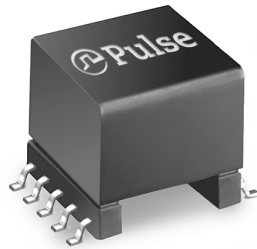


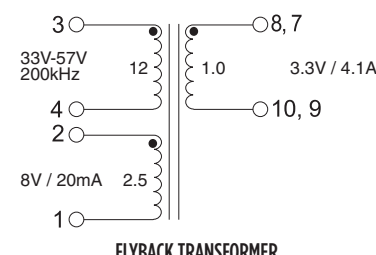
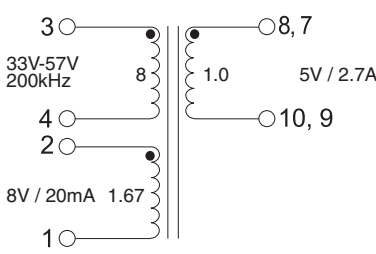
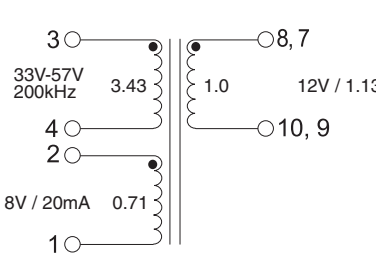
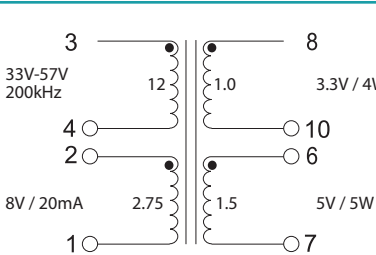
# High Frequency Wire Wound Transformers

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

|          |                 |                                  |              |                                                                                                                                                                     |
|----------|-----------------|----------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>Output power is limited to 6W maximum total</p> <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                           |              |                                                                                                                                                                     |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>1</sup>

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

|           |                 |                                        |             |                            |
|-----------|-----------------|----------------------------------------|-------------|----------------------------|
| PA1367NL  | Pri. Inductance | (3, 4-2, 1)                            | 66.1μH ±10% | <p>FORWARD TRANSFORMER</p> |
|           | 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    |                            |
|           | K1 Factor       | 57.0                                   |             |                            |
| PA1460NL  | Pri. Inductance | (3, 4)                                 | 40μH ±10%   | <p>FLYBACK TRANSFORMER</p> |
|           | 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    |                            |
|           | K1 Factor       | 1025.6                                 |             |                            |
| PA1528NL  | Pri. Inductance | (3, 4)                                 | 28.9μH ±10% | <p>FLYBACK TRANSFORMER</p> |
|           | 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    |                            |
|           | K1 Factor       | 871.8                                  |             |                            |
| PA1528ANL | Pri. Inductance | (3, 4)                                 | 28.9μH ±10% | <p>FLYBACK TRANSFORMER</p> |
|           | 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)                                  | 77mΩ MAX    |                            |
|           | Hi-Pot          | Pri-Sec                                | 1500Vdc     |                            |
|           | K1 Factor       | 871.8                                  |             |                            |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>1</sup>

|          |                 |                                   |              |                            |
|----------|-----------------|-----------------------------------|--------------|----------------------------|
| PA1576NL | Pri. Inductance | (3, 4)                            | 230.4μH ±30% | <p>FORWARD TRANSFORMER</p> |
|          | 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     |                            |
|          | K1 Factor       | 42.7                              |              |                            |
| PA1577NL | Pri. Inductance | (3-4)                             | 230.4μH ±60% | <p>FORWARD TRANSFORMER</p> |
|          | 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     |                            |
|          | K1 Factor       | 42.7                              |              |                            |
| PA1769NL | Pri. Inductance | (3, 4)                            | 6.7μH ±7%    | <p>FLYBACK TRANSFORMER</p> |
|          | 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     |                            |
|          | K1 Factor       | 381.8                             |              |                            |
| PA1861NL | Pri. Inductance | (1, 4)                            | 115.5μH ±7%  | <p>FLYBACK TRANSFORMER</p> |
|          | 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     |                            |
|          | K1 Factor       | 1645.3                            |              |                            |
| PA2070NL | Pri. Inductance | (5-4)                             | 164μH ±10%   | <p>FLYBACK TRANSFORMER</p> |
|          | 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      |                            |
|          | K1 Factor       | 2628.2                            |              |                            |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>1</sup>

