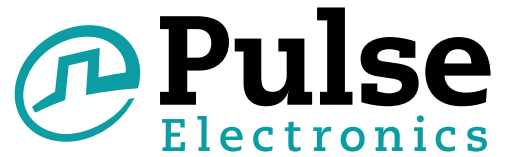


HIGH FREQUENCY WIRE WOUND TRANSFORMERS

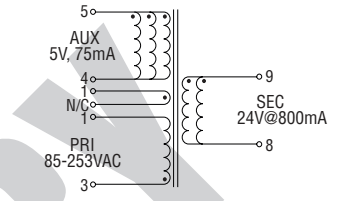
EI22 Platforms - THT



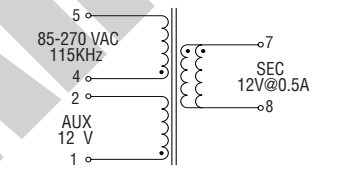
- AC/DC and DC/DC Switching Transformers
- Reinforced Insulation
- 3000Vrms Hi-Pot
- Topology: Flyback
- Custom Design Available

Electrical Specifications @ 25°C — Operating Temperature -40°C to 130°C¹

Part Number	Parameter	Winding	Value	Notes
PA2653NL	Pri. Inductance	(3 - 1)	910 $\mu\text{H} \pm 10\%$	
	Lk. Inductance	(3 - 1)	15 μH MAX	
		w/ (4, 5, 8, 9)	shorted	
	DCR	(3-1)	875	m Ω Max
		(5-4)	17.5	
(9-8)		75		
Hi-Pot	Pri-Sec	3000	Vrms	
K1 Factor		3616.8		
PA2813NL	Pri. Inductance	(4 - 5)	1200 $\mu\text{H} \pm 10\%$	
	Lk. Inductance	(4 - 5)	20 μH MAX	
		w/ (1, 2, 7, 8)	shorted	
	DCR	(4-5)	2500	m Ω Max
		(1-2)	200	
(7-8)		60		
Hi-Pot	Pri-Sec	3000	Vrms	
K1 Factor		5148		



CM - FLYBACK TRANSFORMER



FLYBACK TRANSFORMER

NOTES:

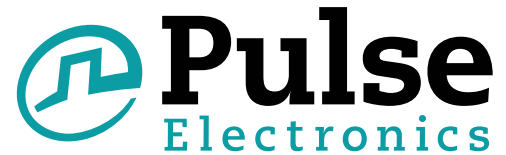
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- The above transformers and inductors have been tested and approved by Pulse's power IC partners and are sited in the appropriate datasheet or evaluation board documentation at these companies. To determine which IC and IC partners are matched with the above Pulse part numbers please consult the IC Cross Reference on the Pulse website.
- For flyback topology applications, it is necessary to ensure that the transformer will not saturate in the application. The peak flux density (Bpk) should remain below 2700Gauss. To calculate the peak flux density use the following formula:

$$\text{Bpk (Gauss)} = \text{K1_Factor} * \text{Ipk(A)}$$
- In high volt- μsec applications, it is important to calculate the core loss of the transformer. Approximate transformer core loss can be calculated as:

$$\text{CoreLoss (W)} = 4.1769 \times 10^{-7} \times (\text{Freq_kHz})^{1.62} \times (\text{DB_Gauss})^{2.65}$$
 where DB can be calculated as:
 For Flyback Topology: $\text{DB} = \text{K1_Factor} * \text{D(A)}$
 For Forward Topology: $\text{DB} = \text{K1_Factor} * \text{Volt-}\mu\text{sec}$
- The "NL" suffix indicates an RoHS-compliant part number. Non-NL suffixed parts are not necessarily RoHS compliant, but are electrically and mechanically equivalent to NL versions. If a part number does not have the "NL" suffix, but an RoHS compliant version is required, please contact Pulse for availability.

