### 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 Ten	nperature -40°C to +130°C1	
	Pri. Inductance	(3-4)	126.7µH ±10%	30-08,7
	Lk. Inductance	(3-4) with (10, 9, 8, 7) shorted	7.5µH MAX	33V-57V 12
		(3-4)	440 ${ m m}\Omega$ MAX	40
PA1136NL	DCR	(8, 7-10, 9)	6mΩ MAX	20-3
		(2-1)	88mΩ MAX	8V / 20mA 2.5
	Hi-Pot	Pri-Sec	1500 <b>V</b> rms	1 O FLYBACK TRANSFORMER
	K1 Factor	1353.6		FLIDACK IKANSFURMEK
	Pri. Inductance	(3-4)	126µH ±10%	30-08,7
	Lk. Inductance	(3-4) with (10, 9, 8, 7) shorted	7.5µH MAX	33V-57V 8 1.0 5V/2.7A
		(3-4)	$460 \mathrm{m}\Omega$ MAX	40-3
PA1137NL	DCR	(8, 7-10, 9)	12mΩ MAX	20
		(2-1)	94mΩ MAX	8V / 20mA 1.67
	Hi-Pot	Pri-Sec	1500Vrms	103
	K1 Factor	1353.6		FLYBACK TRANSFORMER
	Pri. Inductance	(3-4)	126.7µH ±10%	30-08,7
	Lk. Inductance	(3-4) with (10, 9, 8, 7) shorted	7.5µH MAX	33V-57V 200kHz 3.43
		(3-4)	$460 \mathrm{m}\Omega$ MAX	)  (
PA1138NL	DCR	(8, 7-10, 9)	55mΩ MAX	40-010, 9
		(2-1)	94mΩ MAX	8V / 20mA 0.71
	Hi-Pot	Pri-Sec	1500Vrms	103
	K1 Factor	1353.6		FLYBACK TRANSFORMER
	Pri. Inductance	(3-4)	480µH ±10%	3
	Lk. Inductance	(3-4) with (10, 8, 7, 6) shorted	10µH MAX	33V-57V 200kHz 12 1.0 3.3V/4V
		(3-4)	570mΩ MAX	4 0
DA1210NI	DCD	(8-10)	15mΩ MAX	20 6
PA1218NL	DCR	(6-7)	40mΩ MAX	8V / 20mA 2.75
		(2-1)	325mΩ MAX	10-3  ٤07
	Hi-Pot	Pri-Sec	1500Vdc	Output power is limited to 6W maximum total
	K1 Factor	5128.2	·	FLYBACK TRANSFORMER



		Electrical Specifications @ 25°C - Operating Tem	nperature -40°C to +130°C¹	
	Pri. Inductance	(3-4)	77.4µH ±10%	30-08,7
	Lk. Inductance	(3-4) with (10, 9, 8, 7) shorted	0.8µH MAX	3118
		(3-4)	220mΩ MAX	33V-57V 200kHz 3.67
PA1260NL	DCR	(8, 7-10, 9)	18mΩ MAX	40-010, 9
		(2-1)	250mΩ MAX	8V / 20mA 2.5
	Hi-Pot	Pri-Sec	1500Vrms	10
	K1 Factor	1804.2		FLYBACK TRANSFORMER
	Pri. Inductance	(4-1)	155.5µH ±10%	40
	Lk. Inductance	(4-1) with (10, 9, 8, 7) shorted	5μH MAX	33V-57V 6 1.0 3.3V / 11W
		(4-1)	330m $\Omega$ MAX	200kHz 0 0.507 11W
PA1267NL	DCR	(7, 8-9, 10)	11mΩ MAX	50-0
		(5-2)	$650  extbf{m} \Omega$ MAX	12V / 20mA 3.83
	Hi-Pot	Pri-Sec	1500Vrms	20
	K1 Factor	2215.1		FLYBACK TRANSFORMER
	Pri. Inductance	(3-4)	77.4µH ±10%	30-08,7
	Lk. Inductance	(3-4) with (10, 9, 8, 7) shorted	0.8µH MAX	33V-57V 200kHz 5.5 }
		(3-4)	100mΩ MAX	40—310, 9
PA1269NL	DCR	(8, 7-10, 9)	$6.5 \mathrm{m}\Omega$ MAX	20-0
		(2-1)	270mΩ MAX	12V / 20mA 3.75
	Hi-Pot	Pri-Sec	1500Vrms	103
	K1 Factor	1804.2		FLYBACK TRANSFORMER
