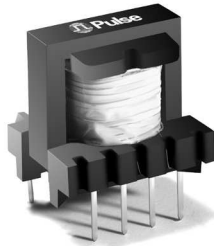
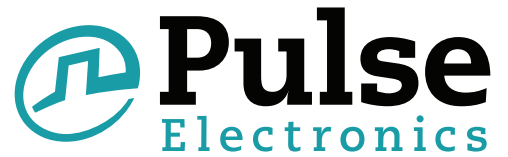


# HIGH FREQUENCY WIRE WOUND TRANSFORMERS

## EE16 Platforms - THT Vertical



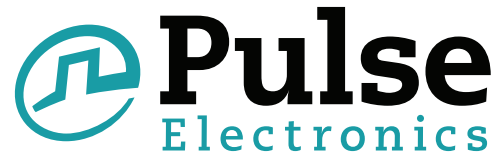
- AC/DC and DC/DC Switching Transformers
- Reinforced Insulation
- 3000Vrms Hi-pot
- Power Range: Up to 60W
- Height: 18.0mm Max
- Footprint: 18.2mm x 16.0mm Max
- Topology: Flyback

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

PA1931NL	Pri. Inductance	(7-5)	3200.0μH ±10%	<p><b>FLYBACK TRANSFORMER</b></p>
	Lk. Inductance	(7-5) with (1-4) shorted	56μH MAX	
	DCR	(7-5)	6400mΩ MAX	
		(4-1)	20mΩ MAX	
		(10-9)	360mΩ MAX	
	Hi-Pot	Pri-Sec	3000 Vrms	
K1 Factor	14692.4			
PA2115NL	Pri. Inductance	(2-1)	1000μH ±15%	<p><b>FLYBACK TRANSFORMER</b></p>
	Lk. Inductance	(2-1) with (3,4,5,6,9,10) shorted	40μH MAX	
	DCR	(2-1)	3220mΩ MAX	
		(3-4)	210mΩ MAX	
		(5-6)	70mΩ MAX	
		(10-9)	80mΩ MAX	
Hi-Pot	Pri-Sec	3000 Vrms		
K1 Factor	5611.7			
PA2517NL	Pri. Inductance	(7-5)	1200.0μH ±10%	<p><b>FLYBACK TRANSFORMER</b></p>
	Lk. Inductance	(7-5) with (1,4,9,10) shorted	30μH MAX	
	DCR	(7-5)	4950mΩ MAX	
		(4-1)	57.5mΩ MAX	
		(10-9)	915mΩ MAX	
	Hi-Pot	Pri-Sec	3000 Vrms	
K1 Factor	5509.6			
PA2531NL	Pri. Inductance	(1-4)	4.5μH ±12%	<p><b>FLYBACK TRANSFORMER</b></p>
	Lk. Inductance	(1-4) with (9-6) shorted	0.21μH MAX	
	DCR	(1-4)	142mΩ MAX	
		(9-6)	73mΩ MAX	
		Pri-Sec	4000 Vrms	
		71.0		
PA2621NL	Pri. Inductance	(5-7)	1000μH ±10%	<p><b>FLYBACK TRANSFORMER</b></p>
	Lk. Inductance	(5-7) with (4,3,2,1) shorted	17μH MAX	
	DCR	(5-7)	2430mΩ MAX	
		(4-3)	260mΩ MAX	
		(2-1)	82mΩ MAX	
		(9-10)	89mΩ MAX	
	Hi-Pot	Pri-Sec	4000 Vrms	
K1 Factor	6313.1			

# HIGH FREQUENCY WIRE WOUND TRANSFORMERS

## EE16 Platforms - THT Vertical



(continued)

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

PA2655NL	Pri. Inductance	(1-4)	3100 μH ±10%	
	Lk. Inductance	(1-4) (8,7,6,5)	62μH MAX	
	DCR	(1-4)	4200mΩ MAX	
		(5-6)	64mΩ MAX	
		(7-8)	105mΩ MAX	
	Hi-Pot	Pri-Sec	3000 Vrms	
K1 Factor	9687.0			

DM 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:  

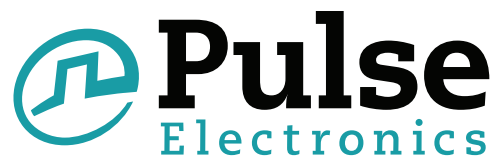
$$B_{pk} \text{ (Gauss)} = K1\_Factor * I_{pk}(A)$$
- In high volt-μsec applications, it is important to calculate the core loss of the transformer. Approximate transformer core loss can be calculated as:  

$$CoreLoss \text{ (W)} = 3.6E-14 * (Freq\_kHz)^{1.63} * (\Delta B\_Gauss)^{2.63}$$
 where ΔB can be calculated as:  
 For Flyback Topology:  $\Delta B = K1\_Factor * \Delta(A)$   
 For Forward Topology:  $\Delta B = K1\_Factor * Volt\text{-}\mu sec$
- 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.

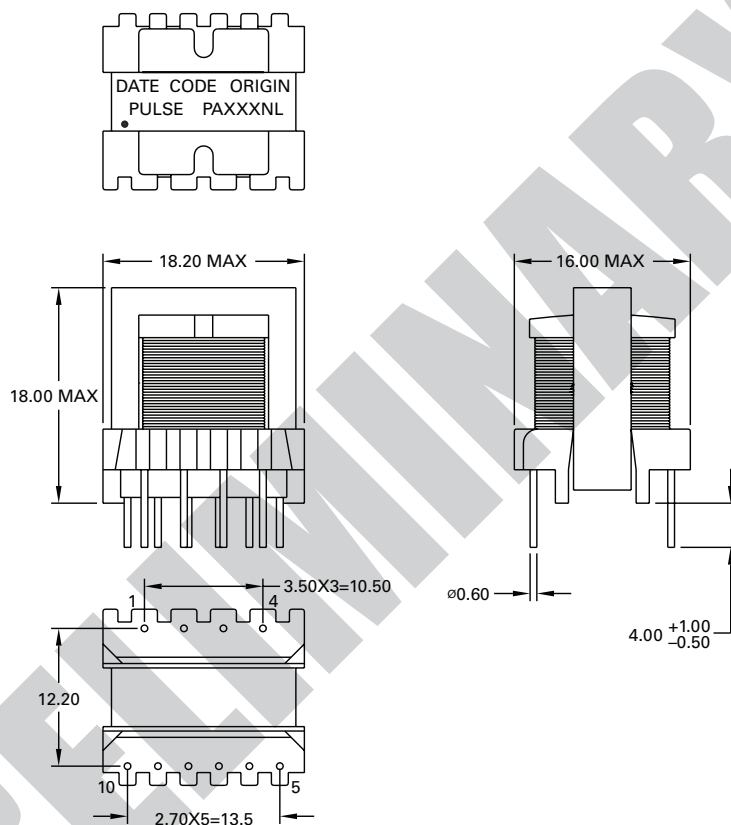
PRELIMINARY

# HIGH FREQUENCY WIRE WOUND TRANSFORMERS

## EE16 Platforms - THT Vertical



### Mechanical



### 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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