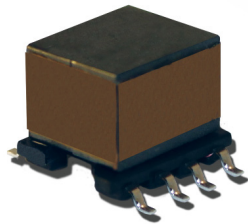


# High Frequency Wire Wound Transformers

EP7 Platforms - SMT



- Power Range:** up to 5W
- Height:** 9.27mm Max
- Footprint:** 13.34mm x 10.7mm Max
- Topology:** Forward and Flyback

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>3</sup>

| Model    | Parameter       | Configuration                   | Value       | Notes                      |
|----------|-----------------|---------------------------------|-------------|----------------------------|
| PA1130NL | Pri. Inductance | (3-4)                           | 500µH ± 10% | <p>FLYBACK TRANSFORMER</p> |
|          | Lk. Inductance  | (3-4) with (8, 7, 6, 5) shorted | 8µH MAX     |                            |
|          | DCR             | (3-4)                           | 1750mΩ MAX  |                            |
|          |                 | (6, 5-8, 7)                     | 15mΩ MAX    |                            |
|          | Hi-Pot          | Pri-Sec                         | 1500Vrms    |                            |
|          | K1 Factor       |                                 | 9735.2      |                            |
| PA1131NL | Pri. Inductance | (3-4)                           | 500µH ± 10% | <p>FLYBACK TRANSFORMER</p> |
|          | Lk. Inductance  | (3-4) with (8, 7, 6, 5) shorted | 7.5µH MAX   |                            |
|          | DCR             | (3-4)                           | 1750mΩ MAX  |                            |
|          |                 | (6, 5-8, 7)                     | 35mΩ MAX    |                            |
|          | Hi-Pot          | Pri-Sec                         | 1500Vrms    |                            |
|          | K1 Factor       |                                 | 9735.2      |                            |
| PA1132NL | Pri. Inductance | (3-4)                           | 521µH ± 10% | <p>FLYBACK TRANSFORMER</p> |
|          | Lk. Inductance  | (3-4) with (8, 7, 6, 5) shorted | 7.5 µH MAX  |                            |
|          | DCR             | (3-4)                           | 1750mΩ MAX  |                            |
|          |                 | (6, 5-8, 7)                     | 100mΩ MAX   |                            |
|          | Hi-Pot          | Pri-Sec                         | 1500Vrms    |                            |
|          | K1 Factor       |                                 | 9937.1      |                            |

# High Frequency Wire Wound Transformers

EP7 Platforms - SMT

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C <sup>5</sup> |                 |                                       |                        |  |
|---|-----------------|---------------------------------------|------------------------|--|
| PA1279NL  | Pri. Inductance | (3-4)                                 | 310 $\mu$ H $\pm$ 10%  |  |
|   | Lk. Inductance  | (3-4) with (8, 7, 6, 5) shorted       | 5 $\mu$ H MAX          |  |
|   | DCR             | (3-4)                                 | 1600m $\Omega$ MAX     |  |
|   |                 | (6, 5-8, 7)                           | 45 m $\Omega$ MAX      |  |
|   |                 | (2-1)                                 | 2600 m $\Omega$ MAX    |  |
|   | Hi-Pot          | Pri-Sec                               | 1500Vrms               |  |
|   | K1 Factor       |                                       | 6584.5                 |  |
|   |                 |                                       | FLYBACK TRANSFORMER    |  |
| PA1280NL  | Pri. Inductance | (3-4)                                 | 310 $\mu$ H $\pm$ 10%  |  |
|   | Lk. Inductance  | (3-4) with (8, 7, 6, 5) shorted       | 5 $\mu$ H MAX          |  |
|   | DCR             | (3-4)                                 | 1600 m $\Omega$ MAX    |  |
|   |                 | (6, 5-8, 7)                           | 87 m $\Omega$ MAX      |  |
|   |                 | (2-1)                                 | 2650 m $\Omega$ MAX    |  |
|   | Hi-Pot          | Pri-Sec                               | 1500Vrms               |  |
|   | K1 Factor       |                                       | 6584.5                 |  |
|   |                 |                                       | FLYBACK TRANSFORMER    |  |
| PA1281NL  | Pri. Inductance | (3-4)                                 | 310 $\mu$ H $\pm$ 10%  |  |
|   | Lk. Inductance  | (3-4) with (8, 7, 6, 5) shorted       | 5 $\mu$ H MAX          |  |
|   | DCR             | (3-4)                                 | 1600 m $\Omega$ MAX    |  |
|   |                 | (6, 5-8, 7)                           | 550 m $\Omega$ MAX     |  |
|   |                 | (2-1)                                 | 2600 m $\Omega$ MAX    |  |
|   | Hi-Pot          | Pri-Sec                               | 1500Vrms               |  |
|   | K1 Factor       |                                       | 6584.5                 |  |
|   |                 |                                       | FLYBACK TRANSFORMER    |  |
| PA1825NL  | Pri. Inductance | (8-1)                                 | 24.5 $\mu$ H $\pm$ 10% |  |
|   | Lk. Inductance  | (8-1) with (2, 3, 4, 5, 6, 7) shorted | 110 $\mu$ H MAX        |  |
|   | DCR             | (8-1)                                 | 50 m $\Omega$ MAX      |  |
|   |                 | (7-2)                                 | 50 m $\Omega$ MAX      |  |
|   |                 | (6-3)                                 | 110 m $\Omega$ MAX     |  |
|   |                 | (5-4)                                 | 160 m $\Omega$ MAX     |  |
|   | Hi-Pot          | Pri-Sec                               | 600 Vdc                |  |
|   | K1 Factor       |                                       | 1635.5                 |  |
|   |                 |                                       | FLYBACK TRANSFORMER    |  |

