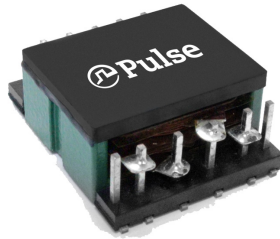


HIGH FREQUENCY FLAT COIL PLANAR TRANSFORMERS

PH08XXCNL Series (up to 160W)



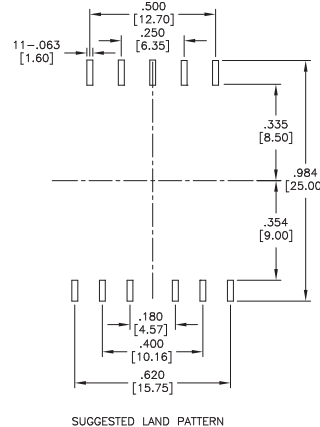
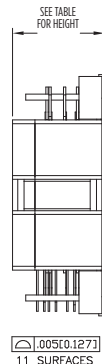
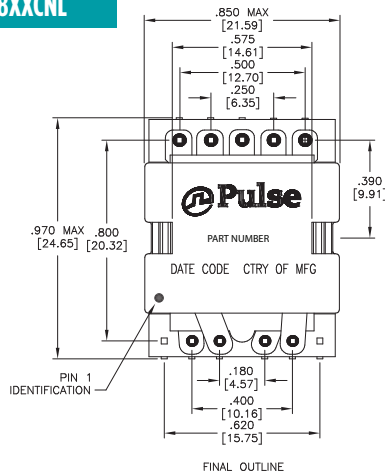
- Power Rating:** up to 160 W
- Height:** 9.1mm to 10.1mm Max
- Footprint:** 24.7mm x 21.6mm Max
- Frequency Range:** 200kHz to 700kHz
- Isolation (Primary to Secondary):** 1500 VDC
- Patented:** US Pat 9378885

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

Part ³ Number	Turns			Schematic	Primary ¹ Inductance (μ MIN)	Leakage ² Inductance (μ MAX)	DCR (mΩ MAX)			Maximum Height (mm)
	Primary A	Primary B	Secondary				Primary A	Primary B	Secondary	
PH0801CNL	4T	4T	4T (1T:1T:1T)	A1	153	0.45	8.5	8.5	7	9.1
PH0802CNL	4T	5T			194	0.45	8.5	12.5		
PH0803CNL	5T	5T			240	0.55	12.5	12.5		
PH0804CNL	5T	6T			290	0.60	12.5	14.2		9.6
PH0805CNL	6T	6T			345	0.65	14.2	14.2		
PH0806CNL	4T	4T	1T & 1T	A2	153	0.45	8.5	8.5	1.0 & 1.0	9.1
PH0807CNL	4T	5T			194	0.55	8.5	12.5		
PH0808CNL	5T	5T			240	0.55	12.5	12.5		
PH0809CNL	5T	6T			290	0.90	12.5	14.2		9.6
PH0810CNL	6T	6T			345	1.00	14.2	14.2		
PH0811CNL	4T	4T	2T & 1T	A3	153	0.45	8.5	8.5	1.75 & 1.75	9.1
PH0812CNL	4T	5T			194	0.45	8.5	12.5		
PH0813CNL	5T	5T			240	0.55	12.5	12.5		
PH0814CNL	5T	6T			290	0.65	12.5	14.2		9.6
PH0815CNL	6T	6T			345	0.85	14.2	14.2		

Mechanicals

PH08XXCNL



Weight11.8 grams
Tape & Reel180/reel
Tray40/tray

Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified,

all tolerances are $\pm \frac{.010}{0.25}$

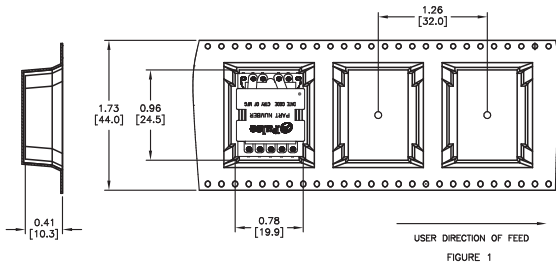
HIGH FREQUENCY FLAT COIL PLANAR TRANSFORMERS

PH08XXCNL Series (up to 160W)

