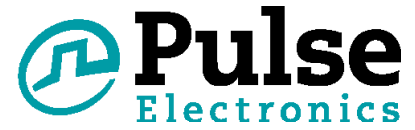




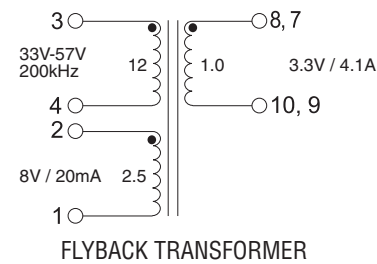
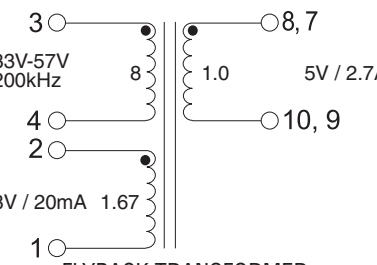
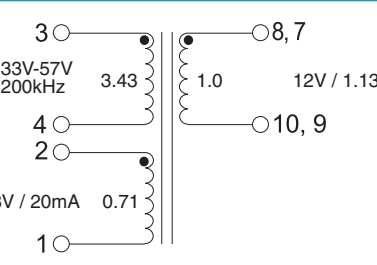
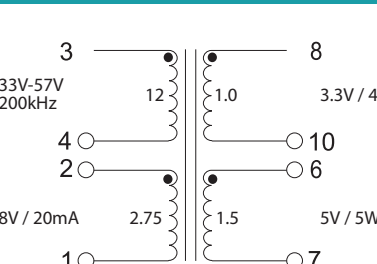


# High Frequency Wire Wound Transformers

EP13 Platforms - SMT



-  **Power Range:** up to 60W
-  **Height:** 12.7mm Max
-  **Footprint:** 17.7mm x 14.0mm Max
-  **Topology:** Forward and Flyback

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C <sup>5</sup> |                 |                                  |              |  |
|---|-----------------|----------------------------------|--------------|--|
| PA1136NL  | Pri. Inductance | (3-4)                            | 126.7µH ±10% |  <p>FLYBACK TRANSFORMER</p>   |
|   | Lk. Inductance  | (3-4) with (10, 9, 8, 7) shorted | 7.5µH MAX    |  |
|   | DCR             | (3-4)                            | 440mΩ MAX    |  |
|   |                 | (8, 7-10, 9)                     | 6mΩ MAX      |  |
|   |                 | (2-1)                            | 88mΩ MAX     |  |
|   | Hi-Pot          | Pri-Sec                          | 1500Vrms     |  |
| K1 Factor   | 1353.6          |                                  |              |  |
| PA1137NL  | Pri. Inductance | (3-4)                            | 126µH ±10%   |  <p>FLYBACK TRANSFORMER</p>  |
|   | Lk. Inductance  | (3-4) with (10, 9, 8, 7) shorted | 7.5µH MAX    |  |
|   | DCR             | (3-4)                            | 460mΩ MAX    |  |
|   |                 | (8, 7-10, 9)                     | 12mΩ MAX     |  |
|   |                 | (2-1)                            | 94mΩ MAX     |  |
|   | Hi-Pot          | Pri-Sec                          | 1500Vrms     |  |
| K1 Factor   | 1353.6          |                                  |              |  |
| PA1138NL  | Pri. Inductance | (3-4)                            | 126.7µH ±10% |  <p>FLYBACK TRANSFORMER</p> |
|   | Lk. Inductance  | (3-4) with (10, 9, 8, 7) shorted | 7.5µH MAX    |  |
|   | DCR             | (3-4)                            | 460mΩ MAX    |  |
|   |                 | (8, 7-10, 9)                     | 55mΩ MAX     |  |
|   |                 | (2-1)                            | 94mΩ MAX     |  |
|   | Hi-Pot          | Pri-Sec                          | 1500Vrms     |  |
| K1 Factor   | 1353.6          |                                  |              |  |
| PA1218NL  | Pri. Inductance | (3-4)                            | 480µH ±10%   |  <p>FLYBACK TRANSFORMER</p> |
|   | Lk. Inductance  | (3-4) with (10, 8, 7, 6) shorted | 10µH MAX     |  |
|   | DCR             | (3-4)                            | 570mΩ MAX    |  |
|   |                 | (8-10)                           | 15mΩ MAX     |  |
|   |                 | (6-7)                            | 40mΩ MAX     |  |
|   |                 | (2-1)                            | 325mΩ MAX    |  |
| Hi-Pot  | Pri-Sec         | 1500Vdc                          |              |  |
| K1 Factor   | 5128.2          |                                  |              |  |

USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

Shanghai 86 21 62787060

China 86 755 33966678

Taiwan 886 3 4356768

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT



## Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>5</sup>

|           |                 |                                  |                         |                            |
|-----------|-----------------|----------------------------------|-------------------------|----------------------------|
| PA1260NL  | Pri. Inductance | (3-4)                            | 77.4 $\mu$ H $\pm$ 10%  | <p>FLYBACK TRANSFORMER</p> |
|           | Lk. Inductance  | (3-4) with (10, 9, 8, 7) shorted | 0.8 $\mu$ H MAX         |                            |
|           | DCR             | (3-4)                            | 220m $\Omega$ MAX       |                            |
|           |                 | (8, 7-10, 9)                     | 18m $\Omega$ MAX        |                            |
|           |                 | (2-1)                            | 250m $\Omega$ MAX       |                            |
|           | Hi-Pot          | Pri-Sec                          | 1500Vrms                |                            |
| K1 Factor |                 | 1804.2                           |                         |                            |
| PA1267NL  | Pri. Inductance | (4-1)                            | 155.5 $\mu$ H $\pm$ 10% | <p>FLYBACK TRANSFORMER</p> |
|           | Lk. Inductance  | (4-1) with (10, 9, 8, 7) shorted | 5 $\mu$ H MAX           |                            |
|           | DCR             | (4-1)                            | 330m $\Omega$ MAX       |                            |
|           |                 | (7, 8-9, 10)                     | 11m $\Omega$ MAX        |                            |
|           |                 | (5-2)                            | 650m $\Omega$ MAX       |                            |
|           | Hi-Pot          | Pri-Sec                          | 1500Vrms                |                            |
| K1 Factor |                 | 2215.1                           |                         |                            |
| PA1269NL  | Pri. Inductance | (3-4)                            | 77.4 $\mu$ H $\pm$ 10%  | <p>FLYBACK TRANSFORMER</p> |
|           | Lk. Inductance  | (3-4) with (10, 9, 8, 7) shorted | 0.8 $\mu$ H MAX         |                            |
|           | DCR             | (3-4)                            | 100m $\Omega$ MAX       |                            |
|           |                 | (8, 7-10, 9)                     | 6.5m $\Omega$ MAX       |                            |
|           |                 | (2-1)                            | 270m $\Omega$ MAX       |                            |
|           | Hi-Pot          | Pri-Sec                          | 1500Vrms                |                            |
| K1 Factor |                 | 1804.2                           |                         |                            |
| PA1276NL  | Pri. Inductance | (3-4)                            | 77.4 $\mu$ H $\pm$ 10%  | <p>FLYBACK TRANSFORMER</p> |
|           | Lk. Inductance  | (3-4) with (10, 9, 8, 7) shorted | 0.8 $\mu$ H MAX         |                            |
|           | DCR             | (3-4)                            | 100m $\Omega$ MAX       |                            |
|           |                 | (8, 7-10, 9)                     | 6.5m $\Omega$ MAX       |                            |
|           |                 | (2-1)                            | 270m $\Omega$ MAX       |                            |
|           | Hi-Pot          | Pri-Sec                          | 1500Vdc                 |                            |
| K1 Factor |                 | 1804.2                           |                         |                            |
| PA1309NL  | Pri. Inductance | (3-4)                            | 16.4 $\mu$ H $\pm$ 10%  | <p>FLYBACK TRANSFORMER</p> |
|           | Lk. Inductance  | (3-4) with (10, 9, 8, 7) shorted | 0.7 $\mu$ H MAX         |                            |
|           | DCR             | (3-4)                            | 38m $\Omega$ MAX        |                            |
|           |                 | (8, 7-10, 9)                     | 10m $\Omega$ MAX        |                            |
|           |                 | (2-1)                            | 200m $\Omega$ MAX       |                            |
|           | Hi-Pot          | Pri-Sec                          | 1500Vrms                |                            |
| K1 Factor |                 | 599.0                            |                         |                            |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT



| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C |                 |  |              |                     |  |
|--|-----------------|--|--------------|---------------------|--|
| PA1367NL   | Pri. Inductance | (3, 4-2, 1)                            | 66.1μH ±10%  |                     |  |
|  | Lk. Inductance  | (3, 4-2, 1) with (10, 9, 8, 7) shorted | 1.0μH MAX    |                     |  |
|  | DCR             | (3, 4-2,1)                             | 82mΩ MAX     |                     |  |
|  |                 | (7, 9)                                 | 12mΩ MAX     |                     |  |
|  |                 | (8-10)                                 | 97mΩ MAX     |                     |  |
|  | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                     |  |
| KI Factor  | 57.0            |  |              |                     |  |
|  |                 |  |              | FORWARD TRANSFORMER |  |
| PA1460NL   | Pri. Inductance | (3, 4)                                 | 40μH ±10%    |                     |  |
|  | Lk. Inductance  | (3, 4) with (10, 9, 8, 7) shorted      | 2.5μH MAX    |                     |  |
|  | DCR             | (3, 4)                                 | 95mΩ MAX     |                     |  |
|  |                 | (8, 7-10, 9)                           | 28mΩ MAX     |                     |  |
|  |                 | (2-1)                                  | 66mΩ MAX     |                     |  |
|  | Hi-Pot          | Pri-Sec                                | 1650Vrms     |                     |  |
| KI Factor  | 1025.6          |  |              |                     |  |
|  |                 |  |              | FLYBACK TRANSFORMER |  |
| PA1528NL   | Pri. Inductance | (3, 4)                                 | 28.9μH ±10%  |                     |  |
|  | Lk. Inductance  | (3, 4) with (10, 9, 8, 7) shorted      | 1μH MAX      |                     |  |
|  | DCR             | (3, 4)                                 | 58mΩ MAX     |                     |  |
|  |                 | (8, 7-10, 9)                           | 27mΩ MAX     |                     |  |
|  |                 | (2-1)                                  | 55mΩ MAX     |                     |  |
|  | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                     |  |
| KI Factor  | 871.8           |  |              |                     |  |
|  |                 |  |              | FLYBACK TRANSFORMER |  |
| PA1528ANL  | Pri. Inductance | (3, 4)                                 | 28.9μH ±10%  |                     |  |
|  | Lk. Inductance  | (3,4) with (10, 9, 8, 7) shorted       | 1μHΩ MAX     |                     |  |
|  | DCR             | (3, 4)                                 | 58mΩ MAX     |                     |  |
|  |                 | (8, 7-10, 9)                           | 27mΩ MAX     |                     |  |
|  |                 | (2-1)                                  | 77mΩ MAX     |                     |  |
|  | Hi-Pot          | Pri-Sec                                | 1500Vdc      |                     |  |
| KI Factor  | 871.8           |  |              |                     |  |
|  |                 |  |              | FLYBACK TRANSFORMER |  |
| PA1576NL   | Pri. Inductance | (3, 4)                                 | 230.4μH ±30% |                     |  |
|  | Lk. Inductance  | (3, 4) with (10, 9, 8, 7) shorted      | 1.5μH MAX    |                     |  |
|  | DCR             | (3, 4)                                 | 36mΩ MAX     |                     |  |
|  |                 | (8, 7-10, 9)                           | 3.5mΩ MAX    |                     |  |
|  |                 | (2-1)                                  | 58mΩ MAX     |                     |  |
|  | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                     |  |
| KI Factor  | 42.7            |  |              |                     |  |
|  |                 |  |              | FORWARD TRANSFORMER |  |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT



| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C <sup>2</sup> |                 |                                   |              |  |
|---|-----------------|-----------------------------------|--------------|--|
| PA1577NL  | Pri. Inductance | (3-4)                             | 230.4μH ±60% |  |
|   | Lk. Inductance  | (3-4) with (10, 9, 8, 7) shorted  | 1.5μH MAX    |  |
|   | DCR             | (3, 4)                            | 36mΩ MAX     |  |
|   |                 | (7-9)=(8-10)                      | 54mΩ MAX     |  |
|   |                 | (2-1)                             | 55mΩ MAX     |  |
|   | Hi-Pot          | Pri-Sec                           | 1500Vrms     |  |
| KI Factor   | 42.7            |                                   |              |  |
| PA1769NL  | Pri. Inductance | (3, 4)                            | 6.7μH ±7%    |  |
|   | Lk. Inductance  | (3, 4) with (10, 9, 8, 7) shorted | 0.65μH MAX   |  |
|   | DCR             | (3, 4)                            | 25mΩ MAX     |  |
|   |                 | (8, 7-10, 9)                      | 6.5mΩ MAX    |  |
|   |                 | (2-1)                             | 115mΩ MAX    |  |
|   | Hi-Pot          | Pri-Sec                           | 1500Vrms     |  |
| KI Factor   | 381.8           |                                   |              |  |
| PA1861NL  | Pri. Inductance | (1, 4)                            | 115.5μH ±7%  |  |
|   | Lk. Inductance  | (1, 4) with (10, 9, 8, 7) shorted | 0.65μH MAX   |  |
|   | DCR             | (1, 4)                            | 330mΩ MAX    |  |
|   |                 | (7, 8-9, 10)                      | 11mΩ MAX     |  |
|   |                 | (5-2)                             | 460mΩ MAX    |  |
|   | Hi-Pot          | Pri-Sec                           | 1500Vrms     |  |
| KI Factor   | 1645.3          |                                   |              |  |
| PA2070NL  | Pri. Inductance | (5-4)                             | 164μH ±10%   |  |
|   | Lk. Inductance  | (5-4) with (10, 9, 8, 7) shorted  | 3μH MAX      |  |
|   | DCR             | (5-4)                             | 292mΩ MAX    |  |
|   |                 | (7, 8-9, 10)                      | 8.5mΩ MAX    |  |
|   |                 | (2-1)                             | 60mΩ MAX     |  |
|   | Hi-Pot          | Pri-Sec                           | 1500Vdc      |  |
| KI Factor   | 2628.2          |                                   |              |  |
| PA2086NL  | Pri. Inductance | (2-3)                             | 164μH ±10%   |  |
|   | Lk. Inductance  | (2-3) with (10, 9, 8, 7) shorted  | 3μH MAX      |  |
|   | DCR             | (2-3)                             | 292mΩ MAX    |  |
|   |                 | (5-4)                             | 64mΩ MAX     |  |
|   |                 | (9-10)                            | 17mΩ MAX     |  |
|   |                 | (7-8)                             | 100mΩ MAX    |  |
| Hi-Pot  | Pri-Sec         | 1500Vrms                          |              |  |
| KI Factor   | 2628.2          |                                   |              |  |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT



| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C |                 |  |              |                            |
|--|-----------------|--|--------------|----------------------------|
| PA2114NL   | Pri. Inductance | (2-3)                                  | 164μH ±10%   | <p>FLYBACK TRANSFORMER</p> |
|  | Lk. Inductance  | (2-3) with (10, 9, 8, 7) shorted       | 3μH MAX      |                            |
|  | DCR             | (2-3)                                  | 300mΩ MAX    |                            |
|  |                 | (5-4)                                  | 64mΩ MAX     |                            |
|  |                 | (9-1)                                  | 30mΩ MAX     |                            |
|  |                 | (7-8)                                  | 165mΩ MAX    |                            |
|  | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                            |
| KI Factor  | 2628.2          |  |              |                            |
| PA2194NL   | Pri. Inductance | (1-2)                                  | 617.4μH ±28% | <p>FORWARD TRANSFORMER</p> |
|  | Lk. Inductance  | (1-2) with (10, 9, 7, 6, 5, 4) shorted | 2μH MAX      |                            |
|  | DCR             | (1-2)                                  | 80mΩ MAX     |                            |
|  |                 | (9, 10-6, 7)                           | 30mΩ MAX     |                            |
|  |                 | (4-5)                                  | 4mΩ MAX      |                            |
|  | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                            |
| KI Factor  | 24.4            |  |              |                            |
| PA2204NL   | Pri. Inductance | (2, 3-4, 5)                            | 5μH ±10%     | <p>FLYBACK TRANSFORMER</p> |
|  | Lk. Inductance  | (2, 3-4, 5) with (10, 9, 8, 7) shorted | 0.25μH MAX   |                            |
|  | DCR             | (2, 3-4, 5)                            | 20mΩ MAX     |                            |
|  |                 | (8, 7-10, 9)                           | 10.3mΩ MAX   |                            |
|  | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                            |
| KI Factor  | 2628.2          |  |              |                            |
| PA2221NL   | Pri. Inductance | (5-4)                                  | 152μH ±10%   | <p>FLYBACK TRANSFORMER</p> |
|  | Lk. Inductance  | (5-4) with (10, 9, 8, 7) shorted       | 4μH MAX      |                            |
|  | DCR             | (5-4)                                  | 280mΩ MAX    |                            |
|  |                 | (7, 8-9, 10)                           | 5.2mΩ MAX    |                            |
|  |                 | (2-1)                                  | 67mΩ MAX     |                            |
|  | Hi-Pot          | Pri-Sec                                | 1500Vdc      |                            |
| KI Factor  | 2435.9          |  |              |                            |
| PA2271NL   | Pri. Inductance | (3-4)                                  | 10μH ±10%    | <p>FLYBACK TRANSFORMER</p> |
|  | Lk. Inductance  | (3-4) with (10, 9, 8, 7) shorted       | 1μH MAX      |                            |
|  | DCR             | (3-4)                                  | 23mΩ MAX     |                            |
|  |                 | (8, 7-10, 9)                           | 6.7mΩ MAX    |                            |
|  |                 | (2-1)                                  | 54mΩ MAX     |                            |
|  | Hi-Pot          | Pri-Sec                                | 1500Vdc      |                            |
| KI Factor  | 512.8           |  |              |                            |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT



| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C <sup>2</sup> |                 |  |              |                            |
|---|-----------------|--|--------------|----------------------------|
| PA2328NL  | Pri. Inductance | (1-2)                                  | 100μH ±10%   | <p>FORWARD TRANSFORMER</p> |
|   | Lk. Inductance  | (1-2) with (10, 9, 6, 5, 4) shorted    | 0.875μH MAX  |                            |
|   | DCR             | (1-2)                                  | 210mΩ MAX    |                            |
|   |                 | (6, 7-9, 10)                           | 9mΩ MAX      |                            |
|   |                 | (4-5)                                  | 580mΩ MAX    |                            |
|   | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                            |
| KI Factor   | 18.3            |  |              |                            |
| PA2367NL  | Pri. Inductance | (2-1)                                  | 85μH ±10%    | <p>FLYBACK TRANSFORMER</p> |
|   | Lk. Inductance  | (2-1) with (10, 9, 7, 6, 5, 4) shorted | 0.75μH MAX   |                            |
|   | DCR             | (2-1)                                  | 325mΩ MAX    |                            |
|   |                 | (9, 10-6, 7)                           | 25.5mΩ MAX   |                            |
|   |                 | (4-5)                                  | 815mΩ MAX    |                            |
|   | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                            |
| KI Factor   | 1614.4          |  |              |                            |
| PA2369NL  | Pri. Inductance | (5-3)                                  | 37μH ±10%    | <p>FLYBACK TRANSFORMER</p> |
|   | Lk. Inductance  | (5-3) with (6, 7, 9, 10) shorted       | 0.75μH MAX   |                            |
|   | DCR             | (5-3)                                  | 89mΩ MAX     |                            |
|   |                 | (6, 7-9, 10)                           | 6.2mΩ MAX    |                            |
|   |                 | (2-1)                                  | 84mΩ MAX     |                            |
|   | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                            |
| KI Factor   | 948.7           |  |              |                            |
| PA2417NL  | Pri. Inductance | (1-2)                                  | 530μH ±28%   | <p>FORWARD TRANSFORMER</p> |
|   | Lk. Inductance  | (1-2) with (10, 9, 7, 6, 5, 4) shorted | 0.5μH MAX    |                            |
|   | DCR             | (1-2)                                  | 75mΩ MAX     |                            |
|   |                 | (6, 7-9, 10)                           | 6.5mΩ MAX    |                            |
|   |                 | (4-5)                                  | 886mΩ MAX    |                            |
|   | Hi-Pot          | Pri-Sec                                | 1500Vdc      |                            |
| KI Factor   | 25.6            |  |              |                            |
| PA2431NL  | Pri. Inductance | (1-2)                                  | 429.3μH ±28% | <p>FORWARD TRANSFORMER</p> |
|   | Lk. Inductance  | (1-2) with (10, 9, 7, 6, 5, 4) shorted | 0.5μH MAX    |                            |
|   | DCR             | (1-2)                                  | 68mΩ MAX     |                            |
|   |                 | (6, 7-9, 10)                           | 6.75mΩ MAX   |                            |
|   |                 | (4-5)                                  | 970mΩ MAX    |                            |
|   | Hi-Pot          | Pri-Sec                                | 1500Vdc      |                            |
| KI Factor   | 28.5            |  |              |                            |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT



| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C <sup>5</sup> |                 |   |              |
|---|-----------------|---|--------------|
| PA2437NL  | Pri. Inductance | (1-4) with (3-2) shorted                  | 80µH ±10%    |
|   | Lk. Inductance  | (1-4) with (3-2) and (9-10) shorted       | 2µH MAX      |
|   | DCR             | (1-3)                                     | 47mΩ MAX     |
|   |                 | (2-4)                                     | 58mΩ MAX     |
|   |                 | (6-7)                                     | 155mΩ MAX    |
|   |                 | (8-10)                                    | 12mΩ MAX     |
|   | Hi-Pot          | Pri-Sec                                   | 1500Vrms     |
| KI Factor   | 1709.4          |   |              |
| <p>FORWARD TRANSFORMER</p>  |                 |   |              |
| PA2466NL  | Pri. Inductance | (5-3)                                     | 37µH ±10%    |
|   | Lk. Inductance  | (5-3) with (6, 7, 9, 10) shorted          | 0.75µH MAX   |
|   | DCR             | (5-3)                                     | 89mΩ MAX     |
|   |                 | (6, 7-9, 10)                              | 4.6mΩ MAX    |
|   |                 | (2-1)                                     | 96mΩ MAX     |
|   | Hi-Pot          | Pri-Sec                                   | 1500Vrms     |
| KI Factor   | 948.7           |   |              |
| <p>FLYBACK TRANSFORMER</p>  |                 |   |              |
| PA2467NL  | Pri. Inductance | (5-3)                                     | 37µH ±10%    |
|   | Lk. Inductance  | (5-3) with (6, 7, 9, 10) shorted          | 0.75µH MAX   |
|   | DCR             | (5-3)                                     | 89mΩ MAX     |
|   |                 | (6, 7-9, 10)                              | 4.6mΩ MAX    |
|   |                 | (2-1)                                     | 96mΩ MAX     |
|   | Hi-Pot          | Pri-Sec                                   | 1500Vrms     |
| KI Factor   | 948.7           |   |              |
| <p>FLYBACK TRANSFORMER</p>  |                 |   |              |
| PA2649NL  | Pri. Inductance | (1-2)                                     | 100.5µH ±10% |
|   | Lk. Inductance  | (1-2) with (4, 5, 6, 7, 8, 9, 10) shorted | 0.88µH MAX   |
|   | DCR             | (1-2)                                     | 110mΩ MAX    |
|   |                 | (6, 7-9, 10)                              | 40mΩ MAX     |
|   |                 | (4-5)                                     | 561mΩ MAX    |
|   | Hi-Pot          | Pri-Sec                                   | 1500Vdc      |
| KI Factor   | 22.3            |   |              |
| <p>FORWARD TRANSFORMER</p>  |                 |   |              |
| PA2669NL  | Pri. Inductance | (1-2)                                     | 17.3µH ±10%  |
|   | Lk. Inductance  | (1-2) with (6, 7, 9, 10) shorted          | 0.28µH MAX   |
|   | DCR             | (1-2)                                     | 42mΩ MAX     |
|   |                 | (6, 7-9, 10)                              | 12.6mΩ MAX   |
|   |                 | (5-4)                                     | 99mΩ MAX     |
|   | Hi-Pot          | Pri-Sec                                   | 1500Vdc      |
| KI Factor   | 739.3           |   |              |
| <p>FORWARD TRANSFORMER</p>  |                 |   |              |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT



| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C <sup>5</sup> |                 |  |              |   |
|---|-----------------|--|--------------|---|
| PA2725NL  | Pri. Inductance | (5-4)  | 139.5μH ±10% | <p>FORWARD TRANSFORMER</p>  |
|   | Lk. Inductance  | (5-4) with (7, 8, 9, 10) shorted             | 1.1μH MAX    |   |
|   | DCR             | (5-4)  | 265mΩ MAX    |   |
|   |                 | (7-9)  | 23mΩ MAX     |   |
|   |                 | (8-10)                                       | 40mΩ MAX     |   |
|   |                 | (2-1)  | 110mΩ MAX    |   |
|   | Hi-Pot          | Pri-Sec                                      | 1500Vrms     |   |
| KI Factor   | 2384.6          |  |              |   |
| PA2945NL  | Pri. Inductance | (1-2)  | 100μH ±10%   | <p>FLYBACK TRANSFORMER</p>  |
|   | Lk. Inductance  | (1-2) with (4, 5, 6, 7, 8, 9, 10) shorted    | 0.3μH MAX    |   |
|   | DCR             | (1-2)  | 27.5mΩ MAX   |   |
|   |                 | (6, 7-9, 10)                                 | 52mΩ MAX     |   |
|   |                 | (4-5)  | 295mΩ MAX    |   |
|   | Hi-Pot          | Pri-Sec                                      | 1500Vrms     |   |
| KI Factor   | 42.7            |  |              |   |
| PA3171NL  | Pri. Inductance | (1-3)  | 100μH ±10%   | <p>FLYBACK TRANSFORMER</p> <p><sup>5</sup> Please note this part has an alternate pin-out. Please see note 5.</p> |
|   | Lk. Inductance  | (1-3) with (6, 7, 8, 9) shorted              | 1μH MAX      |   |
|   | DCR             | (1-3)  | 190mΩ MAX    |   |
|   |                 | (6-7)-(8-9)                                  | 28mΩ MAX     |   |
|   |                 | (5-4)  | 500mΩ MAX    |   |
|   | Hi-Pot          | Pri-Sec                                      | 500Vrms      |   |
| KI Factor   | 1831.5          |  |              |   |
| PA3242NL  | Pri. Inductance | (1-10)                                       | 220μH ±10%   | <p>FORWARD TRANSFORMER</p>  |
|   | Lk. Inductance  | (1-10) with (2, 3, 4, 5, 6, 7, 8, 9) shorted | 1.6μH MAX    |   |
|   | DCR             | (1-10)                                       | 230mΩ MAX    |   |
|   |                 | (2-9)=(3-8)                                  | 17.5mΩ MAX   |   |
|   |                 | (4-7)  | 50mΩ MAX     |   |
|   |                 | (5-6)  | 50mΩ MAX     |   |
|   | Hi-Pot          | Pri-Sec                                      | 1000Vdc      |   |
| KI Factor   | 3760.7          |  |              |   |
| PA3342NL  | Pri. Inductance | (2-3)  | 90μH ±10%    | <p>FORWARD TRANSFORMER</p>  |
|   | Lk. Inductance  | (2-3) with (10, 9, 8, 7) shorted             | 2μH MAX      |   |
|   | DCR             | (2-3)  | 300mΩ MAX    |   |
|   |                 | (5-4)  | 120mΩ MAX    |   |
|   |                 | (9-10)                                       | 40mΩ MAX     |   |
|   |                 | (7-8)  | 27mΩ MAX     |   |
|   | Hi-Pot          | Pri-Sec                                      | 1500Vdc      |   |
| KI Factor   | 1442.3          |  |              |   |