|          |                 |                                        |              |                                                                                                                                                  |
|----------|-----------------|----------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| PA2086NL | 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)                                  | 292mΩ MAX    |                                                                                                                                                  |
|          |                 | (5-4)                                  | 64mΩ MAX     |                                                                                                                                                  |
|          |                 | (9-10)                                 | 17mΩ MAX     |                                                                                                                                                  |
|          |                 | (7-8)                                  | 100mΩ MAX    |                                                                                                                                                  |
|          | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                                                                                                                                                  |
| 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     |                                                                                                                                                  |
| PA2194NL | Pri. Inductance | (1-2)                                  | 617.4μH ±28% | <p>* Please note this part has an alternate pin-out. Please see note 5 and refer to alternate mechanical drawing.</p> <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     |                                                                                                                                                  |
|          | K1 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     |                                                                                                                                                  |
| 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      |                                                                                                                                                  |
|          | K1 Factor       | 2435.9                                 |              |                                                                                                                                                  |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C

|          |                 |                                        |             |                            |
|----------|-----------------|----------------------------------------|-------------|----------------------------|
| 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     |                            |
|          | K1 Factor       | 512.8                                  |             |                            |
| 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    |                            |
| 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    |                            |
| 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    |                            |
| 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     |                            |
| PA2417NL | K1 Factor       | 25.6                                   |             |                            |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>1</sup>

|          |                 |                                        |              |                            |
|----------|-----------------|----------------------------------------|--------------|----------------------------|
| 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    |                            |
|          |                 | (1-2)                                  | 68mΩ MAX     |                            |
|          | DCR             | (6, 7-9, 10)                           | 6.75mΩ MAX   |                            |
|          |                 | (4-5)                                  | 970mΩ MAX    |                            |
|          | Hi-Pot          | Pri-Sec                                | 1500Vdc      |                            |
|          | K1 Factor       | 28.5                                   |              |                            |
| PA2437NL | Pri. Inductance | (1-4) with (3-2) shorted               | 80μH ±10%    | <p>FORWARD TRANSFORMER</p> |
|          | 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    |                            |
|          |                 | (9-10)                                 | 12mΩ MAX     |                            |
|          | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                            |
|          | K1 Factor       | 1709.4                                 |              |                            |
| PA2466NL | 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)                           | 4.6mΩ MAX    |                            |
|          |                 | (2-1)                                  | 96mΩ MAX     |                            |
|          | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                            |
| PA2467NL | 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)                           | 4.6mΩ MAX    |                            |
|          |                 | (2-1)                                  | 96mΩ MAX     |                            |
|          | Hi-Pot          | Pri-Sec                                | 1500Vrms     |                            |
| PA2641NL | Pri. Inductance | (3-4)                                  | 40μH ±10%    | <p>FLYBACK TRANSFORMER</p> |
|          | Lk. Inductance  | (3-4) with (6,7,9,10) shorted          | 1.5μH MAX    |                            |
|          | DCR             | (3,4)                                  | 100mΩ MAX    |                            |
|          |                 | (6-7)                                  | 105mΩ MAX    |                            |
|          |                 | (9-10)                                 | 170mΩ MAX    |                            |
|          |                 | (2-1)                                  | 460mΩ MAX    |                            |
|          | Hi-Pot          | (1,2) to 3,4,6,7,9,10                  | 1500Vrms     |                            |
|          | K1 Factor       | 976.8                                  |              |                            |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

## Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>1</sup>

|          |                 |                                           |              |                                                                                                                                                  |
|----------|-----------------|-------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| PA2649NL | 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)                                     | 110mΩ MAX    |                                                                                                                                                  |
|          |                 | (6, 7-9, 10)                              | 40mΩ MAX     |                                                                                                                                                  |
|          |                 | (4-5)                                     | 561mΩ MAX    |                                                                                                                                                  |
|          | Hi-Pot          | Pri-Sec                                   | 1500Vdc      |                                                                                                                                                  |
|          | KI Factor       | 22.3                                      |              |                                                                                                                                                  |
| PA2669NL | Pri. Inductance | (1,2)                                     | 17.3μH ±10%  | <p>FLYBACK TRANSFORMER</p>                                                                                                                       |
|          | Lk. Inductance  | (1,2) with (6,7-9,10) shorted             | 0.28μH MAX   |                                                                                                                                                  |
|          | DCR             | (1-2)                                     | 42mΩ MAX     |                                                                                                                                                  |
|          |                 | (5-4)                                     | 99mΩ MAX     |                                                                                                                                                  |
|          |                 | (6,7-9,10)                                | 12.6mΩ MAX   |                                                                                                                                                  |
|          | Hi-Pot          | (1,2) to (6,7,9,10)                       | 1500Vrms     |                                                                                                                                                  |
|          |                 | (1,2) to (4,5)                            | 600Vrms      |                                                                                                                                                  |
|          |                 | Windings to core                          | 600Vrms      |                                                                                                                                                  |
|          | KI Factor       | 739.3                                     |              |                                                                                                                                                  |
| PA2725NL | Pri. Inductance | (5-4)                                     | 139.5μH ±10% | <p>* Please note this part has an alternate pin-out. Please see note 5 and refer to alternate mechanical drawing.</p> <p>FLYBACK 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          | (1,2,3,4) to (7,8,9,10)                   | 1500Vrms     |                                                                                                                                                  |
|          | KI Factor       | 2384.6                                    |              |                                                                                                                                                  |
| PA2945NL | Pri. Inductance | (1-2)                                     | 100μH ±10%   | <p>FORWARD 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                                      |              |                                                                                                                                                  |
| PA3150NL | Pri. Inductance | (1-3)                                     | 100.5μH ±10% | <p>FORWARD TRANSFORMER</p>                                                                                                                       |
|          | Lk. Inductance  | (1-3) with (4,5,6,7,9,10) shorted         | 0.5μH MAX    |                                                                                                                                                  |
|          | DCR             | (1-3)                                     | 74.5mΩ MAX   |                                                                                                                                                  |
|          |                 | (4-5)                                     | 550mΩ MAX    |                                                                                                                                                  |
|          |                 | (6,9)                                     | 15.5mΩ MAX   |                                                                                                                                                  |
|          |                 | (7,10)                                    | 16.5mΩ MAX   |                                                                                                                                                  |
|          | Hi-Pot          | (1,3,4,5) to (7, 6,9,10)                  | 1500Vrms     |                                                                                                                                                  |
|          | KI Factor       | 28.5                                      |              |                                                                                                                                                  |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

## Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>1</sup>

|          |                 |                                              |             |                                                                                                                       |
|----------|-----------------|----------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------|
| PA3171NL | Pri. Inductance | (1-3)                                        | 100μH ±10%  | <p>* Please note this part has an alternate pin-out. Please see note 5 and refer to alternate mechanical drawing.</p> |
|          | Lk. Inductance  | (1-3) with (6, 7, 8, 9) shorted              | 1μH MAX     |                                                                                                                       |
|          | DCR             | (1-3)                                        | 190mΩ MAX   |                                                                                                                       |
|          |                 | (6-7)                                        | 28mΩ MAX    |                                                                                                                       |
|          |                 | (8-9)                                        | 500mΩ MAX   |                                                                                                                       |
|          | Hi-Pot          | (1,2,3,4) TO (6,7,8,9)                       | 500Vrms     |                                                                                                                       |
|          | K1 Factor       | 1831.5                                       |             |                                                                                                                       |
|          |                 |                                              |             | <b>FLYBACK TRANSFORMER</b>                                                                                            |
| PA3242NL | Pri. Inductance | (1-10)                                       | 220μH ±10%  |                                                                                                                       |
|          | 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     |                                                                                                                       |
|          | K1 Factor       | 3760.7                                       |             |                                                                                                                       |
|          |                 |                                              |             | <b>FLYBACK TRANSFORMER</b>                                                                                            |
| PA3274NL | Pri. Inductance | (1-2)                                        | 100μH ±10%  |                                                                                                                       |
|          | Lk. Inductance  | (1-2) with (4,5,6,7,9,10) shorted            | 0.5μH MAX   |                                                                                                                       |
|          | DCR             | (1-2)                                        | 77.75mΩ MAX |                                                                                                                       |
|          |                 | (6-9)                                        | 11.9mΩ MAX  |                                                                                                                       |
|          |                 | (7-10)                                       | 12.95mΩ MAX |                                                                                                                       |
|          |                 | (4-5)                                        | 256mΩ MAX   |                                                                                                                       |
|          | Hi-Pot          | (1,2,4,5) to (6,7,9,10)                      | 1500Vrms    |                                                                                                                       |
|          | K1 Factor       | 17.7                                         |             |                                                                                                                       |
|          |                 |                                              |             | <b>FORWARD TRANSFORMER</b>                                                                                            |
| PA3342NL | Pri. Inductance | (2-3)                                        | 90μH ±10%   |                                                                                                                       |
|          | 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     |                                                                                                                       |
|          | K1 Factor       | 1442.3                                       |             |                                                                                                                       |
|          |                 |                                              |             | <b>FORWARD TRANSFORMER</b>                                                                                            |
| PA3371NL | Pri. Inductance | (4-5)                                        | 31μH ±10%   |                                                                                                                       |
|          | 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    |                                                                                                                       |
|          | K1 Factor       | 794.9                                        |             |                                                                                                                       |
|          |                 |                                              |             | <b>FORWARD TRANSFORMER</b>                                                                                            |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

## Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>1</sup>

|          |                 |                                           |                    |                     |
|----------|-----------------|-------------------------------------------|--------------------|---------------------|
| PA3519NL | Pri. Inductance | (1-3)                                     | 73.5μH ±10%        |                     |
|          |                 | (1-3)                                     | 57.5μH min @1.7ADC |                     |
|          | Lk. Inductance  | (1-3) 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          | (1,3,4,5) to (6,7,8,9)                    | 1500Vrms           |                     |
|          | K1 Factor       | 1570.5                                    |                    | FLYBACK TRANSFORMER |
| PA3642NL | Pri. Inductance | (1-3)                                     | 37.9μH ±10%        |                     |
|          |                 | (1-3)                                     | 30μH Min @ 2.5ADC  |                     |
|          | Lk. Inductance  | (1-3) with (4,5,6,7,8,9) shorted          | 0.4 μH MAX         |                     |
|          | DCR             | (1-3)                                     | 101mΩ MAX          |                     |
|          |                 | (6-7)                                     | 14mΩ MAX           |                     |
|          |                 | (8-9)                                     | 26mΩ MAX           |                     |
|          |                 | (5-4)                                     | 92mΩ MAX           |                     |
|          | Hi-Pot          | (1,3,4,5) to (6,7,8,9)                    | 1500Vrms           |                     |
|          | K1 Factor       | 1079.8                                    |                    | FLYBACK TRANSFORMER |
| PA3715NL | Pri. Inductance | (5-3)                                     | 37μH ±10%          |                     |
|          |                 | (5-3)                                     | 29μH Min @ 2.8ADC  |                     |
|          | Lk. Inductance  | (5-3) with (1,2,6,7,9,10) shorted         | 0.75μH MAX         |                     |
|          | DCR             | (5.3)                                     | 89mΩ MAX           |                     |
|          |                 | (5-3)                                     | 84mΩ MAX           |                     |
|          |                 | (2-1)                                     | 3.87mΩ MAX         |                     |
|          | Hi-Pot          | (1,2,3,5) to (6,7,9,10)                   | 1500Vrms           |                     |
|          | K1 Factor       | 948.7                                     |                    | FLYBACK TRANSFORMER |
| PA4065NL | 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)                                     | 75mΩ MAX           |                     |
|          |                 | (6, 7-9, 10)                              | 40mΩ MAX           |                     |
|          |                 | (4-5)                                     | 410mΩ MAX          |                     |
|          | Hi-Pot          | Pri-Sec                                   | 1500Vrms           |                     |
|          | K1 Factor       | 27.0                                      |                    | FORWARD TRANSFORMER |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

## Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C

|          |                 |                                     |              |                                                                             |
|----------|-----------------|-------------------------------------|--------------|-----------------------------------------------------------------------------|
| PA4836NL | Pri. Inductance | (2-3)                               | 75μH ±10%    | <p>PRI 33-57 VDC 200 kHz<br/>AUX 10 V 0.02 A</p> <p>FLYBACK TRANSFORMER</p> |
|          | Lk. Inductance  | (2-3) with (7,8,9,10) shorted       | 2μH MAX      |                                                                             |
|          | DCR             | (2-3)                               | 300mΩ MAX    |                                                                             |
|          |                 | (5-4)                               | 120mΩ MAX    |                                                                             |
|          |                 | (9-10)                              | 68mΩ MAX     |                                                                             |
|          |                 | (7-8)                               | 352mΩ MAX    |                                                                             |
|          | Hi-Pot          | (2,3,4,5) to (7,8,9,10)             | 1650Vrms     |                                                                             |
|          | KI Factor       | 1201.9                              |              |                                                                             |
| PG0738NL | Pri. Inductance | (4-3)                               | 162μH ±10%   | <p>36-60 V 250 KHz</p> <p>FLYBACK TRANSFORMER</p>                           |
|          | Lk. Inductance  | (4-3) with (7,8,9,10) shorted       | 2.2 μH MAX   |                                                                             |
|          | DCR             | (4-3)                               | 600mΩ MAX    |                                                                             |
|          |                 | (1-2)                               | 240mΩ MAX    |                                                                             |
|          |                 | (9-10)                              | 14mΩ MAX     |                                                                             |
|          |                 | (7-8)                               | 240mΩ MAX    |                                                                             |
| PG1318NL | Hi-Pot          | (1,2,3,4) to (7,8,9,10)             | 1500Vrms     | <p>VIN= 33-57 V<br/>FREQ=200 KHz</p> <p>FORWARD TRANSFORMER</p>             |
|          | KI Factor       | 2076.9                              |              |                                                                             |
|          | Pri. Inductance | (1-2)                               | 100.5μH ±10% |                                                                             |
|          | Lk. Inductance  | (1-2) with (4,5,6,7,9,10) shorted   | 0.875μH MAX  |                                                                             |
|          | DCR             | (1-2)                               | 110mΩ MAX    |                                                                             |
|          |                 | (6,7-9,10)                          | 40mΩ MAX     |                                                                             |
|          |                 | (4-5)                               | 680mΩ MAX    |                                                                             |
|          | Hi-Pot          | (1,2,4,5) to (6,7,9,10)             | 1500Vrms     |                                                                             |
| PG1387NL | Pri. Inductance | (2-1)                               | 123μH ±12%   | <p>9V-16V 200kHz</p> <p>FLYBACK TRANSFORMER</p>                             |
|          | Lk. Inductance  | (2-1) with (3,4,6,7,8,9,10) shorted | 2μH MAX      |                                                                             |
|          | Lk. Inductance  | (2-1) with (7,8) shorted            | 5μH MAX      |                                                                             |
|          | Lk. Inductance  | (2-1) with (7,8,9,10) shorted       | 2.1μH MAX    |                                                                             |
|          | DCR             | (2-1)                               | 428mΩ MAX    |                                                                             |
|          |                 | (4-3)                               | 590mΩ MAX    |                                                                             |
|          |                 | (6-7)                               | 280mΩ MAX    |                                                                             |
|          |                 | (7-8)                               | 35mΩ MAX     |                                                                             |
|          |                 | (9-10)                              | 25mΩ MAX     |                                                                             |
|          | Hi-Pot          | (1,2,3,4) to (6,7,8,9,10)           | 1500Vrms     |                                                                             |
|          | KI Factor       | 3504.3                              |              |                                                                             |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

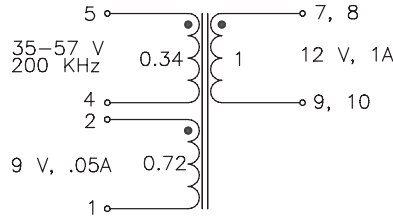
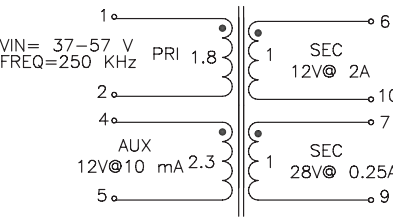
## Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>1</sup>

