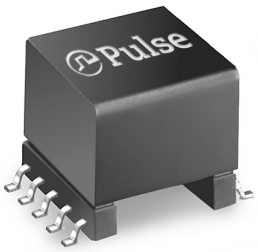
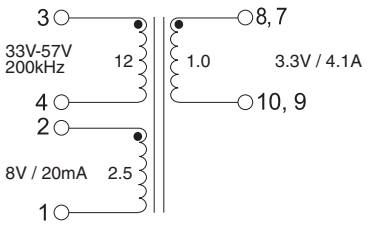
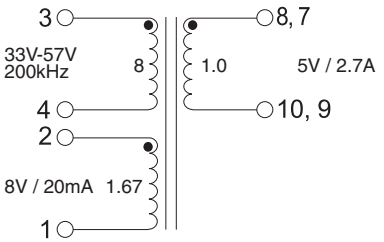
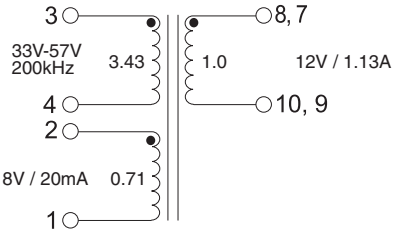
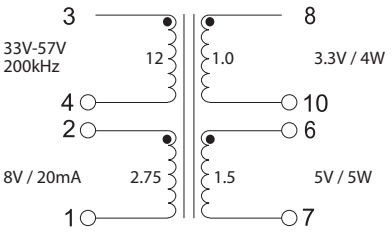
# High Frequency Wire Wound Transformers

*EP13 Platforms - SMT*



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

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **PA1136NL** | Pri. Inductance | (3-4) | 126.7µH ±10% |  |
| | 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% |  |
| | 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% |  |
| | 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% |  |
| | 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 | | |



FLYBACK TRANSFORMER



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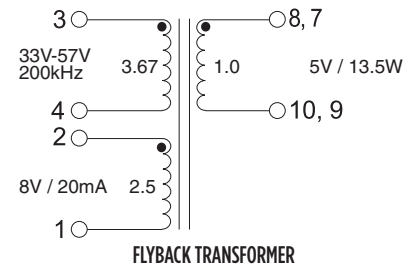
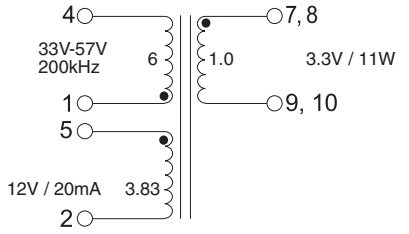
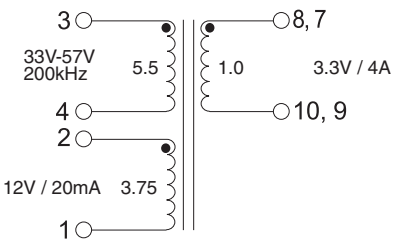
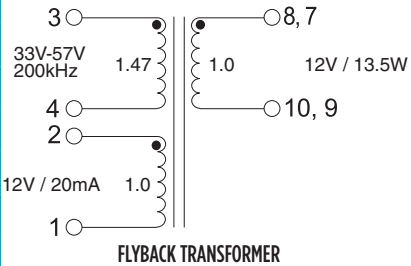
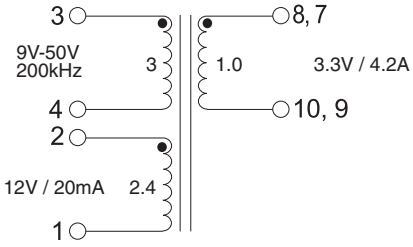
Output power is limited to 6W maximum total

FLYBACK TRANSFORMER

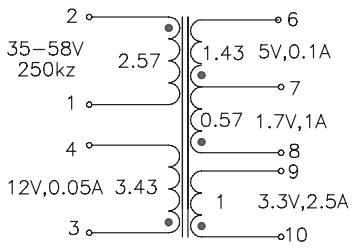
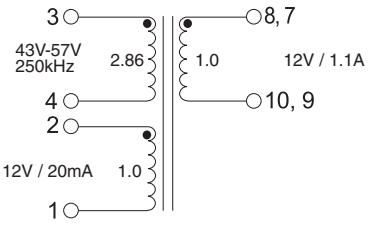
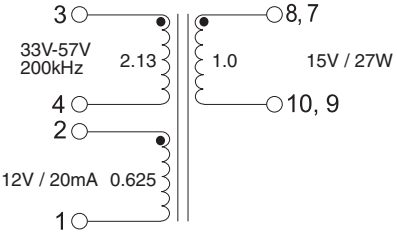
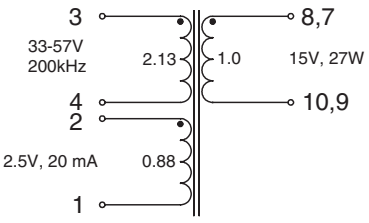
# High Frequency Wire Wound Transformers

