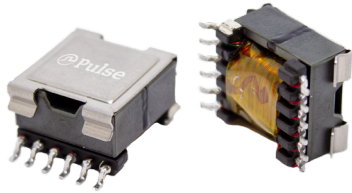


High Frequency Wire Wound Transformers

EFD15+ Flyback Transformer Platform – PAT6261.XXXNL Series



- Ⓢ **Height:** 10.5mm Max
- Ⓢ **Footprint:** 16.5mm x 22.23mm
- Ⓢ **Topology:** *Flyback transformer*
- Ⓢ **Functional Insulation**
- Ⓢ **Isolation voltage:** 1500Vrms (hi-pot)
- Ⓢ **Operating Frequency:** 250kHz

| Pulse PN | Electrical Specifications @25°C – Operating Temperature -40°C to 125°C | | | Schematic |
|---------------|--|---|---------------------------|-----------|
| PAT6261.001NL | Pri. Inductance | (1, 2 - 3, 4) | 24 $\mu\text{H} \pm 10\%$ | |
| | Lk. Inductance | (1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted | 1 μH max | |
| | DCR | (1, 2 - 3, 4) | 80 $\text{m}\Omega$ max | |
| | | (5 - 6) | 420 $\text{m}\Omega$ max | |
| | | (12, 11, 10 - 7, 8, 9) | 5.3 $\text{m}\Omega$ max | |
| Hi-Pot | Pri - Sec | 1500 Vrms | | |
| PAT6261.002NL | Pri. Inductance | (1, 2 - 3, 4) | 24 $\mu\text{H} \pm 10\%$ | |
| | Lk. Inductance | (1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted | 1 μH max | |
| | DCR | (1, 2 - 3, 4) | 70 $\text{m}\Omega$ max | |
| | | (5 - 6) | 370 $\text{m}\Omega$ max | |
| | | (12, 11, 10 - 7, 8, 9) | 6.3 $\text{m}\Omega$ max | |
| Hi-Pot | Pri - Sec | 1500 Vrms | | |
| PAT6261.003NL | Pri. Inductance | (1, 2 - 3, 4) | 24 $\mu\text{H} \pm 10\%$ | |
| | Lk. Inductance | (1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted | 1 μH max | |
| | DCR | (1, 2 - 3, 4) | 70 $\text{m}\Omega$ max | |
| | | (5 - 6) | 370 $\text{m}\Omega$ max | |
| | | (12, 11, 10 - 7, 8, 9) | 28 $\text{m}\Omega$ max | |
| Hi-Pot | Pri - Sec | 1500 Vrms | | |
| PAT6261.004NL | Pri. Inductance | (1, 2 - 3, 4) | 3 $\mu\text{H} \pm 10\%$ | |
| | Lk. Inductance | (1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted | 0.2 μH max | |
| | DCR | (1, 2 - 3, 4) | 10 $\text{m}\Omega$ max | |
| | | (5 - 6) | 420 $\text{m}\Omega$ max | |
| | | (12, 11, 10 - 7, 8, 9) | 3.50 $\text{m}\Omega$ max | |
| Hi-Pot | Pri - Sec | 1500 Vrms | | |

High Frequency Wire Wound Transformers

EFD15+ Flyback Transformer Platform – PAT6261.XXXNL Series



| Pulse PN | Electrical Specifications @25°C – Operating Temperature -40°C to 125°C | | | Schematic |
|---------------|--|---|---------------------|-----------|
| PAT6261.005NL | Pri. Inductance | (1, 2 - 3, 4) | 3 μ H \pm 10% | |
| | Lk. Inductance | (1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted | 0.2 μ H max | |
| | DCR | (1, 2 - 3, 4) | 10 m Ω max | |
| | | (5 - 6) | 450 m Ω max | |
| | | (12, 11, 10 - 7, 8, 9) | 4.20 m Ω max | |
| Hi-Pot | Pri - Sec | 1500 Vrms | | |
| PAT6261.006NL | Pri. Inductance | (1, 2 - 3, 4) | 3 μ H \pm 10% | |
| | Lk. Inductance | (1, 2 - 3, 4) with (12, 11, 10 - 7, 8, 9) shorted | 0.2 μ H max | |
| | DCR | (1, 2 - 3, 4) | 12 m Ω max | |
| | | (5 - 6) | 375 m Ω max | |
| | | (12, 11, 10 - 7, 8, 9) | 8 m Ω max | |
| Hi-Pot | Pri - Sec | 1500 Vrms | | |

Notes:

- Storage Temperature: -40°C to 125°C
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- Pri/Lk. Inductance value is measured at 100Khz/0.1Vrms.
- 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:

$$B_{pk} \text{ (Gauss)} = K1_Factor * I_{pk}(A)$$
- 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:

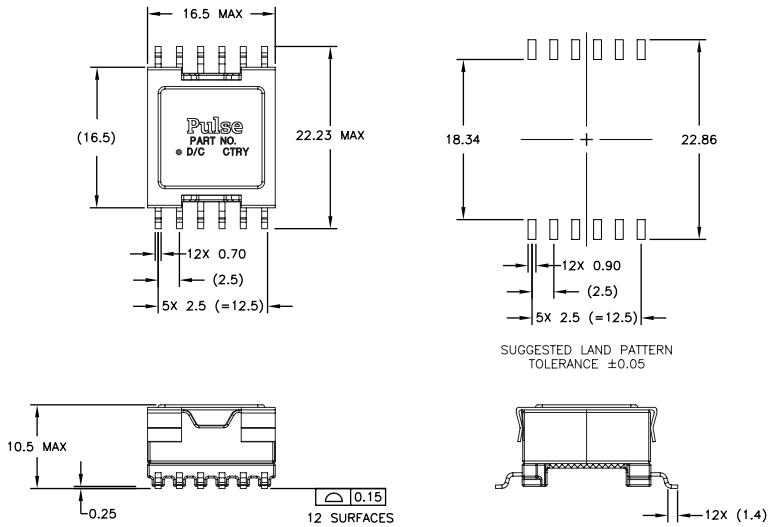
$$CoreLoss \text{ (W)} = 4.6E-14 * (Freq_kHz)^{1.63} * (\Delta B_Gauss)^{2.63}$$
 where ΔB can be calculated as:
 For Flyback Topology: $\Delta B = K1_Factor * \Delta(A)$
- For parties interested in K1 Factor values please contact Pulse Electronics.

High Frequency Wire Wound Transformers

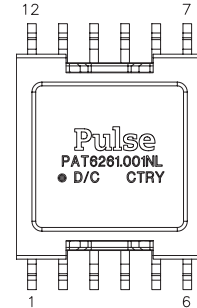
EFD15+ Flyback Transformer Platform – PAT6261.XXXNL Series

PAT6261.XXXNL

Mechanical



Final Outline



For More Information:

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