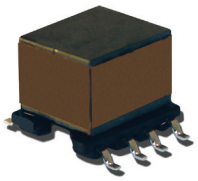
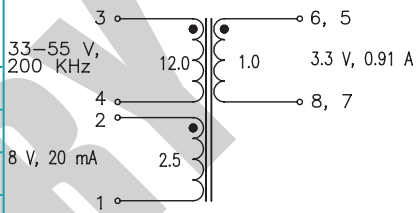
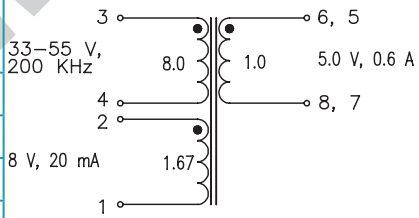
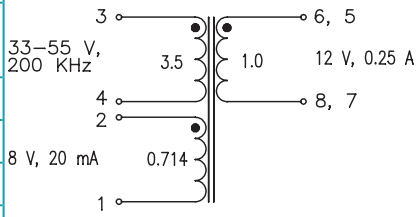
High Frequency Wire Wound Transformers

EP7 Platforms - SMT



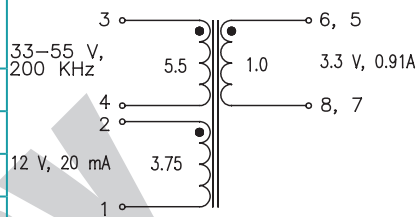
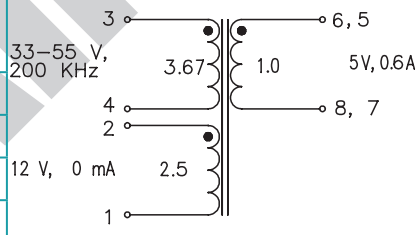
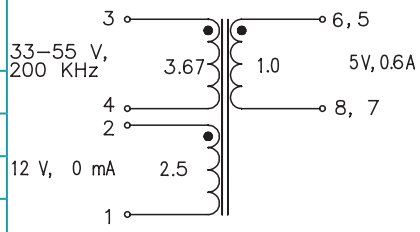
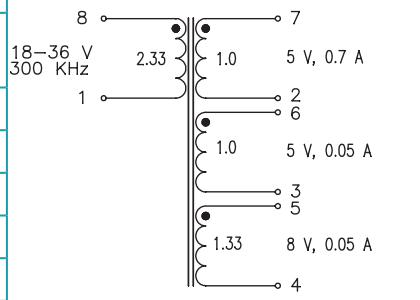
- ***Power Range:*** *up to 5W*
- ***Height:*** *9.27mm Max*
- ***Footprint:*** *13.34mm x 10.7mm Max*
- ***Toplogy:*** *Forward and Flyback*

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C[5]				
PA1130NL	Pri. Inductance	(3-4)	500µH ± 10%	
	Lk. Inductance	(3-4) with (8, 7, 6, 5) shorted	8µH MAX	
	DCR	(3-4)	1750mΩ MAX	
		(6, 5-8, 7)	15mΩ MAX	
		(2-1)	215mΩ MAX	
	Hi-Pot	Pri-Sec	1500Vrms	
	K1 Factor	9735.2		FLYBACK TRANSFORMER
PA1131NL	Pri. Inductance	(3-4)	500µH ±10%	
	Lk. Inductance	(3-4) with (8, 7, 6, 5) shorted	7.5µH MAX	
	DCR	(3-4)	1750mΩ MAX	
		(6, 5-8, 7)	35mΩ MAX	
		(2-1)	215mΩ MAX	
	Hi-Pot	Pri-Sec	1500Vrms	
	K1 Factor	9735.2		FLYBACK TRANSFORMER
PA1132NL	Pri. Inductance	(3-4)	521µH ±10%	
	Lk. Inductance	(3-4) with (8, 7, 6, 5) shorted	7.5 µH MAX	
	DCR	(3-4)	1750mΩ MAX	
		(6, 5-8, 7)	100mΩ MAX	
		(2-1)	220mΩ MAX	
	Hi-Pot	Pri-Sec	1500Vrms	
	K1 Factor	9937.1		FLYBACK TRANSFORMER

PRELIMINARY

High Frequency Wire Wound Transformers

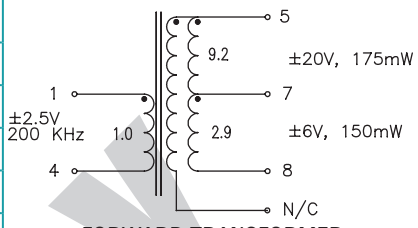
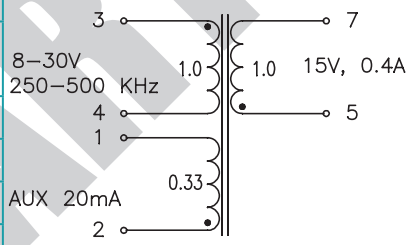
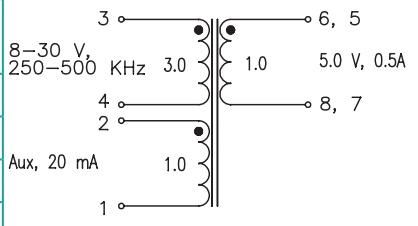
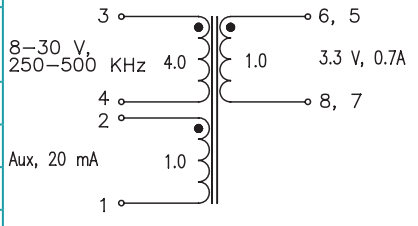
EP7 Platforms - SMT