	Pri. Inductance	(3-4)	77.4µH ±10%	30-08,7
	Lk. Inductance	(3-4) with (10, 9, 8, 7) shorted	0.8µH MAX	33V-57V 200kHz 1.47
		(3-4)	100mΩ MAX	4 0 10, 9
PA1276NL	DCR	(8, 7-10, 9)	$6.5 \mathrm{m}\Omega$ MAX	20-010,9
		(2-1)	270mΩ MAX	12V / 20mA 1.0
	Hi-Pot	Pri-Sec	1500 <b>V</b> dc	103
	K1 Factor	1804.2		FLYBACK TRANSFORMER
	Pri. Inductance	(3-4)	16.4µH ±10%	30-08,7
	Lk. Inductance	(3-4) with (10, 9, 8, 7) shorted	0.7µH MAX	9V-50V 200kHz 3
		(3-4)	$38 \mathrm{m}\Omega$ MAX	40-310, 9
PA1309NL	DCR	(8, 7-10, 9)	10mΩ MAX	20-0
		(2-1)	200mΩ MAX	12V / 20mA 2.4
	Hi-Pot	Pri-Sec	1500 <b>V</b> rms	103
	K1 Factor	599.0	·	FLYBACK TRANSFORMER



		Electrical Specifications @ 25°C - Operating Tem	perature -40°C to +130°C¹	
	Pri. Inductance	(3, 4-2, 1)	66.1µH ±10%	2 ~ 6
	Lk. Inductance	(3, 4-2, 1) with (10, 9, 8, 7) shorted	1.0µH MAX	35-58V 250kz 2.57
		(3, 4-2,1)	$82 \mathrm{m}\Omega$ MAX	1 • 7
DATECTALL	DCR	(7, 9)	12mΩ MAX	(0.57 1.7V,1A 4
PA1367NL		(8-10)	97mΩ MAX	12V,0.05A 3.43 1 3.3V,2.5A
	Hi-Pot	Pri-Sec	1500Vrms	310
	K1 Factor	57.0		FORWARD TRANSFORMER
	Pri. Inductance	(3, 4)	40μH ±10%	30-08,7
	Lk. Inductance	(3, 4) with (10, 9, 8, 7) shorted	2.5µH MAX	43V-57V 250kHz 2.86 1.0 12V / 1.1A
PA1460NL		(3, 4)	95mΩ MAX	40-3  -010.9
	DCR	(8, 7-10, 9)	28mΩ MAX	20—3
		(2-1)	66mΩ MAX	12V / 20mA 1.0
	Hi-Pot	Pri-Sec	1650 <b>V</b> rms	10
	K1 Factor	1025.6		FLYBACK TRANSFORMER
	Pri. Inductance	(3, 4)	28.9µH ±10%	30-8,7
	Lk. Inductance	(3, 4) with (10, 9, 8, 7) shorted	1μH MAX	33V-57V 2.13 \\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	DCR	(3, 4)	58mΩ MAX	40-010, 9
PA1528NL	DCK	(8, 7-10, 9)	27mΩ MAX	] ]
		(2-1)	55mΩ MAX	12V / 20mA 0.625
	Hi-Pot	Pri-Sec	1500 <b>V</b> rms	10
	K1 Factor	871.8		FLYBACK TRANSFORMER
	Pri. Inductance	(3, 4)	28.9µH ±10%	3 •••• 8,7
	Lk. Inductance	(3,4) with (10, 9, 8, 7) shorted	1μHΩ MAX	33-57V 200kHz 2.13
PA1528ANL		(3, 4)	58mΩ MAX	4 2 10,9
	DCR	(8, 7-10, 9)	27mΩ MAX	12.5V, 20 mA 0.88
		(2-1)	77mΩ MAX	1
	Hi-Pot	Pri-Sec	1500Vdc	"
	K1 Factor	871.8		FLYBACK TRANSFORMER



		Electrical Specifications @ 25°C - Operating Ten	nperature -40°C to +130°C¹	
	Pri. Inductance	(3, 4)	230.4µH ±30%	30-08,7
	Lk. Inductance	(3, 4) with (10, 9, 8, 7) shorted	1.5µH MAX	26V-68V 6 1.0 3.3V / 12A
PA1576NL		(3, 4)	36mΩ MAX	40
PAIDIUNL	DCR	(8, 7-10, 9)	$3.5 \mathrm{m}\Omega$ MAX	20-3
		(2-1)	58mΩ MAX	10V / 50mA 3
