# High Frequency Wire Wound Transformers

EFD15+ Flyback Transformer Platform - PAT6261.XXXNL Series









@ Height: 10.5mm Max

Footprint: 16.5mm x 22.23mmTopology: Flyback transformer

Functional Insulation

Isolation voltage: 1500Vrms (hi-pot)

Operating Frequency: 250kHz

Pulse PN	E	lectrical Specifications @25°C — Operating Temperature -4	0°C to 125°C¹	Schematic
PAT6261.001NL	Pri. Inductance	(1, 2 - 3, 4)	24 μH ± 10%	1,20
	Lk. Inductance	(1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted	1.5 µH max	33-57V <sub>18</sub>
	DCR	(1, 2 - 3, 4)	$80\mathrm{m}\Omega$ max	3,40
		(5 -6)	420 m $\Omega$ max	5 0 12,11,10
		(12, 11, 10 - 7, 8, 9)	$5.3\mathrm{m}\Omega\mathrm{max}$	10.7V@50mA }
	Hi-Pot	Pri - Sec	1500 Vrms	8 3    2
	K1 Factor	614		
PAT6261.002NL	Pri. Inductance	(1, 2 - 3, 4)	24 μH ± 10%	1,2 O 33-57V 18
	Lk. Inductance	(1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted	1.3 µH max	
	DCR	(1, 2 - 3, 4)	$80\mathrm{m}\Omega\mathrm{max}$	
		(5 -6)	370 mΩ max	3,40 5* 0 12,11,10
		(12, 11, 10 - 7, 8, 9)	6.3 mΩ max	
	Hi-Pot	Pri - Sec	1500 Vrms	11.5V@50mA
	K1 Factor	614		6 0 7,8,9
	Pri. Inductance	(1, 2 - 3, 4)	24 μH ± 10%	1,20
PAT6261.003NL	Lk. Inductance	(1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted	1 μH max	33-57V 10
		(1, 2 - 3, 4)	$80\text{m}\Omega$ max	18 \
	DCR	(5 -6)	370 m $\Omega$ max	3,40 O 12,11,10
		(12, 11, 10 - 7, 8, 9)	$30\text{m}\Omega$ max	10.6V@50mA
	Hi-Pot	Pri - Sec	1500 Vrms	7 \    \ / \
	K1 Factor	614		6 0 7,8,9
PAT6261.004NL	Pri. Inductance	(1, 2 - 3, 4)	3 μH ± 10%	1,20
	Lk. Inductance	(1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted	0.2 µH max	9–57V
	DCR	(1, 2 - 3, 4)	15 m $\Omega$ max	6
		(5 -6)	420 m $\Omega$ max	3,40 5° 0 12,11,10
		(12, 11, 10 - 7, 8, 9)	$5\text{m}\Omega$ max	10 500 50 04
	Hi-Pot	Pri - Sec	1500 Vrms	12.5V@50MA 8
	K1 Factor	230		

PulseElectronics.com P931.C (07/23)

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Pulse PN	El	ectrical Specifications @25°C — Operating Temperature -	Schematic	
	Pri. Inductance	(1, 2 - 3, 4)	3 μH ± 10%	1,20
	Lk. Inductance	(1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted	0.2 μH max	9-57V
		(1, 2 - 3, 4)	12.5 m $\Omega$ max	6
PAT6261.005NL	DCR	(5 -6)	450 m $\Omega$ max	3,40 5 0 12,11,10
		(12, 11, 10 - 7, 8, 9)	5.5 m $\Omega$ max	- 12.5V@50mA 8 5.0V@6.5A
	Hi-Pot	Pri - Sec	1500 Vrms	
	K1 Factor	230		6 0 7,8,9
PAT6261.006NL	Pri. Inductance	(1, 2 - 3, 4)	3 μH ± 10%	1,20
	Lk. Inductance	(1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted	0.2 μH max	9-57 V
		(1, 2 - 3, 4)	15 m $\Omega$ max	6
	DCR	(5 -6)	375 m $\Omega$ max	3,40 5 0 12.5 V @ 50 mA 6 0 0 12,11,10 6 12.0 V @ 3.3 A 0 7,8,9
		(12, 11, 10 - 7, 8, 9)	25 m $\Omega$ max	
	Hi-Pot	Pri - Sec	1500 Vrms	
	K1 Factor	230		

#### Notes:

- 1. Storage Temperature: -40°C to 125°C
- 2. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- 3. Pri/Lk. Inductance value is measured at 100Khz/0.1Vrms.
- 4. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. (PAT6261.XXXNL becomes PAT6261.XXXNLT). Pulse complies with industry standard tape and reel specification EIA481.
- 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 \* lpk(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 (W) =  $4.6E-14 * (Freq_kHz)^{1.63} * (\triangle B_Gauss)^{2.63}$ 

where  $\triangle B$  can be calculated as:

For Flyback Topology:  $\triangle B = K1_Factor * \triangle(A)$ 

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# High Frequency Wire Wound Transformers

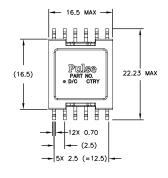
EFD15+ Flyback Transformer Platform - PAT6261.XXXNL Series

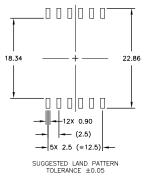
### PAT6261.XXXNL

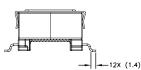
10.5 MAX

#### Mechanical

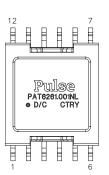
□ 0.15







#### **Final Outline**



#### **For More Information:**

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