*EP13 Platforms - SMT*

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **PA1260NL** | Pri. Inductance | (3-4) | 77.4µH ±10% |  FLYBACK TRANSFORMER |
| | 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% |  FLYBACK TRANSFORMER |
| | 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% |  FLYBACK TRANSFORMER |
| | 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% |  FLYBACK TRANSFORMER |
| | 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% |  FLYBACK TRANSFORMER |
| | 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[1] | | | | |
|---|---|---|---|---|
| **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 | |
| | K1 Factor | 57.0 | | |
| **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 | |
| | K1 Factor | 1025.6 | | |
| **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 | |
| | K1 Factor | 871.8 | | |
| **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 | |
| | K1 Factor | 871.8 | | |



FORWARD TRANSFORMER



FLYBACK TRANSFORMER



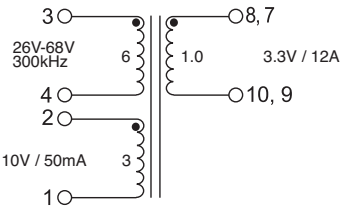
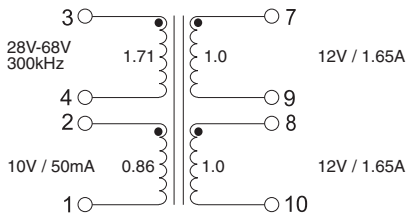
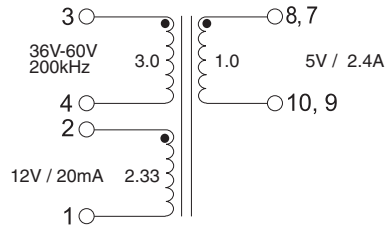
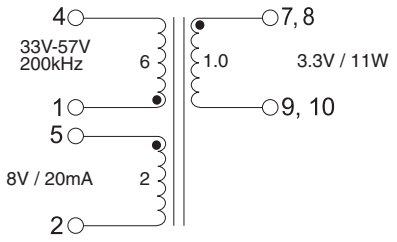
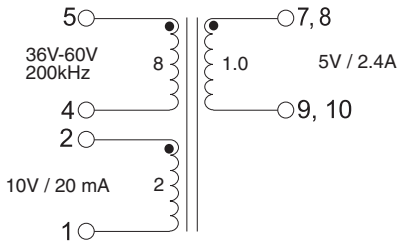
FLYBACK TRANSFORMER



FLYBACK TRANSFORMER

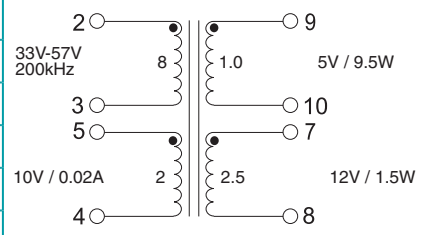
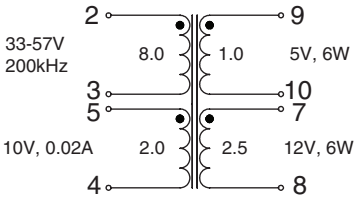
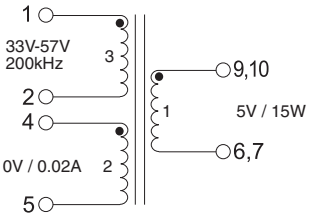
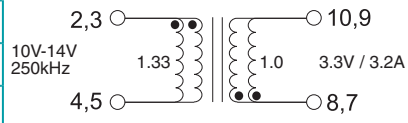
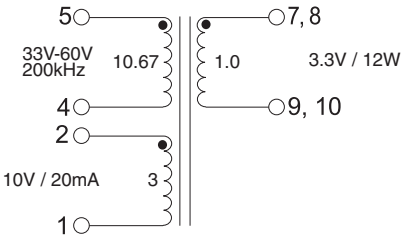
# High Frequency Wire Wound Transformers

