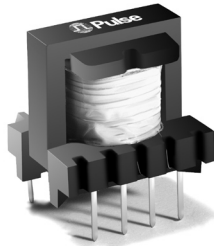


HIGH FREQUENCY WIRE WOUND TRANSFORMERS

EE16 Platforms - THT Vertical



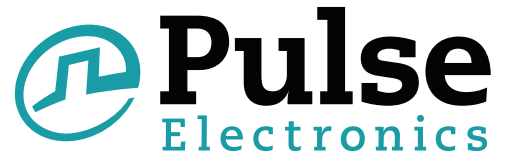
- AC/DC and DC/DC Switching Transformers
- Reinforced Insulation
- 3000Vrms Hi-pot
- Power Range: Up to 60W
- Height: 18.0mm Max
- Footprint: 18.2mm x 16.0mm Max
- Topology: Flyback

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

PA1931NL	Pri. Inductance	(7-5)	3200.0μH ±10%	<p>FLYBACK TRANSFORMER</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>FLYBACK TRANSFORMER</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>FLYBACK TRANSFORMER</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>FLYBACK TRANSFORMER</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>FLYBACK TRANSFORMER</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 μ H \pm 10%	
	Lk. Inductance	(1-4) (8,7,6,5)	62 μ H MAX	
	DCR	(1-4)	4200m Ω MAX	
		(5-6)	64m Ω MAX	
		(7-8)	105m Ω MAX	
	Hi-Pot	Pri-Sec	3000 Vrms	
K1 Factor	9687.0			