	Hi-Pot	Pri-Sec	1500Vrms	10
	K1 Factor	42.7		FORWARD TRANSFORMER
	Pri. Inductance	(3-4)	230.4µH ±60%	30-0  6-07
	Lk. Inductance	(3-4) with (10, 9, 8, 7) shorted	1.5µH MAX	28V-68V 300kHz 1.71
		(3, 4)	36mΩ MAX	40-3
PA1577NL	DCR	(7-9)=(8-10)	54mΩ MAX	20-8
		(2-1)	55mΩ MAX	10V / 50mA 0.86 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	Hi-Pot	Pri-Sec	1500Vrms	10
	K1 Factor	42.7		FORWARD TRANSFORMER
	Pri. Inductance	(3, 4)	6.7µH ±7%	30-08,7
	Lk. Inductance	(3, 4) with (10, 9, 8, 7) shorted	0.65µH MAX	36V-60V 200kHz 3.0
		(3, 4)	25mΩ MAX	40-3  -010, 9
PA1769NL	DCR	(8, 7-10, 9)	6.5mΩ MAX	20
		(2-1)	115mΩ MAX	12V / 20mA 2.33
	Hi-Pot	Pri-Sec	1500Vrms	103
	K1 Factor	381.8		FLYBACK TRANSFORMER
	Pri. Inductance	(1, 4)	115.5µH ±7%	40
	Lk. Inductance	(1, 4) with (10, 9, 8, 7) shorted	0.65µH MAX	33V-57V
		(1, 4)	330mΩ MAX	10-3  -09, 10
PA1861NL	DCR	(7, 8-9, 10)	11mΩ MAX	50
		(5-2)	460mΩ MAX	8V / 20mA 2
	Hi-Pot	Pri-Sec	1500Vrms	20—311
	K1 Factor	1645.3		FLYBACK TRANSFORMER
	Pri. Inductance	(5-4)	164µH ±10%	50-07,8
	Lk. Inductance	(5-4) with (10, 9, 8, 7) shorted	3µН МАХ	36V-60V 8
		(5-4)	292mΩ MAX	40-3
PA2070NL	DCR	(7, 8-9, 10)	8.5mΩ MAX	20
		(2-1)	60mΩ MAX	10V / 20 mA 2
	Hi-Pot	Pri-Sec	1500Vdc	103
	K1 Factor	2628.2		FLYBACK TRANSFORMER



		Electrical Specifications @ 25°C - Operating Temp	perature -40°C to +130°C¹	
	Pri. Inductance	(2-3)	164µH ±10%	
	Lk. Inductance	(2-3) with (10, 9, 8, 7) shorted	3µН МАХ	20-0  6-09
		(2-3)	292mΩ MAX	33V-57V 200kHz 8
PA2086NL	DCR	(5-4)	64mΩ MAX	30-3
FAZOUNL	DCK	(9-10)	17mΩ MAX	50-07
		(7-8)	100mΩ MAX	10V / 0.02A 2   2.5 12V / 1.5W
	Hi-Pot	Pri-Sec	1500 <b>V</b> rms	40
	K1 Factor	2628.2		FLYBACK TRANSFORMER
	Pri. Inductance	(2-3)	164µH ±10%	
	Lk. Inductance	(2-3) with (10, 9, 8, 7) shorted	3µН МАХ	29
		(2-3)	$300 \mathrm{m}\Omega$ MAX	33-57V 200kHz 8.0 1.0 5V, 6W
DA 211 ANII	DCD	(5-4)	64mΩ MAX	3
PA2114NL	DCR	(9-1)	30mΩ MAX	10V, 0.02A 2.0 2.5 12V, 6W
		(7-8)	165 $m\Omega$ MAX	48
	Hi-Pot	Pri-Sec	1500 <b>V</b> rms	
	K1 Factor	2628.2		FLYBACK TRANSFORMER
	Pri. Inductance	(1-2)	617.4µH ±28%	10-9
	Lk. Inductance	(1-2) with (10, 9, 7, 6, 5, 4) shorted	2μH MAX	33V-57V 3 }
		(1-2)	80mΩ MAX	20—3
PA2194NL	DCR	(9, 10-6, 7)	$30 \mathrm{m}\Omega$ MAX	10V / 0.02A 2
		(4-5)	4mΩ MAX	50
	Hi-Pot	Pri-Sec	1500Vrms	* Please note this part has an alternate pin-out.     Please see note 5 and refer to alternate mechanical drawing.