*EP13 Platforms - SMT*

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **PA1576NL** | Pri. Inductance | (3, 4) | 230.4µH ±30% |  FORWARD TRANSFORMER |
| | 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% |  FORWARD TRANSFORMER |
| | 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% |  FLYBACK TRANSFORMER |
| | 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% |  FLYBACK TRANSFORMER |
| | 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% |  FLYBACK TRANSFORMER |
| | 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 | | |

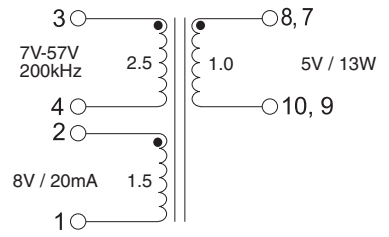
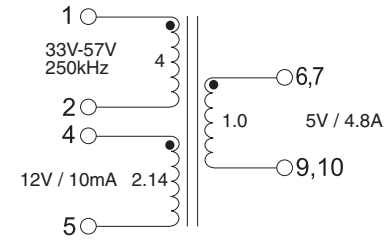
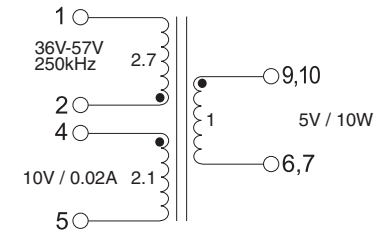
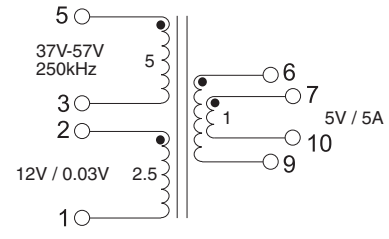
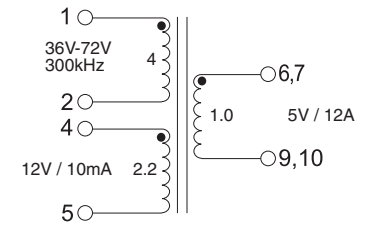
# High Frequency Wire Wound Transformers

*EP13 Platforms - SMT*

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **PA2086NL** | Pri. Inductance | (2-3) | 164µH ±10% |  FLYBACK TRANSFORMER |
| | 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 | |
| | K1 Factor | 2628.2 | | |
| **PA2114NL** | Pri. Inductance | (2-3) | 164µH ±10% |  FLYBACK TRANSFORMER |
| | 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 | |
| | K1 Factor | 2628.2 | | |
| **PA2194NL** | Pri. Inductance | (1-2) | 617.4µH ±28% |  * Please note this part has an alternate pin-out. Please see note 5 and refer to alternate mechanical drawing. FORWARD TRANSFORMER |
| | 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% |  FLYBACK TRANSFORMER |
| | 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 | |
| | K1 Factor | 2628.2 | | |
| **PA2221NL** | Pri. Inductance | (5-4) | 152µH ±10% |  FLYBACK TRANSFORMER |
| | 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 | | |

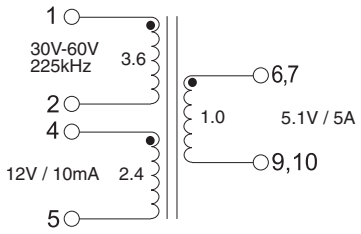
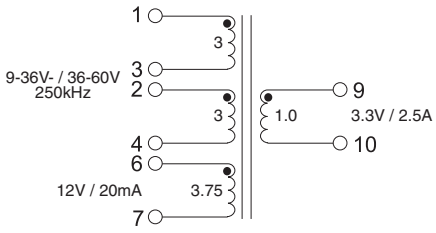
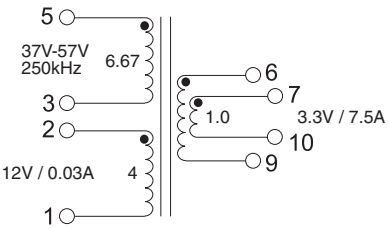
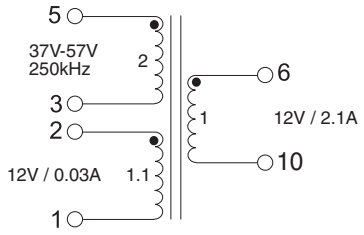
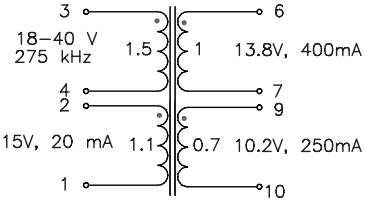
# High Frequency Wire Wound Transformers