# High Frequency Wire Wound Transformers

EP7 Platforms - SMT

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C <sup>5</sup> |                 |                                 |              |                            |
|---|-----------------|---------------------------------|--------------|----------------------------|
| PA2571NL  | Pri. Inductance | (1-4)                           | 100µH ±25%   | <p>FORWARD TRANSFORMER</p> |
|   | DCR             | (1-4)                           | 85 mΩ MAX    |                            |
|   |                 | (5-7)                           | 8760 mΩ MAX  |                            |
|   |                 | (7-8)                           | 2200 mΩ MAX  |                            |
|   | Hi-Pot          | Pri-Sec                         | 500 Vrms     |                            |
| KI Factor   | 93.5            |                                 |              |                            |
| PA2617NL  | Pri. Inductance | (3-4)                           | 22.5 µH ±10% | <p>FLYBACK TRANSFORMER</p> |
|   | Lk. Inductance  | (3-4) with (5,7) shorted        | 0.6 µH MAX   |                            |
|   | DCR             | (3-4)                           | 100 mΩ MAX   |                            |
|   |                 | (5-7)                           | 200 mΩ MAX   |                            |
|   |                 | (2-1)                           | 110 mΩ MAX   |                            |
|   | Hi-Pot          | Pri-Sec                         | 1500 Vrms    |                            |
| KI Factor   | 1401.9          |                                 |              |                            |
| PA2626NL  | Pri. Inductance | (3-4)                           | 30 µH ±5%    | <p>FLYBACK TRANSFORMER</p> |
|   | Lk. Inductance  | (3-4) with (8, 7, 6, 5) shorted | 0.7 µH MAX   |                            |
|   | DCR             | (3-4)                           | 250 mΩ MAX   |                            |
|   |                 | (6, 5-8, 7)                     | 72 mΩ MAX    |                            |
|   |                 | (2-1)                           | 170 mΩ MAX   |                            |
|   | Hi-Pot          | Pri-Sec                         | 500 Vrms     |                            |
| KI Factor   | 1168.2          |                                 |              |                            |
| PA3018NL  | Pri. Inductance | (3-4)                           | 48.6µH ±5%   | <p>FLYBACK TRANSFORMER</p> |
|   | Lk. Inductance  | (3-4) with (8, 7, 6, 5) shorted | 0.9 µH MAX   |                            |
|   | DCR             | (3-4)                           | 250 mΩ MAX   |                            |
|   |                 | (6, 5-8, 7)                     | 35 mΩ MAX    |                            |
|   |                 | (2-1)                           | 130 mΩ MAX   |                            |
|   | Hi-Pot          | Pri-Sec                         | 500 Vdc      |                            |
| KI Factor   | 1892.5          |                                 |              |                            |