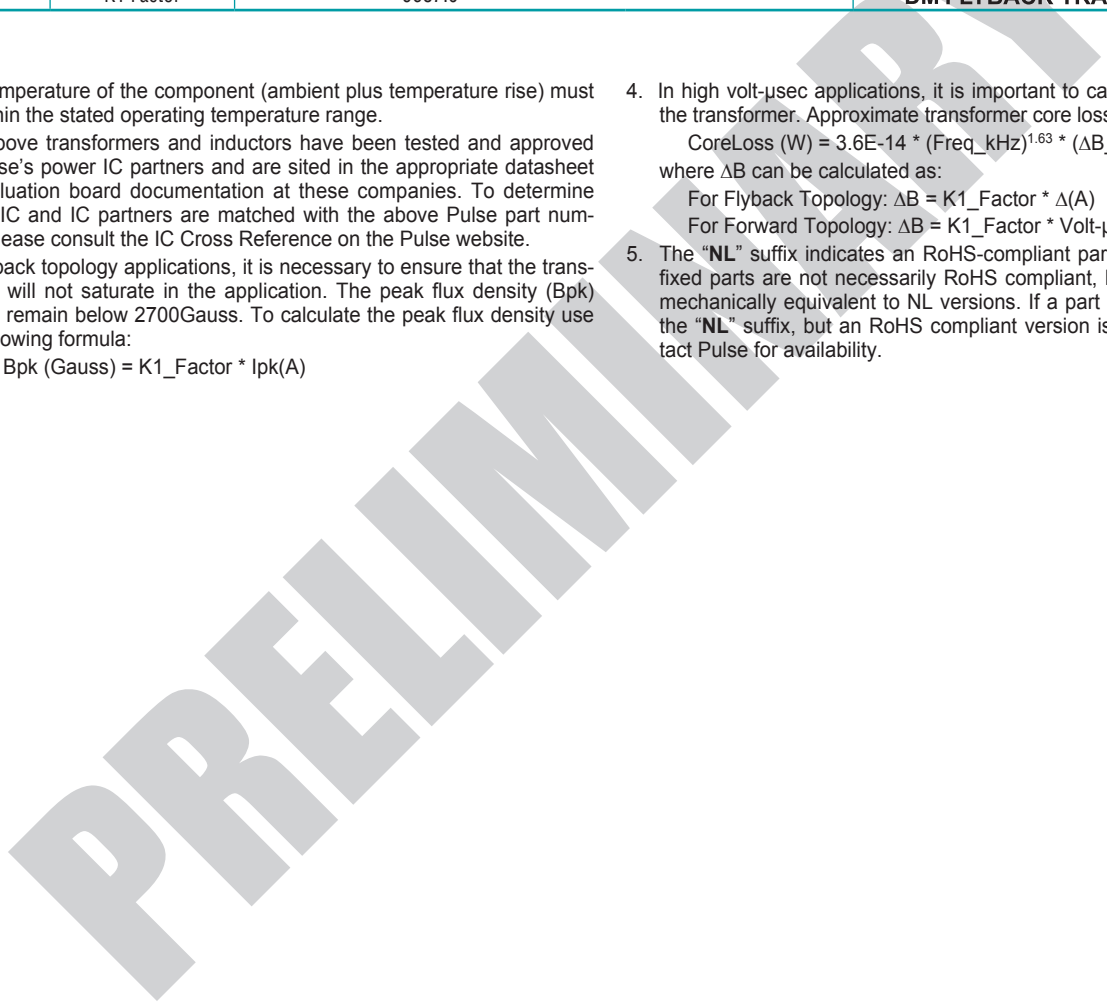
DM FLYBACK TRANSFORMER

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:

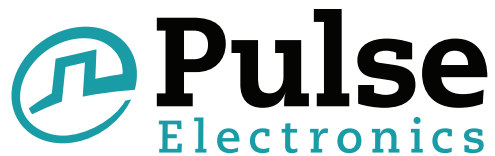
$$B_{pk} \text{ (Gauss)} = K1_Factor * I_{pk}(A)$$
- In high volt- μ sec applications, it is important to calculate the core loss of the transformer. Approximate transformer core loss can be calculated as:

$$CoreLoss \text{ (W)} = 3.6E-14 * (Freq_kHz)^{1.63} * (\Delta B_Gauss)^{2.63}$$
 where ΔB can be calculated as:
 For Flyback Topology: $\Delta B = K1_Factor * \Delta(A)$
 For Forward Topology: $\Delta B = K1_Factor * Volt\text{-}\mu\text{sec}$
- 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.

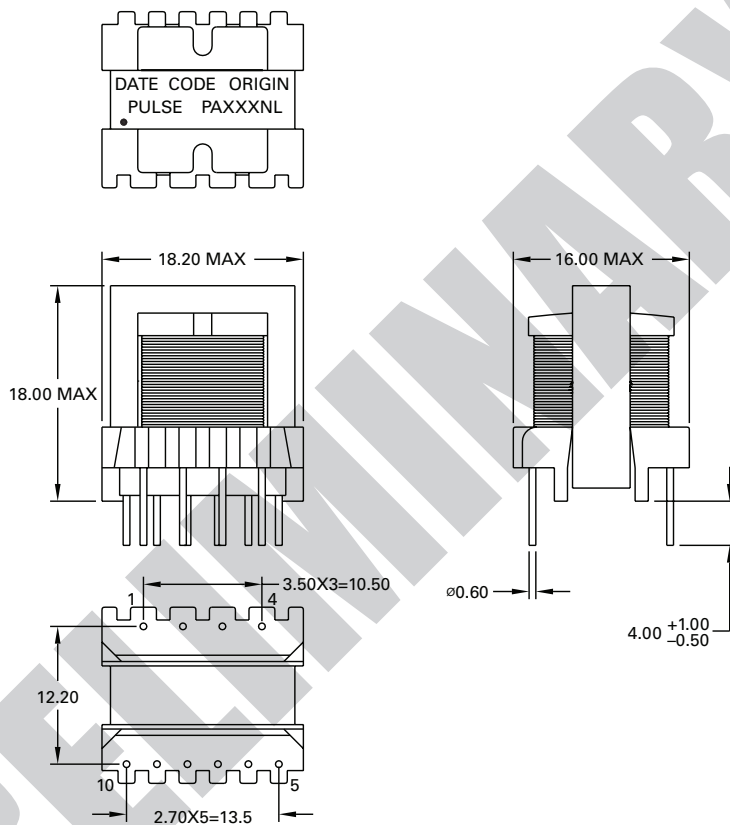


HIGH FREQUENCY WIRE WOUND TRANSFORMERS

EE16 Platforms - THT Vertical



Mechanical



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