*EP13 Platforms - SMT*

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **PA2271NL** | Pri. Inductance | (3-4) | 10µH ±10% |  |
| | 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 | | FLYBACK TRANSFORMER |
| **PA2328NL** | Pri. Inductance | (1-2) | 100µH ±10% |  |
| | 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 | |
| | K1 Factor | 18.3 | | FORWARD TRANSFORMER |
| **PA2367NL** | Pri. Inductance | (2-1) | 85µH ±10% |  |
| | 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 | |
| | K1 Factor | 1614.4 | | FLYBACK TRANSFORMER |
| **PA2369NL** | 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) | 6.2mΩ MAX | |
| | | (2-1) | 84mΩ MAX | |
| | Hi-Pot | Pri-Sec | 1500Vrms | |
| | K1 Factor | 948.7 | | FLYBACK TRANSFORMER |
| **PA2417NL** | Pri. Inductance | (1-2) | 530µH ±28% |  |
| | 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 | |
| | K1 Factor | 25.6 | | FORWARD TRANSFORMER |

# High Frequency Wire Wound Transformers

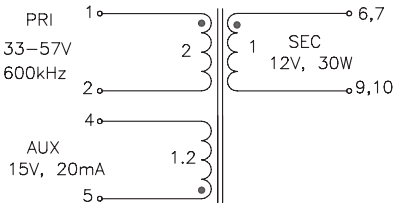
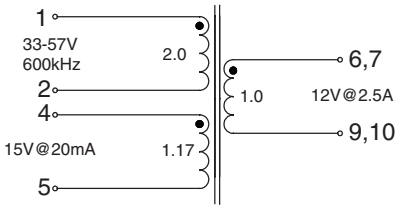
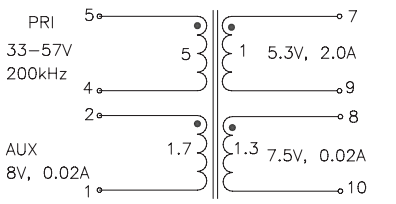
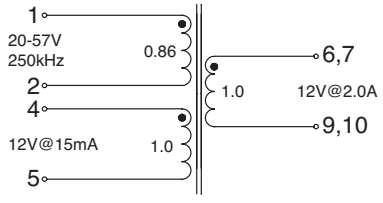
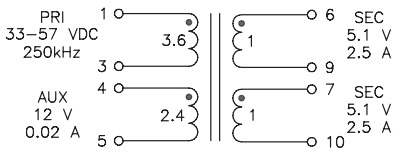
*EP13 Platforms - SMT*

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **PA2431NL** | Pri. Inductance | (1-2) | 429.3µH ±28% |  |
| | 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 | |
| | K1 Factor | 28.5 | | |
| | | | | **FORWARD TRANSFORMER** |
| **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 | |
| | | (9-10) | 12mΩ MAX | |
| | Hi-Pot | Pri-Sec | 1500Vrms | |
| | K1 Factor | 1709.4 | | |
| | | | | **FORWARD TRANSFORMER** |
| **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 | |
| | K1 Factor | 948.7 | | |
| | | | | **FLYBACK TRANSFORMER** |
| **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 | |
| | K1 Factor | 948.7 | | |
| | | | | **FLYBACK TRANSFORMER** |
| **PA2641NL** | Pri. Inductance | (3-4) | 40µH ±10% |  |
| | 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 | | |
| | | | | **FLYBACK TRANSFORMER** |

