






# 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 ±20%	Rated Current A	Min. Self-Resonant Frequency MHz	DC Resistance		Saturation Current (20°C) A	Heating Current
				MAX.	TYP.		Δ T ≈ 40°C
				mΩ	mΩ		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 (Δ T ≈ 40°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 2354 777 100

Singapore 65 6287 8998

Shanghai 86 21 62787060

China 86 755 33966678

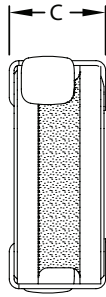
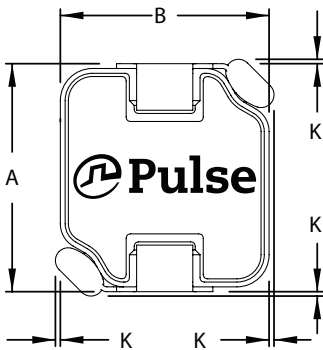
Taiwan 886 3 4356768

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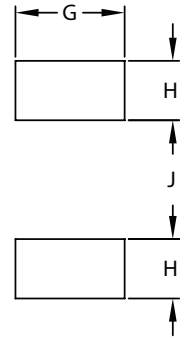
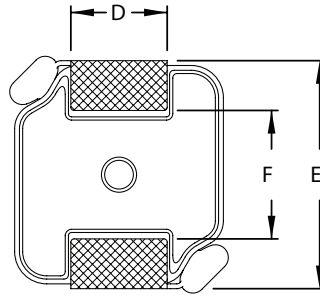
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## Mechanical

PA4333.XXXNLT



Final Layout

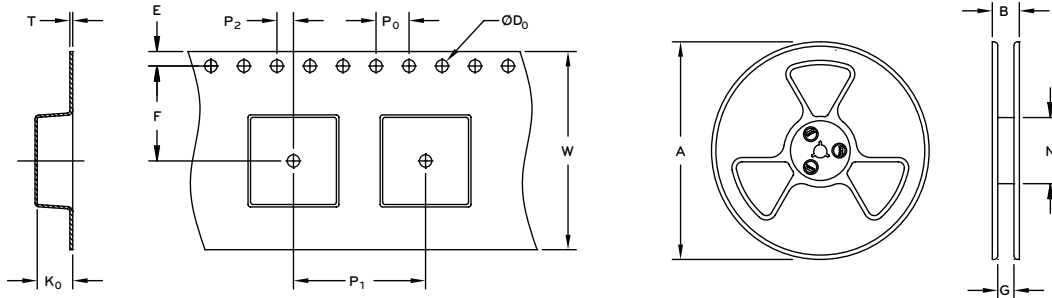


SUGGESTED PAD LAYOUT

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 PCS/REEL
	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>	
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

Pulse Electronics GmbH  
Am Rottland 12  
58540 Meinerzhagen  
Germany

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

### Pulse China Headquarters

B402, Shenzhen Academy of  
Aerospace Technology Bldg.  
10th Kejian 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)

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