Electrical Specifications @ 25°C – Operating Temperature -40°C to +130°C[5]				
PA1279NL	Pri. Inductance	(3-4)	310 µH ±10%	
	Lk. Inductance	(3-4) with (8, 7, 6, 5) shorted	5 µH MAX	
	DCR	(3-4)	1600mΩ MAX	
		(6, 5-8, 7)	45 mΩ MAX	
		(2-1)	2600 mΩ MAX	
	Hi-Pot	Pri-Sec	1500Vrms	
	K1 Factor	6584.5		FLYBACK TRANSFORMER
PA1280NL	Pri. Inductance	(3-4)	310µH ±10%	
	Lk. Inductance	(3-4) with (8, 7, 6, 5) shorted	5 µH MAX	
	DCR	(3-4)	1600 mΩ MAX	
		(6, 5-8, 7)	87 mΩ MAX	
		(2-1)	2650 mΩ MAX	
	Hi-Pot	Pri-Sec	1500Vrms	
	K1 Factor	6584.5		FLYBACK TRANSFORMER
PA1281NL	Pri. Inductance	(3-4)	310 µH ±10%	
	Lk. Inductance	(3-4) with (8, 7, 6, 5) shorted	5 µH MAX	
	DCR	(3-4)	1600 mΩ MAX	
		(6, 5-8, 7)	550 mΩ MAX	
		(2-1)	2600 mΩ MAX	
	Hi-Pot	Pri-Sec	1500Vrms	
	K1 Factor	6584.5		FLYBACK TRANSFORMER
PA1825NL	Pri. Inductance	(8-1)	24.5 µH ±10%	
	Lk. Inductance	(8-1) with (2, 3, 4, 5, 6, 7) shorted	110 µH MAX	
	DCR	(8-1)	50 mΩ MAX	
		(7-2)	50 mΩ MAX	
		(6-3)	110 mΩ MAX	
		(5-4)	160 mΩ MAX	
	Hi-Pot	Pri-Sec	600 Vdc	
	K1 Factor	1635.5		FLYBACK TRANSFORMER

PRELIMINARY

High Frequency Wire Wound Transformers

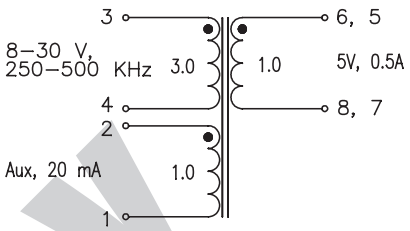
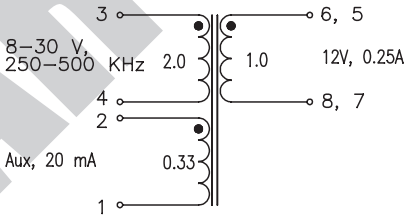
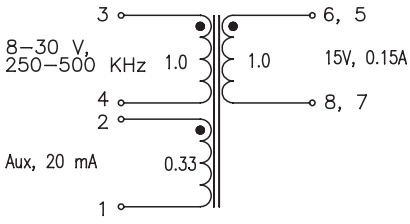
EP7 Platforms - SMT

Electrical Specifications @ 25°C – Operating Temperature -40°C to +130°C[5]				
PA2571NL	Pri. Inductance	(1-4)	100µH ±25%	 FORWARD TRANSFORMER
	DCR	(1-4)	85 mΩ MAX	
		(5-7)	8760 mΩ MAX	
		(7-8)	2200 mΩ MAX	
	Hi-Pot	Pri-Sec	500 Vrms	
	K1 Factor	93.5		
PA2617NL	Pri. Inductance	(3-4)	22.5 µH ±10%	 FLYBACK TRANSFORMER
	Lk. Inductance	(3-4) with (5,7) shorted	0.6 µH MAX	
	DCR	(3-4)	100 mΩ MAX	
		(5-8)	200 mΩ MAX	
		(2-1)	110 mΩ MAX	
	Hi-Pot	Pri-Sec	1500 Vrms	
	K1 Factor	1401.9		
PA2626NL	Pri. Inductance	(3-4)	30 µH ±5%	 FLYBACK TRANSFORMER
	Lk. Inductance	(3-4) with (8, 7, 6, 5) shorted	0.7 µH MAX	
	DCR	(3-4)	250 mΩ MAX	
		(6, 5-8, 7)	72 mΩ MAX	
		(2-4)	170 mΩ MAX	
	Hi-Pot	Pri-Sec	500 Vrms	
	K1 Factor	1168.2		
PA3018NL	Pri. Inductance	(3-4)	48.6µH ±5%	 FLYBACK TRANSFORMER
	Lk. Inductance	(3-4) with (8, 7, 6, 5) shorted	0.9 µH MAX	
	DCR	(3-4)	250 mΩ MAX	
		(6, 5-8, 7)	35 mΩ MAX	
		(2-1)	130 mΩ MAX	
	Hi-Pot	Pri-Sec	500 Vdc	
	K1 Factor	1892.5		