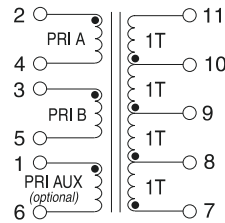
Schematics

PH08XXCNL

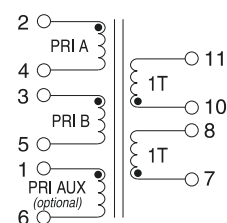
Tape & Reel Layout for PH08XXCNL



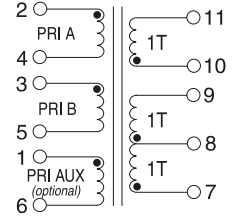
A1



A2



A3

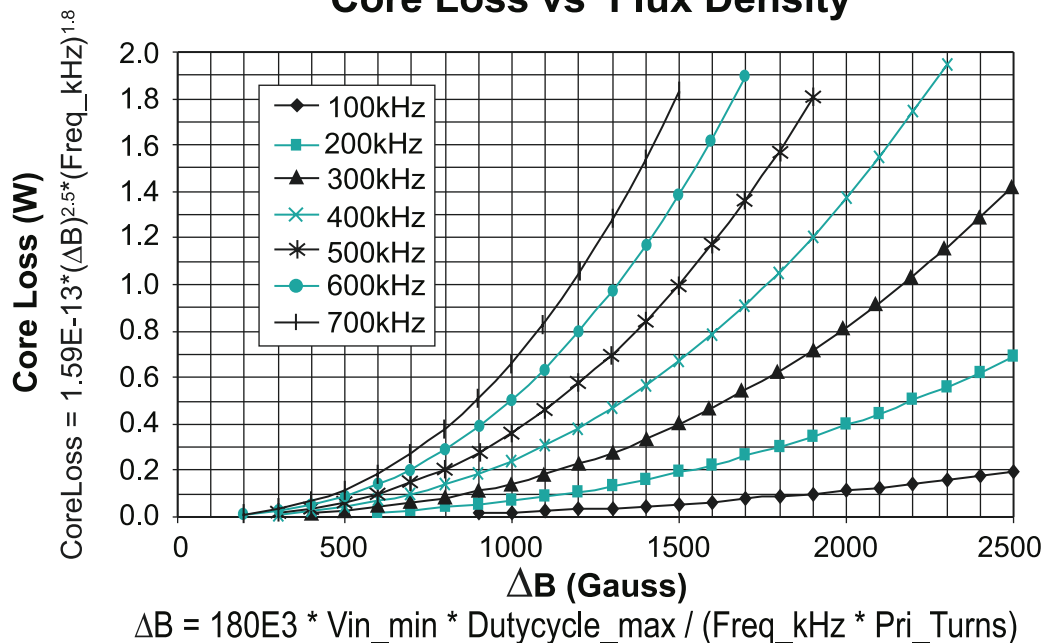


Notes:

1. Inductance is measured with both primary windings connected in services (2 to 5, with 3 and 4 shorted).
2. Leakage inductance is measured on winding (2-5) with (3-4) and (7, 8, 9, 10, 11) shorted.
3. The "NL" suffix indicates an RoHS-compliant part number.
4. It is possible to add a primary side aux. winding to any of the above configurations as shown in the schematics. Transformers with primary side aux. winding are non-standard and can be made available upon request. The primary aux. winding can be between 2 and 16 turns. To add a primary aux. winding to a given base, use the

- extension .xxx. For example, to add a 4T aux. winding to the base part number PH0801CNL, use the part number PH0801.004CNL. The height increases to 10.1mm MAX for PH0810.xxxCNL. For the other part numbers there is no change to the height..
5. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the complete number (i.e. **PH0801.009CNL** becomes **PH0801.009CNLT**).
 6. To determine if the transformer is suitable for your application, it is necessary to ensure that the temperature rise of the component (ambient plus temperature rise) not exceed its operating temperature. To determine the approximate temperature rise of the transformer, refer to the graphs below.

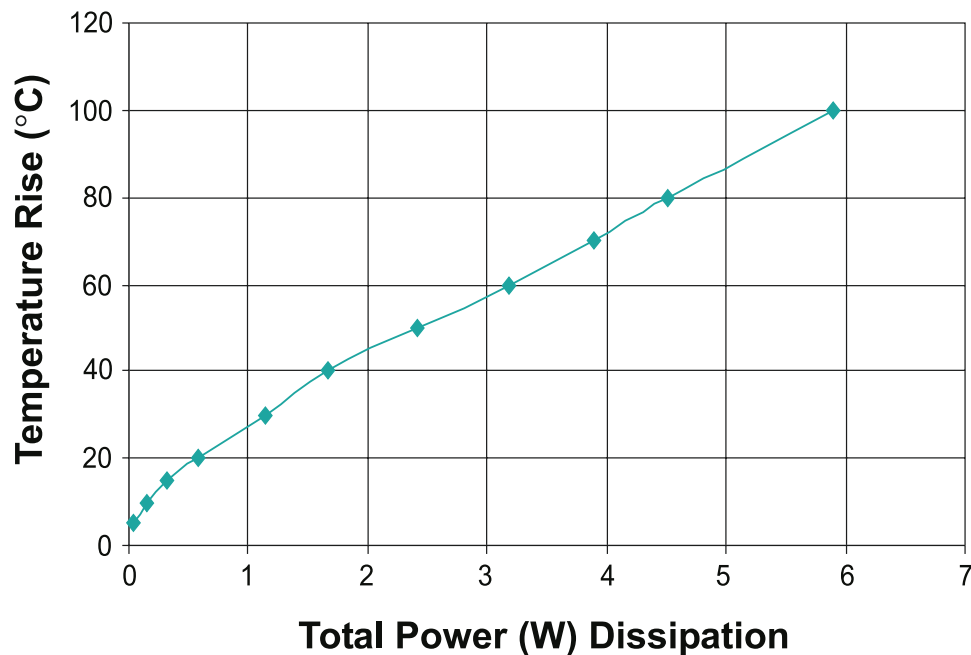
Core Loss vs Flux Density



HIGH FREQUENCY FLAT COIL PLANAR TRANSFORMERS

PH08XXCNL Series (up to 160W)

Temperature Rise vs. Power (W) Dissipation



For More Information

Pulse Worldwide Headquarters

15255 Innovation Drive Ste 100
San Diego, CA 92128
U.S.A.

Pulse Europe

Pulse Electronics GmbH
Am Rottland 12
58540 Meinerzhagen
Germany

Pulse China Headquarters

Pulse Electronics (ShenZhen) CO., LTD
D708, Shenzhen Academy of
Aerospace Technology,
The 10th Keji South Road,
Nanshan District, Shenzhen,
P.R. China 518057

Pulse North China

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

Pulse South Asia

3 Fraser Street
0428 DUO Tower
Singapore 189352

Pulse North Asia

1F., No.111 Xiyuan Rd
Zhongli City
Taoyuan City 32057
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 2162786973

Tel: 65 6287 8998
Fax: 65 6280 0080

Tel: 886 3 4356768
Fax: 886 3 4356820

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, 2018. Pulse Electronics, Inc. All rights reserved.