	K1 Factor	24.4		FORWARD TRANSFORMER
	Pri. Inductance	(2, 3-4, 5)	5μH ±10%	
	Lk. Inductance	(2, 3-4, 5) with (10, 9, 8, 7) shorted	0.25µH MAX	2,3 0 010,9
PA2204NL	DCD	(2, 3-4, 5)	20mΩ MAX	10V-14V 250kHz 1.33 }
TALLOTTIL	DCR	(8, 7-10, 9)	10.3 ${ m m}\Omega$ MAX	4,5 0 8,7
	Hi-Pot	Pri-Sec	1500Vrms	
	K1 Factor	2628.2		FLYBACK TRANSFORMER
	Pri. Inductance	(5-4)	152µH ±10%	50-07,8
	Lk. Inductance	(5-4) with (10, 9, 8, 7) shorted	4μH MAX	33V-60V 200kHz 10.67
		(5-4)	280 $m\Omega$ MAX	40————————————————————————————————————
PA2221NL	DCR	(7, 8-9, 10)	$5.2 \mathrm{m}\Omega$ MAX	
		(2-1)	67mΩ MAX	10V / 20mA 3
	Hi-Pot	Pri-Sec	1500Vdc	103
	K1 Factor	2435.9		FLYBACK TRANSFORMER



		Electrical Specifications @ 25°C - Operating Tem	perature -40°C to +130°C¹	
	Pri. Inductance	(3-4)	10µH ±10%	30-08,7
	Lk. Inductance	(3-4) with (10, 9, 8, 7) shorted	1μH MAX	7V-57V 2.5 }
		(3-4)	23mΩ MAX	40—310, 9
PA2271NL	DCR	(8, 7-10, 9)	6.7mΩ MAX	20
		(2-1)	54mΩ MAX	8V / 20mA 1.5
	Hi-Pot	Pri-Sec	1500Vdc	103
	K1 Factor	512.8		FLYBACK TRANSFORMER
	Pri. Inductance	(1-2)	100µH ±10%	10
	Lk. Inductance	(1-2) with (10, 9, 6, 5, 4) shorted	0.875µH MAX	33V-57V 4 3 0 6 7
		(1-2)	210mΩ MAX	20-3
PA2328NL	DCR	(6, 7-9, 10)	9mΩ MAX	40-0   (1.0 50 / 4.8A)
TALSLONE		(4-5)	$580 \mathrm{m}\Omega$ MAX	12V / 10mA 2.14
	Hi-Pot	Pri-Sec	1500Vrms	503
	K1 Factor	18.3		FORWARD TRANSFORMER
	Pri. Inductance	(2-1)	85µH ±10%	10
	Lk. Inductance	(2-1) with (10, 9, 7, 6, 5, 4) shorted	0.75μH MAX	36V-57V
		(2-1)	325 $m\Omega$ MAX	20-9,10
PA2367NL	DCR	(9, 10-6, 7)	25.5 ${ m m}\Omega$ MAX	40 SV/10W
PAZ30/NL		(4-5)	815m $\Omega$ MAX	10V/0.02A 2.1
	Hi-Pot	Pri-Sec	1500Vrms	503
	K1 Factor	1614.4		FLYBACK TRANSFORMER
	Pri. Inductance	(5-3)	37μH ±10%	5 0
	Lk. Inductance	(5-3) with (6, 7, 9, 10) shorted	0.75μH MAX	37V-57V 5 250kHz 5
		(5-3)	89mΩ MAX	30-3
PA2369NL	DCR	(6, 7-9, 10)	6.2mΩ MAX	20-10
PAZOOSNL		(2-1)	84mΩ MAX	12V / 0.03V 2.5 3
	Hi-Pot	Pri-Sec	1500Vrms	103
	K1 Factor	948.7		FLYBACK TRANSFORMER
	Pri. Inductance	(1-2)	530µH ±28%	10
	Lk. Inductance	(1-2) with (10, 9, 7, 6, 5, 4) shorted	0.5µH MAX	36V-72V 3
		(1-2)	75 ${ m m}\Omega$ MAX	20-30-06,7
PA2417NL	DCR	(6, 7-9, 10)	6.5mΩ MAX	40-0   \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
FA441/NL		(4-5)	886mΩ MAX	12V / 10mA 2.2
	Hi-Pot	Pri-Sec	1500Vdc	503
	K1 Factor	25.6		FORWARD TRANSFORMER



		Electrical Specifications @ 25°C - Operating Temp	perature -40°C to +130°C¹	
	Pri. Inductance	(1-2)	429.3µH ±28%	10
	Lk. Inductance	(1-2) with (10, 9, 7, 6, 5, 4) shorted	0.5µH MAX	30V-60V 225kHz 3.6
		(1-2)	68mΩ MAX	3  • 0,1
PA2431NL	DCR	(6, 7-9, 10)	6.75mΩ MAX	20   \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
		(4-5)	970m <b>Ω</b> MAX	12V / 10mA 2.4
	Hi-Pot	Pri-Sec	1500Vdc	503
	K1 Factor	28.5		FORWARD TRANSFORMER
	Pri. Inductance	(1-4) with (3-2) shorted	80µH ±10%	
	Lk. Inductance	(1-4) with (3-2) and (9-10) shorted	2µH MAX	10-3
		(1-3)	47mΩ MAX	9-36V- / 36-60V 2 0 9
PA2437NL	DCR	(2-4)	58mΩ MAX	250KHZ 2
		(6-7)	155mΩ MAX	40-010
		(9-10)	12mΩ MAX	12V / 20mA 3.75
	Hi-Pot	Pri-Sec	1500Vrms	70
	K1 Factor	1709.4		FORWARD TRANSFORMER
	Pri. Inductance	(5-3)	37μH ±10%	50-01
	Lk. Inductance	(5-3) with (6, 7, 9, 10) shorted	0.75µH MAX	271/571/