PRELIMINARY

High Frequency Wire Wound Transformers

EP7 Platforms - SMT

Electrical Specifications @ 25°C – Operating Temperature -40°C to +130°C[5]				
PA3019NL	Pri. Inductance	(3-4)	47.2 µH ±5%	
	Lk. Inductance	(3-4) with (1, 2, 8, 7, 6, 5) shorted	0.7 µH MAX	
	DCR	(3-4)	250 mΩ MAX	
		(6, 5-8, 7)	72 mΩ MAX	
		(2-1)	170 mΩ MAX	
	Hi-Pot	Pri-Sec	500 Vrms	
	K1 Factor	1838.0		FLYBACK TRANSFORMER
PA3020NL	Pri. Inductance	(3-4)	56.7 µH ±5%	
	Lk. Inductance	(3-4) with (8, 7, 6, 5) shorted	0.98 µH MAX	
	DCR	(3-4)	400 mΩ MAX	
		(6, 5-8, 7)	200 mΩ MAX	
		(2-1)	110 mΩ MAX	
	Hi-Pot	Pri-Sec	500 Vrms	
	K1 Factor	1766.4		FLYBACK TRANSFORMER
PA3021NL	Pri. Inductance	(3-4)	48.8 µH ±5%	
	Lk. Inductance	(3-4) with (8, 7, 6, 5) shorted	0.4 µH MAX	
	DCR	(3-4)	100mΩ MAX	
		(6, 5-8, 7)	200 mΩ MAX	
		(2-1)	110 mΩ MAX	
	Hi-Pot	Pri-Sec	500 Vrms	
	K1 Factor	3040.5		FLYBACK TRANSFORMER

PRELIMINARY

High Frequency Wire Wound Transformers

EP7 Platforms - SMT

Notes:

1. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
2. The above transformers and inductors have been tested and approved by Pulse's power IC partners and are sited in the appropriate datasheet or evaluation board documentation at these companies. To determine which IC and IC partners are matched with the above Pulse part numbers please consult the IC Cross Reference on the Pulse website.
3. For flyback topology applications, it is necessary to ensure that the transformer will not saturate in the application. The peak flux density (Bpk) should remain below 2700Gauss. To calculate the peak density, use the following formula:

   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) $^{1.63}$ * (ΔB_Gauss) $^{2.63}$

   where ΔB can be calculated as:

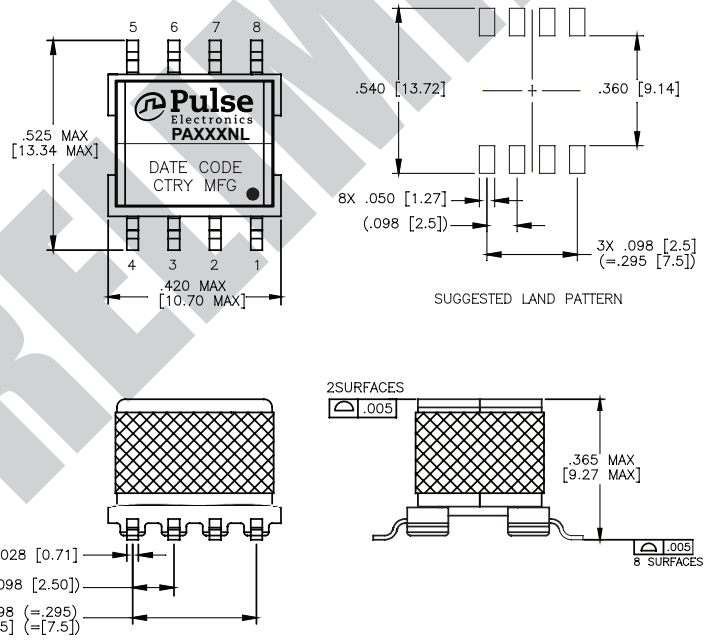
   For Flyback Topology: ΔB = K1_Factor * (A)

   For Forward Topology: ΔB = K1_Factor * Volt-µsec
5. Optional Tape & Reel packaging can be ordered by adding a "**T**" suffix to the part number (i.e. PA1130NL becomes PA1130NL**T**). Pulse complies with industry standard tape and reel specification EIA481. The tape and reel for this product has a width (W=24mm), pitch (Po=16mm) an depth (Ko=9.8mm).

PRELIMINARY

Mechanical

PAXXXXNL



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