# High Frequency Wire Wound Transformers

*EP13 Platforms - SMT*

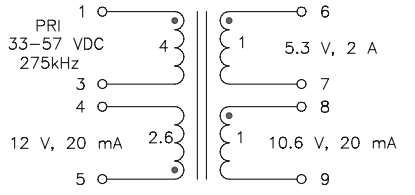
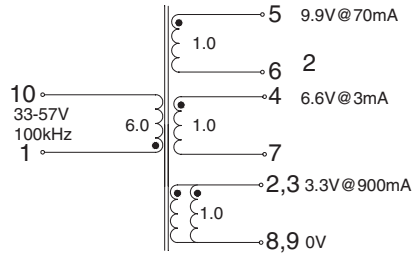
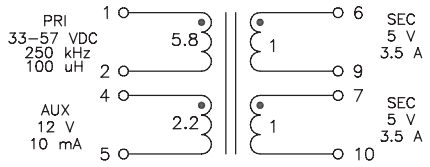
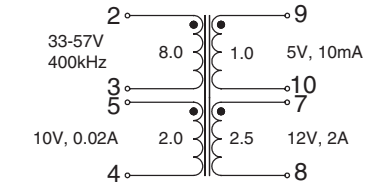
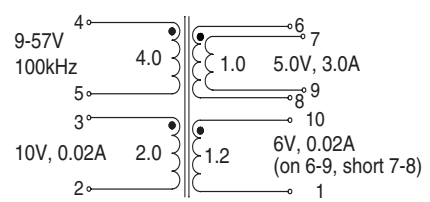
Pulse A YAGEO Company

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **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 | |
| | K1 Factor | 22.3 | | **FORWARD TRANSFORMER** |
| **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 | |
| | | (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 | |
| | K1 Factor | 739.3 | | **FLYBACK TRANSFORMER** |
| **PA2725NL** | Pri. Inductance | (5-4) | 139.5µH ±10% | * Please note this part has an alternate pin-out. Please see note 5 and refer to alternate mechanical drawing.  |
| | 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 | |
| | K1 Factor | 2384.6 | | **FLYBACK TRANSFORMER** |
| **PA2945NL** | Pri. Inductance | (1-2) | 100µH ±10% |  |
| | 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 | |
| | K1 Factor | 42.7 | | **FORWARD TRANSFORMER** |
| **PA3150NL** | Pri. Inductance | (1-3) | 100.5µH ±10% |  |
| | 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 | |
| | K1 Factor | 28.5 | | **FORWARD TRANSFORMER** |

# High Frequency Wire Wound Transformers

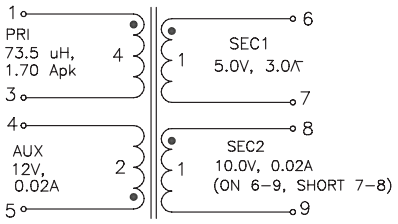
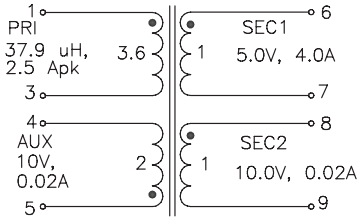
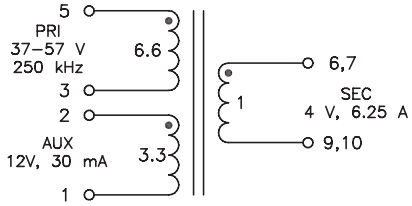
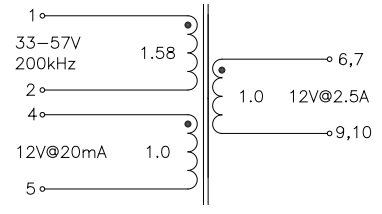
*EP13 Platforms - SMT*

Pulse A YAGEO Company

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **PA3171NL** | Pri. Inductance | (1-3) | 100µH ±10% |  * Please note this part has an alternate pin-out. Please see note 5 and refer to alternate mechanical drawing. **FLYBACK TRANSFORMER** |
| | 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 | | |
| **PA3242NL** | Pri. Inductance | (1-10) | 220µH ±10% |  **FLYBACK TRANSFORMER** |
| | 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 | | |
| **PA3274NL** | Pri. Inductance | (1-2) | 100µH ±10% |  **FORWARD TRANSFORMER** |
| | 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 | | |
| **PA3342NL** | Pri. Inductance | (2-3) | 90µH ±10% |  **FORWARD TRANSFORMER** |
| | 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 | | |
| **PA3371NL** | Pri. Inductance | (4-5) | 31µH ±10% |  **FORWARD TRANSFORMER** |
| | 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 | | |