		(5-3)	89mΩ MAX	250kHz 6.67 30————————————————————————————————————
PA2466NL	DCR	(6, 7-9, 10)	4.6mΩ MAX	20 3.3V / 7.5
		(2-1)	96mΩ MAX	12V/0.03A 4
	Hi-Pot	Pri-Sec	1500Vrms	103
	K1 Factor	948.7		FLYBACK TRANSFORMER
	Pri. Inductance	(5-3)	37μH ±10%	50-01
	Lk. Inductance	(5-3) with (6, 7, 9, 10) shorted	0.75µH MAX	37V-57V
		(5-3)	89mΩ MAX	250kHz <sup>2</sup> 3 6
PA2467NL	DCR	(6, 7-9, 10)	4.6mΩ MAX	20 {1 12V/2.1A
		(2-1)	96mΩ MAX	12V / 0.03A 1.1
	Hi-Pot	Pri-Sec Pri-Sec	1500Vrms	103
	K1 Factor	948.7		FLYBACK TRANSFORMER
	Pri. Inductance	(3-4)	40μH ±10%	
	Lk. Inductance	(3-4) with (6,7,9,10) shorted	1.5µH MAX	3 6
		(3,4)	100mΩ MAX	18-40 V 275 kHz 1.5
PA2641NL	DCR	(6-7)	105mΩ MAX	4
		(9-10)	170mΩ MAX	15V, 20 mA 1.1 0.7 10.2V, 250mA
		(2-1)	460mΩ MAX	1
	Hi-Pot	(1,2) to 3,4,6,7,9,10	1500Vrms	]
	K1 Factor	976.8		FLYBACK TRANSFORMER



		Electrical Specifications @ 25°C - Operating Temp	perature -40°C to +130°C1	
	Pri. Inductance	(1-2)	100.5µH ±10%	pp 10
	Lk. Inductance	(1-2) with (4, 5, 6, 7, 8, 9, 10) shorted	0.88µH MAX	33_57V 2 SEC
		(1-2)	110mΩ MAX	600kHz 2 12V, 30W
PA2649NL	DCR	(6, 7-9, 10)	40mΩ MAX	4
		(4-5)	561mΩ MAX	AUX 15V, 20mA
	Hi-Pot	Pri-Sec	1500Vdc	5
	K1 Factor	22.3		FORWARD TRANSFORMER
	Pri. Inductance	(1,2)	17.3µH ±10%	
	Lk. Inductance	(1,2) with (6,7-9,10) shorted	0.28µH MAX	
		(1-2)	42mΩ MAX	1 ←
	DCR	(5-4)	99mΩ MAX	600kHz 2.0 3 6,7
PA2669NL		(6,7-9,10)	12.6 <b>m</b> Ω MAX	2°————————————————————————————————————
	W. D	(1,2) to (6,7,9,10)	1500Vrms	15V@20mA 1.17 9,10
	Hi-Pot	(1,2) to (4,5)	600Vrms	5
		Windings to core	600Vrms	
	K1 Factor	739.3		FLYBACK TRANSFORMER
	Pri. Inductance	(5-4)	139.5µH ±10%	* Please note this part has an alternate pin-out.
	Lk. Inductance	(5-4) with (7,8,9,10) shorted	1.1µH MAX	Please see note 5 and refer to alternate mechanical drawi
		(5,4)	265mΩ MAX	PRI 5° 7 5 1 5.3V, 2.0A
PA2725NL	DCR	(7-9)	23mΩ MAX	200kHz 4
		(8-10)	40mΩ MAX	2 8
		(2-1)	110mΩ MAX	AUX 1.7 } (1.3 7.5V, 0.02A
	Hi-Pot	(1,2,3,4) to (7,8,9,10)	1500Vrms	10
	K1 Factor	2384.6		FLYBACK TRANSFORMER
	Pri. Inductance	(1-2)	100μH ±10%	
	Lk. Inductance	(1-2) with (4, 5, 6, 7, 8, 9, 10) shorted	0.3µH MAX	10
		(1-2)	27.5 <b>m</b> Ω MAX	0.86
PA2945NL	DCR	(6, 7-9, 10)	52mΩ MAX	250KHZ 20
		(4-5)	295mΩ MAX	9,10
	Hi-Pot	Pri-Sec Pri-Sec	1500Vrms	5
	K1 Factor	42.7		FORWARD TRANSFORMER
	Pri. Inductance	(1-3)	100.5µH ±10%	
	Lk. Inductance	(1-3) with (4,5,6,7,9,10) shorted	0.5µH MAX	
		(1-3)	74.5mΩ MAX	PRI 10 0 6 SEC 33-57 VDC 3.6 (1 5.1 V 2.5 A
	DCR	(4-5)	550mΩ MAX	30-09
PA3150NL	DCR	(4-3)		
PA3150NL	DCR	(6,9)	15.5mΩ MAX	AUX 40 0 7 SEC 12 V 2.4) (1 5.1 V
PA3150NL	DCR	(6,9)		AUX 40 0 7 SEC 5.1 V 0.02 A 5 0 0 10
PA3150NL	DCR		15.5mΩ MAX 16.5mΩ MAX 1500Vrms	AUX 4 0 0 7 SEC 12 V 2.4



		Electrical Specifications @ 25°C - Operating Temp	erature -40°C to +130°C1	
	Pri. Inductance	(1-3)	100µH ±10%	10 6
	Lk. Inductance	(1-3) with (6, 7, 8, 9) shorted	1μH MAX	PRI (5 1 5.3 V, 2 A 275kHz
DA 7171NI		(1-3)	190mΩ MAX	3 0 7
PA3171NL	DCR	(6-7)	28mΩ MAX	12 V, 20 mA 2.6 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
		(8-9)	500mΩ MAX	5 0 9
	Hi-Pot	(1,2,3,4) TO (6,7,8,9)	500Vrms	* Please note this part has an alternate pin-out. Please see note 5 and refer to alternate mechanical drawing.