|          |                 |                                        |                     |                                                                               |
|----------|-----------------|----------------------------------------|---------------------|-------------------------------------------------------------------------------|
| PG1576NL | Pri. Inductance | (3-4)                                  | 230.4μH ±10%        | <p>28-68 V, 300 KHz</p> <p>10 V, 50 mA</p> <p><b>FORWARD TRANSFORMER</b></p>  |
|          | Lk. Inductance  | (3-4) with (10,9,8,7) shorted          | 1.5 μH MAX          |                                                                               |
|          | DCR             | (3-4)                                  | 36mΩ MAX            |                                                                               |
|          |                 | (7,8-9,10)                             | 3.5mΩ MAX           |                                                                               |
|          |                 | (2,1)                                  | 58mΩ MAX            |                                                                               |
|          | Hi-Pot          | (1,2,3,4) to (7,8,9,10)                | 1500Vrms            |                                                                               |
|          |                 | (1,2) to (3,4)                         | 500Vrms             |                                                                               |
|          |                 | windings to core                       | 600Vrms             |                                                                               |
|          | K1 Factor       | 42.7                                   |                     |                                                                               |
| PG1593NL | Pri. Inductance | (2-1)                                  | 144μH ±10%          | <p>37-57 V, 400 KHz</p> <p>10 V, 0.05 A</p> <p><b>FLYBACK TRANSFORMER</b></p> |
|          |                 | (2-1)                                  | 110μH min @ 0.75ADC |                                                                               |
|          | Lk. Inductance  | (2-1) with (3,4,6,7,8,9,10) shorted    | 0.9μH MAX           |                                                                               |
|          |                 | (3-4) with (1,2,6,7,8,9,10) shorted    | 0.3μH MAX           |                                                                               |
|          |                 | (6-7) with (1,2,3,4,6,7,9,10) shorted  | 0.2μH MAX           |                                                                               |
|          |                 | (7-8) with (1,2,3,4,6,7,9,10) shorted  | 0.1μH MAX           |                                                                               |
|          |                 | (9-10) with (1,2,3,4,6,7,9,10) shorted | 0.1μH MAX           |                                                                               |
|          | DCR             | (2-1)                                  | 1202mΩ MAX          |                                                                               |
|          | Hi-Pot          | (1,3-6,7,9,10)                         | 1500Vrms            |                                                                               |
|          | K1 Factor       | 2953.8                                 |                     |                                                                               |
| PH2467NL | Pri. Inductance | (5-3)                                  | 37μH ±10%           | <p>37-57 V, 250 KHz</p> <p>12 V, .03A</p> <p><b>FLYBACK TRANSFORMER</b></p>   |
|          | Lk. Inductance  | (5-3) with (6,10) shorted              | 0.65μH MAX          |                                                                               |
|          | DCR             | (5-3)                                  | 89mΩ MAX            |                                                                               |
|          |                 | (2-1)                                  | 96mΩ MAX            |                                                                               |
|          |                 | (6-10)                                 | 28mΩ MAX            |                                                                               |
|          | Hi-Pot          | (5,3,2,1) to (6,10)                    | 1650Vrms            |                                                                               |
|          | K1 Factor       | 948.7                                  |                     |                                                                               |
| PH9006NL | Pri. Inductance | (3-4)                                  | 19μH ±15%           | <p>35-80V, 250 KHz</p> <p>10V, 10 mA</p> <p><b>FLYBACK TRANSFORMER</b></p>    |
|          | Lk. Inductance  | (3-4) with (1,2,7,9) shorted           | 0.42 μH MAX         |                                                                               |
|          | DCR             | (3-4)                                  | 36mΩ MAX            |                                                                               |
|          |                 | (7,9)                                  | 3.5mΩ MAX           |                                                                               |
|          |                 | (2-1)                                  | 58mΩ MAX            |                                                                               |
|          | Hi-Pot          | (1,2,3,4) to (7,8,9,10)                | 1500Vrms            |                                                                               |
|          | K1 Factor       | 609.0                                  |                     |                                                                               |