# High Frequency Wire Wound Transformers

EP13 Platforms - SMT



| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C <sup>3</sup> |                 |  |              |  |
|---|-----------------|--|--------------|--|
| PA3371NL  | Pri. Inductance | (4-5)  | 31μH ±10%    | <p>FORWARD TRANSFORMER</p>   |
|   | Lk. Inductance  | (4-5) with (1, 2, 3, 6, 7, 8, 9, 10) shorted | 0.5μH MAX    |  |
|   | DCR             | (4-5)  | 100mΩ MAX    |  |
|   |                 | (6-8)=(7-9)                                  | 13mΩ MAX     |  |
|   |                 | (1-10)                                       | 83.5mΩ MAX   |  |
|   |                 | (3-2)  | 155mΩ MAX    |  |
|   | Hi-Pot          | Pri-Sec                                      | 1500Vrms     |  |
| KI Factor   | 794.9           |  |              |  |
| PA3519NL  | Pri. Inductance | (1-3)  | 73.5μH ±10%  | <p>FLYBACK TRANSFORMER</p> <p>* Please note this part has an alternate pin-out. Please see note 5.</p> |
|   | Lk. Inductance  | (1-2) with (4, 5, 6, 7, 8, 9) shorted        | 0.6μH MAX    |  |
|   | DCR             | (1-3)  | 113mΩ MAX    |  |
|   |                 | (6-7)  | 15mΩ MAX     |  |
|   |                 | (8-9)  | 31mΩ MAX     |  |
|   |                 | (5-4)  | 180mΩ MAX    |  |
|   | Hi-Pot          | Pri-Sec                                      | 1500Vrms     |  |
| KI Factor   | 1570.5          |  |              |  |
| PA3642NL  | Pri. Inductance | (1-3)  | 37.9μH ±10%  | <p>FLYBACK TRANSFORMER</p> <p>* Please note this part has an alternate pin-out. Please see note 5.</p> |
|   | Lk. Inductance  | (1-3) with (4, 5, 6, 7, 8, 9) shorted        | 0.4μH MAX    |  |
|   | DCR             | (1-3)  | 101mΩ MAX    |  |
|   |                 | (6-7)  | 14mΩ MAX     |  |
|   |                 | (8-9)  | 26mΩ MAX     |  |
|   |                 | (5-4)  | 92mΩ MAX     |  |
|   | Hi-Pot          | Pri-Sec                                      | 1500Vrms     |  |
| KI Factor   | 1079.8          |  |              |  |
| PA4065NL  | Pri. Inductance | (1-2)  | 100.5μH ±10% | <p>FORWARD TRANSFORMER</p>   |
|   | Lk. Inductance  | (1-2) with (4, 5, 6, 7, 8, 9, 10) shorted    | 0.88μH MAX   |  |
|   | DCR             | (1-2)  | 75mΩ MAX     |  |
|   |                 | (6, 7-9, 10)                                 | 40mΩ MAX     |  |
|   |                 | (4-5)  | 410mΩ MAX    |  |
|   | Hi-Pot          | Pri-Sec                                      | 1500Vrms     |  |
|   | KI Factor       | 27.0   |              |  |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

## Notes:

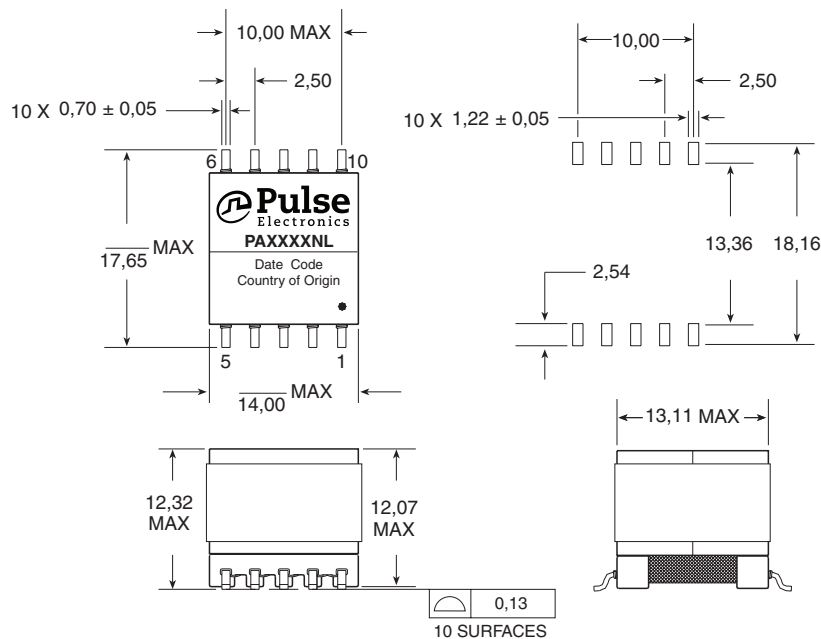
1. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
2. The above transformers and inductors have been tested and approved by Pulse's power IC partners and are sited in the appropriate datasheet or evaluation board documentation at 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:  $\Delta B = K1\_Factor * Volt\text{-}\mu\text{sec}$
5. The standard pin-numbering for this package is indicated in the below mechanical drawing showing pin 1 on the lower right corner and the numbers proceeding clockwise to pin 10 on the upper right corner. However, for those parts that are indicated as having an alternate pinout, pin 1 is in the lower left corner and the numbers proceed counter-clockwise to pin 10 in the upper left corner.
6. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PA1136NL becomes PA1136NLT). Pulse complies with industry standard tape and reel specification EIA481. The tape and reel for this product has a width (W=32mm), pitch (Po=24mm) an depth (Ko=13.2mm).
7. 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.

## Mechanical

PAXXXXNL



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