	K1 Factor	1831.5		FLYBACK TRANSFORMER
	Pri. Inductance	(1-10)	220µH ±10%	
	Lk. Inductance	(1-10) with (2, 3, 4, 5, 6, 7, 8, 9) shorted	1.6µH MAX	5 9.9V@70mA
		(1-10)	230mΩ MAX	6 2
PA3242NL	DCR	(2-9)=(3-8)	17.5mΩ MAX	10
		(4-7)	50mΩ MAX	1 ° ~ ~ ~ ~ 7
		(5-6)	50mΩ MAX	2,3 3.3V@900mA
	Hi-Pot	Pri-Sec	1000Vdc	8,9 ov
	K1 Factor	3760.7		FLYBACK TRANSFORMER
	Pri. Inductance	(1-2)	100µH ±10%	
	Lk. Inductance	(1-2) with (4,5,6,7,9,10) shorted	0.5μH MAX	
		(1-2)	77.75mΩ MAX	PRI 1 0 0 6 SE 33–57 VDC 5.8 1 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6
	DCR	(6-9)	11.9mΩ MAX	33–57 VDC 5.8 1 5 5 5 5 6 6 6 7 7 VDC 5.8 250 kHz 3.5 100 uH 2 0 0 9
PA3274NL		(7-10)	12.95m <b>Ω</b> MAX	AUX 4 0 0 7 SE 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
		(4-5)	256mΩ MAX	12 V 2.2   (1 5.3.5
	Hi-Pot	(1,2,4,5) to (6,7,9,10)	1500Vrms	
	K1 Factor	17.7		FORWARD TRANSFORMER
	Pri. Inductance	(2-3)	90μH ±10%	
	Lk. Inductance	(2-3) with (10, 9, 8, 7) shorted	2μH MAX	2∘9
		(2-3)	300mΩ MAX	33-57V 400kHz 8.0 1.0 5V, 10mA
PA3342NL	DCR	(5-4)	120mΩ MAX	3
		(9-10)	40mΩ MAX	10V, 0.02A 2.0 2.5 12V, 2A
		(7-8)	27mΩ MAX	48
	Hi-Pot	Pri-Sec Pri-Sec	1500Vdc	FORWARD TRANSFORMED
	K1 Factor	1442.3		FORWARD TRANSFORMER
	Pri. Inductance	(4-5)	31µH ±10%	
	Lk. Inductance	(4-5) with (1, 2, 3, 6, 7, 8, 9, 10) shorted	0.5µH MAX	9-57V 4° 9-57V 4° 7
		(4-5)	100mΩ MAX	100kHz 4.0 ≤  > 1.0 5.0V. 3.0A
	200	(6-8)=(7-9)	13mΩ MAX	5 9 3 10
PA3371NL	DCR	(1-10)	83.5mΩ MAX	10V, 0.02A 2.0 { 1.2 6V, 0.02A (on 6-9, short 7-
		(3-2)	155m <b>Ω</b> MAX	2. 1
	Hi-Pot	Pri-Sec	1500Vrms	
	K1 Factor	794.9	-	FORWARD TRANSFORMER



		Electrical Specifications @ 25°C - Operating Tem	perature -40°C to +130°C¹	
	Pri. Inductance	(1-3)	73.5µH ±10%	
		(1-3)	57.5µH min @1.7ADC	10-PRI 0504
	Lk. Inductance	(1-3) with (4,5,6,7,8,9) shorted	0.6µH MAX	73.5 uH, 4
PA3519NL		(1-3)	113mΩ MAX	3
	DCR	(6-7)	15mΩ MAX	AUX SEC2 8
		(8-9)	31mΩ MAX	12V, 0.02A 2 1 10.0V, 0.02A (ON 6-9, SHORT 7-8)
		(5-4)	180 ${\sf m}\Omega$ MAX	59
	Hi-Pot	(1,3,4,5) to (6,7,8,9)	1500 <b>V</b> rms	
	K1 Factor	1570.5		FLYBACK TRANSFORMER
	Pri. Inductance	(1-3)	37.9µH ±10%	
		(1-3)	30μH Min @ 2.5ADC	PRI SEC1 6
PA3642NL	Lk. Inductance	(1-3) with (4,5,6,7,8,9) shorted	0.4 μH MAX	37.9 uH, 3.6 2.5 Apk
		(1-3)	101mΩ MAX	3 - 7
	DCR	(6-7)	14mΩ MAX	AUX 3
		(8-9)	26mΩ MAX	0.02A 5. 10.0V, 0.02A
		(5-4)	92mΩ MAX	* Please note this part has an alternate pin-out.
