	3.80	15	43.5	36.5	3.80	3.80
PA4333.682NLT	6.8	3.20	14	64.0	53.5	3.20	3.20
PA4333.822NLT	8.2	3.10	13	69.0	58.0	3.20	3.10
PA4333.103NLT	10	3.00	12	77.4	64.5	3.00	3.00
PA4333.153NLT	15	2.50	11	127.0	106.0	3.00	2.50
PA4333.223NLT	22	1.70	8	177.0	148.0	1.70	2.00

## 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 ( $\Delta T \approx 40^\circ\text{C}$ ) 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 40°C. Take note that the components' 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.
- Maximum voltage across terminals to be limited to <40Vdc

USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

Shanghai 86 21 62787060

China 86 755 33966678

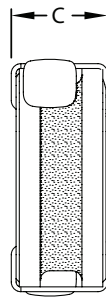
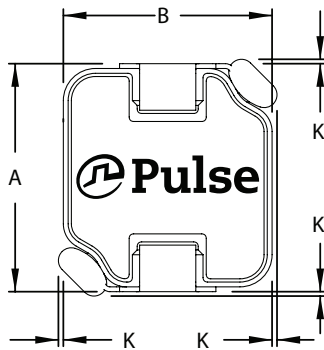
Taiwan 886 3 4356768

# SMT Power Inductor

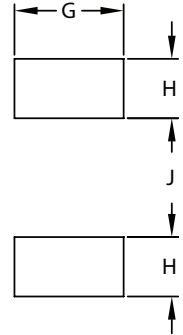
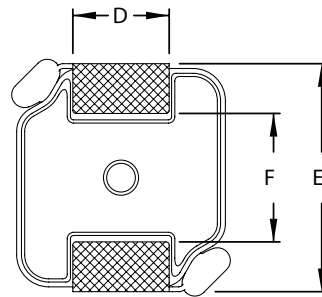
Shielded Drum Core - PA4333.XXXNLT Series

## Mechanical

### PA4333.XXXNLT



Final Layout

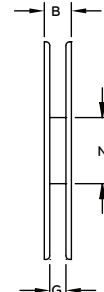
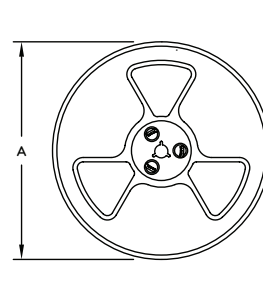
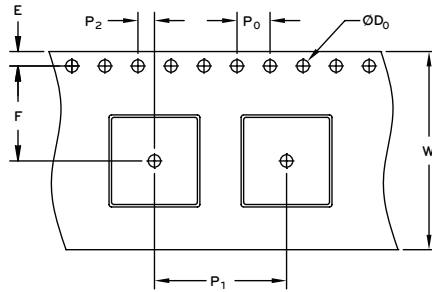
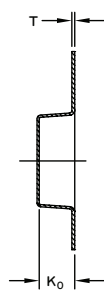


SUGGESTED PAD LAYOUT

Series	A	B	C	D	E	F	G	H	J	K
PA4333.XXXNLT	7.4 MAX	6.8 MAX	3.2 MAX	(3.2)	(6.9)	(3.8)	(3.4)	(1.85)	(3.7)	0.5 MAX

All Dimensions in mm.

### TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST														
	REEL SIZE (mm)				TAPE SIZE (mm)									QTY
	A	B	G	N	E	F	D <sub>0</sub>	P <sub>1</sub>	P <sub>0</sub>	P <sub>2</sub>	W	T	K <sub>0</sub>	PCS/REEL
PA4333.XXXNLT	Ø330	22.4	16.4	100	1.75	7.5	1.5	12	4	2	16	0.40	3.6	1000

## For More Information

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

Tel: 858 674 8100  
Fax: 858 674 8262

**Pulse Europe**  
Einsteinstrasse 1  
D-71083 Herrenberg  
Germany

Tel: 49 7032 78060  
Fax: 49 7032 7806 135

**Pulse China Headquarters**  
B402, Shenzhen Academy of  
Aerospace Technology Bldg.  
10th Kejinan Road  
High-Tech Zone  
Nanshan District  
Shenzhen, PR China  
518057  
Tel: 86 755 33966678  
Fax: 86 755 33966700

**Pulse North China**  
Room 2704/2705  
Super Ocean Finance Ctr.  
2067 Yan An Road  
West  
Shanghai 200336  
China  
Tel: 86 21 62787060  
Fax: 86 2162786973

**Pulse South Asia**  
135 Joo Seng Road  
#03-02  
PM Industrial Bldg.  
Singapore 368363  
Tel: 65 6287 8998  
Fax: 65 6287 8998

**Pulse North Asia**  
3F, No. 198  
Zhongyuan Road  
Zhongli City  
Taoyuan County 320  
Taiwan R. O. C.  
Tel: 886 3 4356768  
Fax: 886 3 4356823 (Pulse)  
Fax: 886 3 4356820 (FRE)

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2015. Pulse Electronics, Inc. All rights reserved.