# High Frequency Wire Wound Transformers

EP13 Platforms - SMT

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>1</sup>

|          |                 |                                   |              |                                                                                                                |
|----------|-----------------|-----------------------------------|--------------|----------------------------------------------------------------------------------------------------------------|
| PH9058NL | Pri. Inductance | (5-4)                             | 152μH ±10%   |  <p>FLYBACK TRANSFORMER</p> |
|          | Lk. Inductance  | (5-4) with (1,2,7,8,9,10) shorted | 4μH MAX      |                                                                                                                |
|          | DCR             | (5-4)                             | 280mΩ MAX    |                                                                                                                |
|          |                 | (7,8-9,10)                        | 50mΩ MAX     |                                                                                                                |
|          |                 | (2-1)                             | 67mΩ MAX     |                                                                                                                |
|          | Hi-Pot          | (1,2,4,5) to (7,8,9,10)           | 1650Vrms     |                                                                                                                |
|          | KI Factor       | 2435.9                            |              |                                                                                                                |
| PH9098NL | Pri. Inductance | (1-2)                             | 100.5μH ±15% |  <p>FORWARD TRANSFORMER</p> |
|          | Lk. Inductance  | (1-2) with (4,5,6,7,9,10) shorted | 1.5μH MAX    |                                                                                                                |
|          | DCR             | (1-2)                             | 115mΩ MAX    |                                                                                                                |
|          |                 | (4-5)                             | 980mΩ MAX    |                                                                                                                |
|          |                 | (6,10)                            | 60mΩ MAX     |                                                                                                                |
|          |                 | (7,9)                             | 480 mΩ MAX   |                                                                                                                |
|          | Hi-Pot          | Pri-Sec                           | 1650Vrms     |                                                                                                                |
|          | KI Factor       | 22.3                              |              |                                                                                                                |

# 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:  
$$CoreLoss \text{ (W)} = 2.5E-14 * (Freq\_kHz)^{1.65} * (\Delta B\_Gauss)^{2.65}$$
  
where  $\Delta B$  can be calculated as:

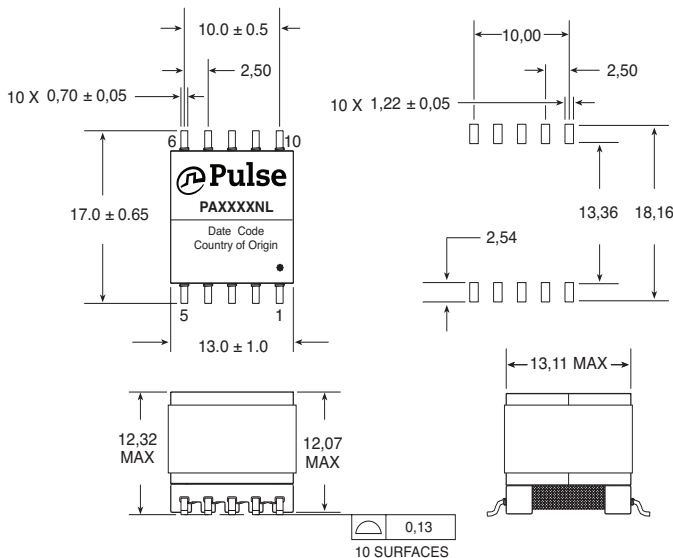
For Flyback Topology:  $\Delta B = K1\_Factor * \Delta I(A)$

For Forward Topology:  $\Delta B = K1\_Factor * Volt\_µsec$

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 clock wise 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. Refer to the alternate mechanical drawing for further details.
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.

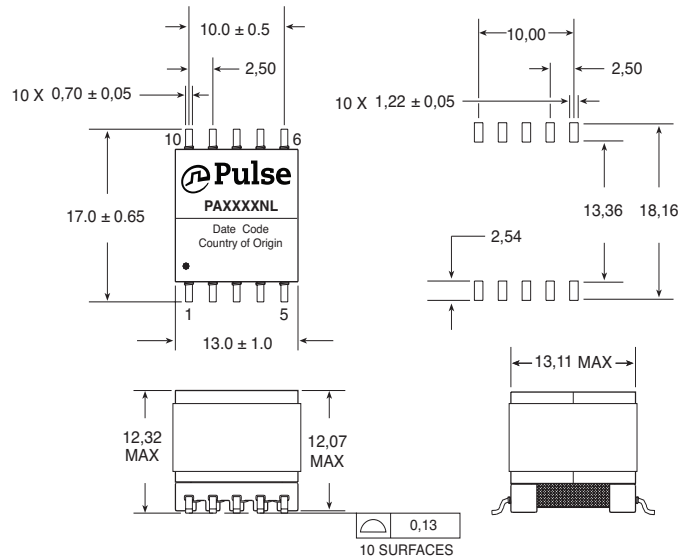
## Mechanical

### PAXXXXNL



## Alternate Mechanical

### PA2194NL, PA2669NL, PA3171NL, PA3519NL, and PA3642NL



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