## THT Integrated Common Mode and Differential Mode Choke

PA4040.XXXNL





- Common Mode and Differential Mode Choke intergrated into a single component reducing overall losses and reducing footprint
- Dielectric Strength: 1500Vrms
- Common Mode Inductance: 4.5mH (1Arms) to 0.28mH (3.5Arms)
- Differential Mode Inductance: 685uH (1.33Apk) to 55uH (4.6Apk)
- Size (LxWxH): 31.0mm x 24.9mm x 16.5 mm Max
- Safety Spacing: 3.0mm creepage and clearance between windings, 1.5mm between windings and core

Electrical Specifications @ 25°C – Operating Temperature –40°C to +125°C										
Pulse PN	Common Mode Inductance (mH Min) (1-2)=(4-3)	Differential Mode Inductance (uH Min) (1-4 with 2,3 shorted)	Irms (A)	lpeak (A)	<b>DCR/winding</b> (m $\Omega$ Max) (1-2)=(4-3)	<b>SRF</b> (MHz, typical)	<b>Impedance at SRF</b> (kΩ typical)			
PA4040.001NL	4.5	685	1.0	1.33	245	0.5	140			
PA4040.002NL	1.25	320	1.5	2	120	0.7	47			
PA4040.003NL	0.41	96	2.5	3.33	46	1.45	8.5			
PA4040.004NL	0.28	55	3.5	4.6	32	1.75	5.3			

#### Notes:

- 1. The current rating (Irms) is based upon the temperature rise of the component and represents the rms current which will cause a typical temperature rise of 40°C.
- 2. The peak current is the current which will typically cause a 20% drop in the differential mode inductance. The peak current should not be exceeded in the application as it will reduce the CM and DM rejection of the component.
- 3. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- 4. The PA4040.XXXNL is designed to provide 3.0mm of safety spacing (creepage and clearance distance) between windings and 1.5mm of safety spacing (creepage and clearance distance) between both windings and core.

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

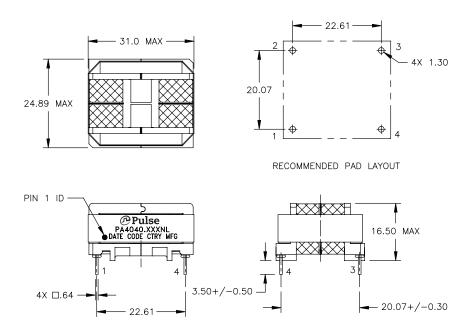
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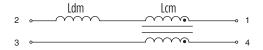
### **Mechanical**

#### PA4040.XXXNL



### **Schematic**

#### PA4040.XXXNL



### For More Information

Pulse Worldwide Headquarters 12220 World Trade Drive San Diego, CA 92128 U.S.A.	Pulse Europe Zeppelinstrasse 15 71083 Herrenberg Germany	Pulse China Headquarters B402, Shenzhen Academy of Aerospace Technology Bldg. 10th Kejinan Road High-Tech Zone Nanshan District Shenzen, PR China	Pulse North China Room 2704/2705 Super Ocean Finance Ctr. 2067 Yan An Road West Shanghai 200336	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: 886 3 4356768
Tel: 858 674 8100	Tel: 49 7032 7806 0	518057 Tel: 86 755 33966678	China	Tel: 65 6287 8998 Fax: 65 6287 8998	Fax: 886 3 4356823 (Pulse)
Fax: 858 674 8262	Fax: 49 7032 7806 12	Fax: 86 755 33966700	Tel: 86 21 62787060	1 dx. 03 0207 0330	(ruise)

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