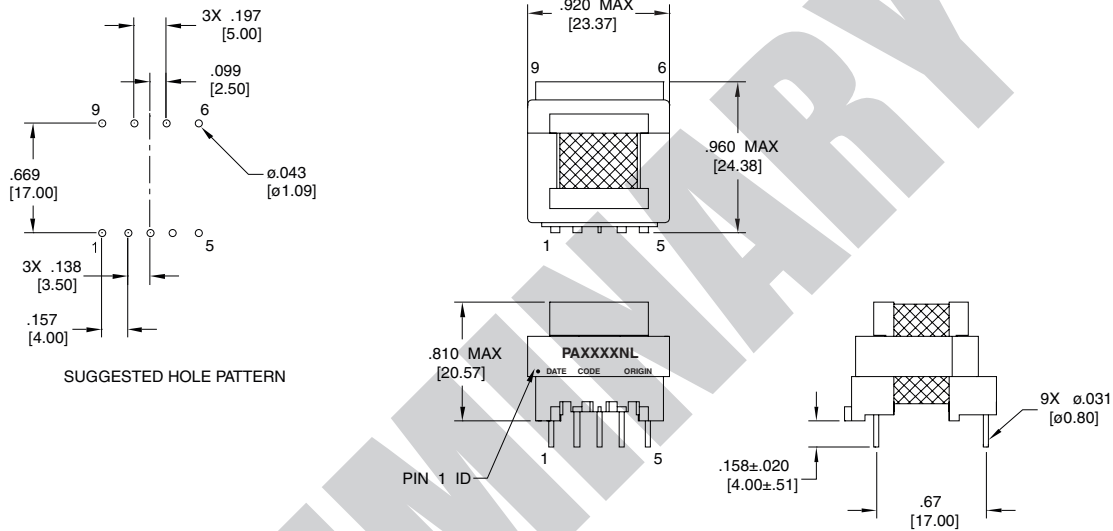
HIGH FREQUENCY WIRE WOUND TRANSFORMERS

EI22 Platforms - THT



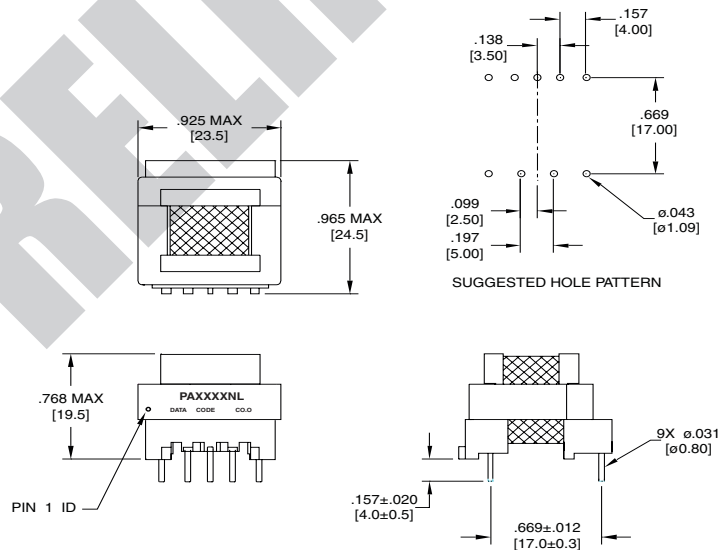
Mechanical

PA2653NL



Mechanical

PA2813NL



For More Information:

Pulse North America Headquarters
12220 World Trade Dr.
San Diego, CA 92128
U.S.A.

Pulse European Headquarters
Einsteinstrasse 1
D-71083 Herrenberg
Germany

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

Pulse North China
Room 1503
XinYin Building
No. 888 YiShan Rd.
Shanghai 200233
China

Pulse South Asia
150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324

Pulse North Asia
No. 26
Kao Ching Rd.
Yang Mei Chen
Taoyuan Hsien
Taiwan, R. O. C.
32667

TEL: 858 674 8100
FAX: 858 674 8262

TEL: 49 7032 7806 0
FAX: 49 7032 7806 12

TEL: 86 755 33966678
FAX: 86 755 33966700

TEL: 86 21 32181071
FAX: 86 21 32181396

TEL: 65 6287 8998
FAX: 65 6280 0080

TEL: 886 3 4643715
FAX: 886 3 4641911

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