HIGH FREQUENCY WIRE WOUND TRANSFORMERS El22 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°C ¹									
PA2653NL	Pri. Inductance	(3 - 1)	910 µH ± 10%	50,000					
	Lk. Inductance	(3 - 1)	15 µH MAX	AUX 5V, 75mA					
	w/	(4, 5, 8, 9)	shorted	4					
		(3-1)	875	N/C SEC 24V@800mA					
	DCR	(5-4)	17.5 m Ω Max	$\langle \rangle \rangle$					
		(9-8)	75	PRI 85-253VAC					
	Hi-Pot	Pri-Sec	3000 Vrms	30					
	K1 Factor	3616.8							
PA2813NL	Pri. Inductance	(4 - 5)	1200 µH ± 10%						
	Lk. Inductance	(4 - 5)	20 µH MAX	85-270 VAC					
	w/	(1, 2, 7, 8)	shorted	115KHz \\(• • •					
		(4-5)	2500	4					
	DCR	(1-2)	200 m Ω Max	AUX 12 V					
		(7-8)	60						
	Hi-Pot	Pri-Sec	3000 Vrms	FLYBACK TRANSFORMER					
	K1 Factor	5148							

NOTES:

- 1. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- 2. 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 andIC partners are matched with the above Pulse part numbers please consult the IC Cross Reference on the Pulse website.
- 3. 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:

Bpk (Gauss) = K1_Factor * Ipk(A)

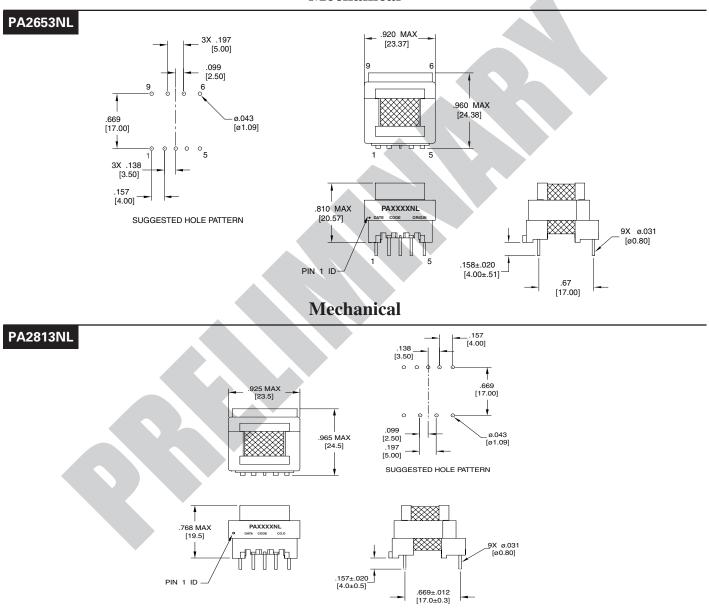
4. In high volt-usec applications, it is important to calculate the core loss of the transformer. Approximate transformer core loss can be calculated as: CoreLoss (W) = 4.1769x10 ⁻⁷ x(Freq_kHz)^{^1.62} x (DB_Gauss)^{^2.65} where DB can be calculated as:

- For Flyback Topology: $DB = K1_Factor * D(A)$
- For Forward Topology: DB = K1 Factor * Volt-usec
- 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.

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Mechanical



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