# High Frequency Wire Wound Transformers

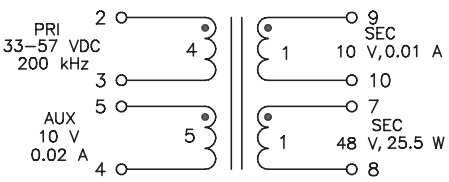
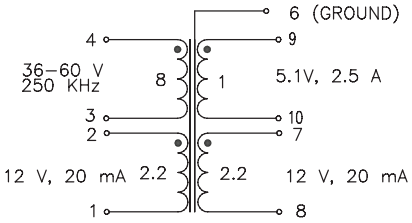
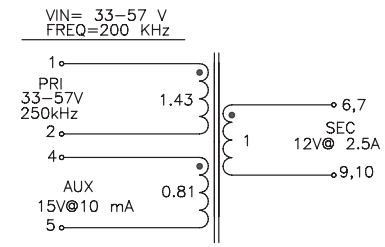
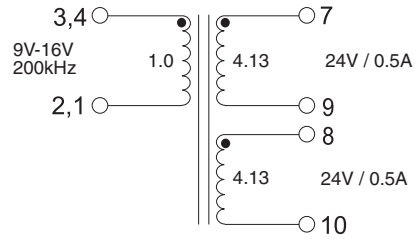
*EP13 Platforms - SMT*

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **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** |

* Please note this part has an alternate pin-out.
Please see note 5 and refer to alternate mechanical drawing.

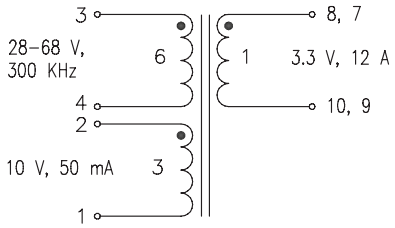
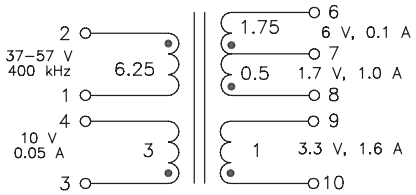
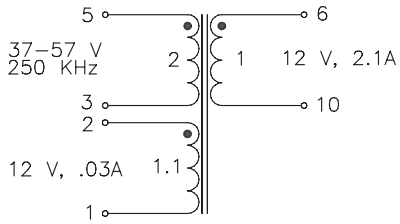
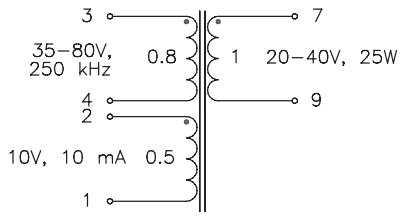
# High Frequency Wire Wound Transformers

*EP13 Platforms - SMT*

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **PA4836NL** | Pri. Inductance | (2-3) | 75µH ±10% |  |
| | | (2-3) | 52.5µH Min @ 2.3 ADC | |
| | 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 | |
| | K1 Factor | 1201.9 | | **FLYBACK TRANSFORMER** |
| **PG0738NL** | Pri. Inductance | (4-3) | 162µH ±10% |  |
| | 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 | |
| | Hi-Pot | (1,2,3,4) to (7,8,9,10) | 1500Vrms | |
| | K1 Factor | 2076.9 | | **FLYBACK TRANSFORMER** |
| **PG1318NL** | 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 | |
| | K1 Factor | 22.3 | | **FORWARD TRANSFORMER** |
| **PG1387NL** | Pri. Inductance | (2-1) | 123µH ±12% |  |
| | 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 | |
| | K1 Factor | 3504.3 | | **FLYBACK TRANSFORMER** |

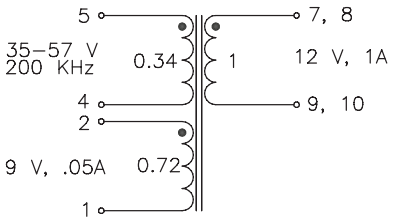
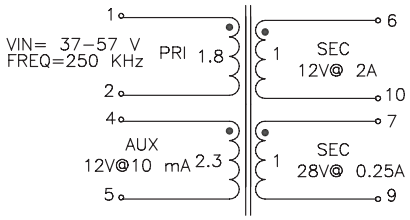
# High Frequency Wire Wound Transformers