	Hi-Pot	(1,3,4,5) to (6,7,8,9)	1500Vrms	Please see note 5 and refer to alternate mechanical drawing
	K1 Factor	1079.8		FLYBACK TRANSFORMER
	Pri. Inductance	(5-3)	37μH ±10%	
		(5-3)	29µH Min @ 2.8ADC	5 O
	Lk. Inductance	(5-3) with (1,2,6,7,9,10) shorted	0.75µH MAX	37–57 V   6.6
D4771FNI	DCR	(5.3)	89mΩ MAX	3 0 SEC 2 0 4 V, 6.25 A
PA3715NL	DCK	(5-3)	84mΩ MAX	AUX 3.3 9,10 9,10
		(2-1)	$3.87 \mathrm{m}\Omega$ MAX	1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Hi-Pot	(1,2,3,5) to (6,7,9,10)	1500Vrms	·
	K1 Factor	948.7		FLYBACK TRANSFORMER
	Pri. Inductance	(1-2)	100.5µH ±10%	
	Lk. Inductance	(1-2) with (4, 5, 6, 7, 8, 9, 10) shorted	0.88µH MAX	1
PA4065NL		(1-2)	75mΩ MAX	200kHz 1.33 }
PA400JNL	DCR	(6, 7-9, 10)	40mΩ MAX	2 0 1.0 12V@2.5A
		(4-5)	410m $\Omega$ MAX	12V@20mA 1.0
	Hi-Pot	Pri-Sec	1500Vrms	5
	K1 Factor	27.0		FORWARD TRANSFORMER



		Electrical Specifications @ 25°C - Operating Ter	nperature -40°C to +130°C¹	
	Pri. Inductance	(2-3)	75µH ±10%	
	Th. madetance	(2-3)	52.5μH Min @ 2.3 ADC	
	Lk. Inductance	(2-3) with (7,8,9,10) shorted	2μH MAX	PRI 2 0 9 SEC
PA4836NL		(2-3)	300mΩ MAX	PRI 2
PA40JUNL	DCR	(5-4)	120mΩ MAX	
		(9-10)	68mΩ MAX	10 V 5 )   C 1 48 V, 25
		(7-8)	352mΩ MAX	0.02 ~ 4 0 0 8
	Hi-Pot	(2,3,4,5) to (7,8,9,10)	1650Vrms	
	K1 Factor	1201.9		FLYBACK TRANSFORMER
	Pri. Inductance	(4-3)	162μH ±10%	
	Lk. Inductance	(4-3) with (7,8,9,10) shorted	2.2 μH MAX	6 (GROUND)
		(4-3)	600mΩ MAX	36-60 V 8 1 5.1V, 2.5 A
PG0738NL	DCR	(1-2)	240mΩ MAX	3
		(9-10)	14mΩ MAX	<b>1</b>
		(7-8)	240mΩ MAX	12 V, 20 mA 2.2 1 2.2 12 V, 20 m
	Hi-Pot	(1,2,3,4) to (7,8,9,10)	1500Vrms	, ,
	K1 Factor	2076.9		FLYBACK TRANSFORMER
	Pri. Inductance	(1-2)	100.5μH ±10%	VIN= 33-57 V FREQ=200 KHz
	Lk. Inductance	(1-2) with (4,5,6,7,9,10) shorted	0.875µH MAX	10
	DCD	(1-2)	110mΩ MAX	PRI 33–57V 1.43 3 6,7
PG1318NL	DCR	(6,7-9,10)	40mΩ MAX	2 SEC 1 12V@ 2.5A
		(4-5)	680mΩ MAX	AUX 0,81
	Hi-Pot	(1,2,4,5) to (6,7,9,10)	1500Vrms	15V@10 mA 5
	K1 Factor	22.3		FORWARD TRANSFORMER
	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	3,4 0 7
	Lk. Inductance	(2-1) with (7,8,9,10) shorted	2.1µH MAX	9V-16V 200kHz 1.0 { 4.13 24V / 0.5
		(2-1)	428 $m\Omega$ MAX	2,1 0 9
PG1387NL	DCR	(4-3)	$590  extbf{m} \Omega$ MAX	8
		(6-7)	280mΩ MAX	4.13 24V / 0.5.