# High Frequency Wire Wound Transformers

EP7 Platforms - SMT

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C <sup>2</sup> |                 |                                       |                       |                            |
|---|-----------------|---------------------------------------|-----------------------|----------------------------|
| <b>PA3019NL</b>   | Pri. Inductance | (3-4)                                 | 47.2 $\mu$ H $\pm$ 5% | <p>FLYBACK TRANSFORMER</p> |
|   | Lk. Inductance  | (3-4) with (1, 2, 8, 7, 6, 5) shorted | 0.7 $\mu$ H MAX       |                            |
|   | DCR             | (3-4)                                 | 250 m $\Omega$ MAX    |                            |
|   |                 | (6, 5-8, 7)                           | 72 m $\Omega$ MAX     |                            |
|   |                 | (2-1)                                 | 170 m $\Omega$ MAX    |                            |
|   | Hi-Pot          | Pri-Sec                               | 500 Vrms              |                            |
| KI Factor   | 1838.0          |                                       |                       |                            |
| <b>PA3020NL</b>   | Pri. Inductance | (3-4)                                 | 56.7 $\mu$ H $\pm$ 5% | <p>FLYBACK TRANSFORMER</p> |
|   | Lk. Inductance  | (3-4) with (8, 7, 6, 5) shorted       | 0.98 $\mu$ H MAX      |                            |
|   | DCR             | (3-4)                                 | 400 m $\Omega$ MAX    |                            |
|   |                 | (6, 5-8, 7)                           | 200 m $\Omega$ MAX    |                            |
|   |                 | (2-1)                                 | 110 m $\Omega$ MAX    |                            |
|   | Hi-Pot          | Pri-Sec                               | 500 Vrms              |                            |
| KI Factor   | 1766.4          |                                       |                       |                            |
| <b>PA3021NL</b>   | Pri. Inductance | (3-4)                                 | 48.8 $\mu$ H $\pm$ 5% | <p>FLYBACK TRANSFORMER</p> |
|   | Lk. Inductance  | (3-4) with (8, 7, 6, 5) shorted       | 0.4 $\mu$ H MAX       |                            |
|   | DCR             | (3-4)                                 | 100m $\Omega$ MAX     |                            |
|   |                 | (6, 5-8, 7)                           | 200 m $\Omega$ MAX    |                            |
|   |                 | (2-1)                                 | 110 m $\Omega$ MAX    |                            |
|   | Hi-Pot          | Pri-Sec                               | 500 Vrms              |                            |
| KI Factor   | 3040.5          |                                       |                       |                            |

# High Frequency Wire Wound Transformers

EP7 Platforms - SMT

**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 and IC 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 density, use the following formula:  

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

$$CoreLoss \text{ (W)} = 2.5E-14 * (Freq\_kHz)^{1.63} * (\Delta B\_Gauss)^{2.63}$$

where  $\Delta B$  can be calculated as:

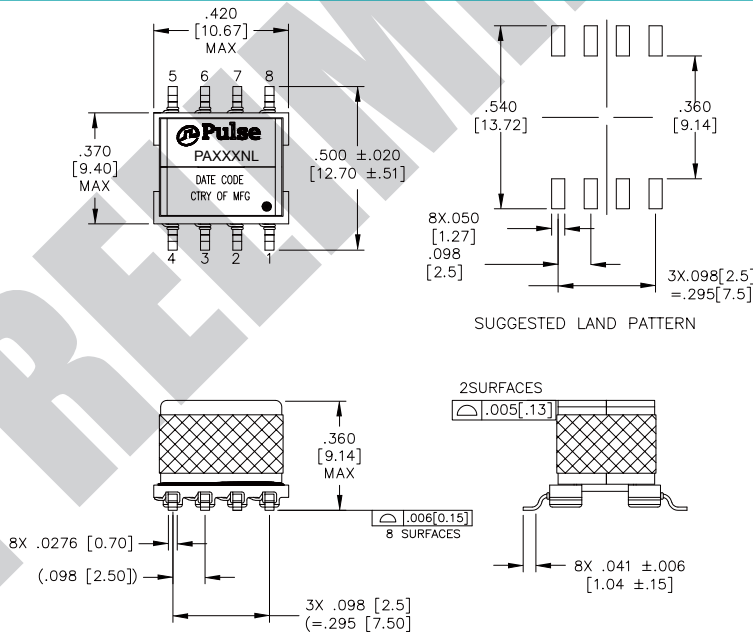
For Flyback Topology:  $\Delta B = K1\_Factor * (A)$

For Forward Topology:  $\Delta B = K1\_Factor * Volt\text{-}\mu sec$

5. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PA1130NL becomes PA1130NLT). Pulse complies with industry standard tape and reel specification EIA481. The tape and reel for this product has a width (W=24mm), pitch (Po=16mm) an depth (Ko=9.8mm).

## Mechanical

PAXXXNL



单击下面可查看定价，库存，交付和生命周期等信息

[>>Pulse\(普思\)](#)