*EP13 Platforms - SMT*

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **PG1576NL** | Pri. Inductance | (3-4) | 230.4µH ±10% |  |
| | 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 | | **FORWARD TRANSFORMER** |
| **PG1593NL** | Pri. Inductance | (2-1) | 144µH ±10% |  |
| | | (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) | 0.1µH MAX | |
| | DCR | (2-1) | 1202mΩ MAX | |
| | Hi-Pot | (1,3-6,7,9,10) | 1500Vrms | |
| | K1 Factor | 2953.8 | | **FLYBACK TRANSFORMER** |
| **PH2467NL** | Pri. Inductance | (5-3) | 37µH ±10% |  |
| | 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 | | **FLYBACK TRANSFORMER** |
| **PH9006NL** | Pri. Inductance | (3-4) | 19µH ±15% |  |
| | 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 | | **FLYBACK TRANSFORMER** |

# High Frequency Wire Wound Transformers

*EP13 Platforms - SMT*

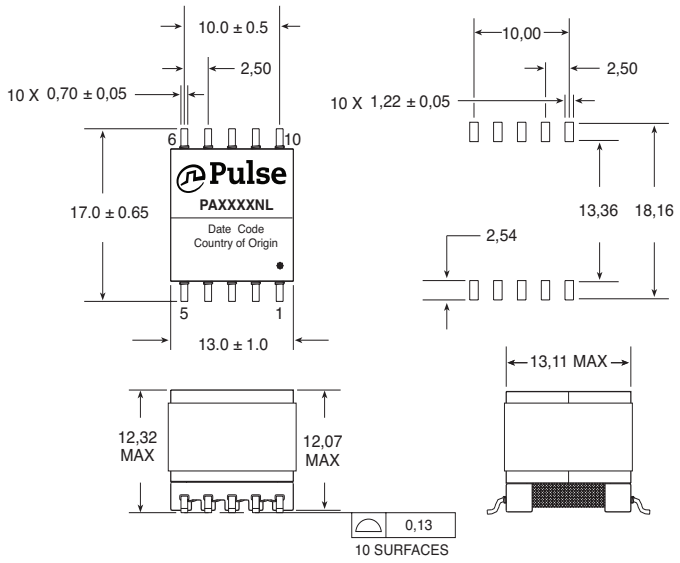
| Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[1] | | | | |
|---|---|---|---|---|
| **PH9058NL** | Pri. Inductance | (5-4) | 152µH ±10% |  |
| | Lk. Inductance | (5-4) with (1,2,7,8,9,10) shorted | 4µH MAX | |
| | DCR | (5-4) | 280mΩ MAX | |
| | | (7,8-9,10) | 50mΩ MAX | |
| | | (2-1) | 67mΩ MAX | |
| | Hi-Pot | (1,2,4,5) to (7,8,9,10) | 1650Vrms | |
| | K1 Factor | 2435.9 | | **FLYBACK TRANSFORMER** |
| **PH9098NL** | Pri. Inductance | (1-2) | 100.5µH ±15% |  |
| | 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 | |
| | K1 Factor | 22.3 | | **FORWARD TRANSFORMER** |

**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
   Bpk (Gauss) = K1_Factor * Ipk (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 (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 * $\Delta$I(A)
   For Forward Topology: $\Delta$B = K1_Factor * Volt-$\mu$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 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.

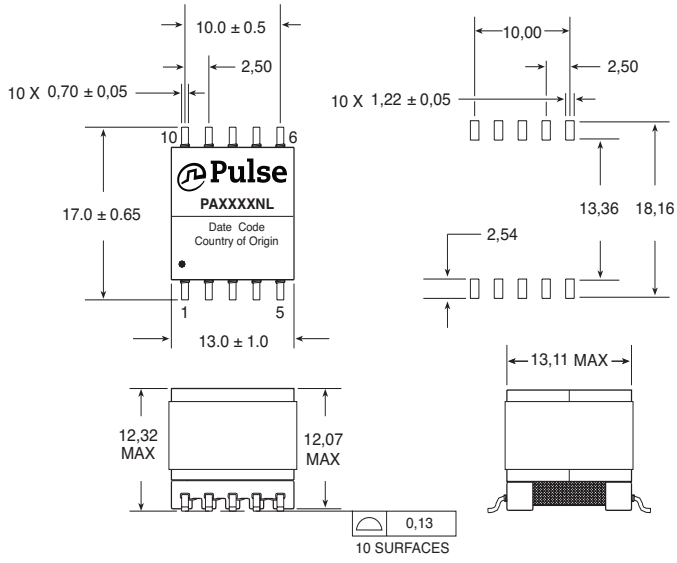
## Mechanical

### PAXXXXNL




## Alternate Mechanical

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

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