		(7-8)	35mΩ MAX	□ 10
		(9-10)	25mΩ MAX	
	Hi-Pot	(1,2,3,4) to (6,7,8,9,10)	1500Vrms	FIVE TON ARTHUR CONTRA
	K1 Factor	3504.3	·	FLYBACK TRANSFORMER



		Electrical Specifications @ 25°C - Operating Tem	perature -40°C to +130°C¹	
	Pri. Inductance	(3-4)	230.4µH ±10%	
	Lk. Inductance	(3-4) with (10,9,8,7) shorted	1.5 µH MAX	3
		(3-4)	36mΩ MAX	28-68 V, 6 300 KHz 6 3.3 V, 12
PG1576NL	DCR	(7,8-9,10)	$3.5 \mathrm{m}\Omega$ MAX	3112
I GISTORE		(2,1)	58mΩ MAX	2
	Hi-Pot	(1,2,3,4) to (7,8,9,10)	1500 <b>V</b> rms	10 V, 50 mA 3
	ПІ-РОІ	(1,2) to (3,4)	500Vrms	1 •———)
		windings to core	600Vrms	
	K1 Factor	42.7		FORWARD TRANSFORMER
	Pri. Inductance	(2-1)	144µH ±10%	
		(2-1)	110µH min @ 0.75ADC	
		(2-1) with (3,4,6,7,8,9,10) shorted	0.9µH MAX	2 0   \( \big( \frac{1.75}{6} \) \( \text{0.1} \)
		(3-4) with (1,2,6,7,8,9,10) shorted	0.3µH MAX	2 0 6.25 1.75 6 V, 0.1
D.C.C.C.T.L.II	Lk. Inductance	(6-7) with (1,2,3,4,6,7,9,10) shorted	0.2µH MAX	
PG1593NL		(7-8) with (1,2,3,4,6,7,9,10) shorted	0.1µH MAX	10 V 0.05 A 3
		(9-10) with (1,2,3,4,6,7,9,10)	0.1µH MAX	30 10
	DCR	(2-1)	1202 ${ m m}\Omega$ MAX	
	Hi-Pot	(1,3-6,7,9,10)	1500Vrms	
	K1 Factor	2953.8		FLYBACK TRANSFORMER
	Pri. Inductance	(5-3)	37μH ±10%	5 • 6
	Lk. Inductance	(5-3) with (6,10) shorted	0.65µH MAX	37-57 V 250 KHz 2 \ 1 12 V, 2
		(5-3)	89mΩ MAX	<b>√</b>   ≻
PH2467NL	DCR	(2-1)	96mΩ MAX	3
		(6-10)	28mΩ MAX	12 V, .03A 1.13
	Hi-Pot	(5,3,2,1) to (6,10)	1650Vrms	1
	K1 Factor	948.7		FLYBACK TRANSFORMER
	Pri. Inductance	(3-4)	19µH ±15%	3 • 10 7
	Lk. Inductance	(3-4) with (1,2,7,9) shorted	0.42 μH MAX	35-80V, 0.8 1 20-40V, 25V
DUOQOCNI		(3-4)	36mΩ MAX	4
PH9006NL	DCR	(7,9)	3.5mΩ MAX	<b>√</b> ∥
		(2-1)	58mΩ MAX	10V, 10 mA 0.5
	Hi-Pot	(1,2,3,4) to (7,8,9,10)	1500Vrms	1 •————
	K1 Factor	609.0		FLYBACK TRANSFORMER



Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C¹								
	Pri. Inductance	(5-4)	152µH ±10%	5 • 7, 8				
PH9058NL	Lk. Inductance	(5-4) with (1,2,7,8,9,10) shorted	4μH MAX	75 57 \				
	DCR	(5-4)	280m $\Omega$ MAX					
		(7,8-9,10)	50mΩ MAX	4 0 9, 10				
		(2-1)	67mΩ MAX	9 V, .05A 0.72				
	Hi-Pot	(1,2,4,5) to (7,8,9,10)	1650Vrms	1				
	K1 Factor	2435.9		FLYBACK TRANSFORMER				
	Pri. Inductance	(1-2)	100.5µH ±15%					
PH9098NL	Lk. Inductance	(1-2) with (4,5,6,7,9,10) shorted	1.5µH MAX	1 • • 6				
	DCR	(1-2)	115mΩ MAX	VIN= 37-57 V PRI 1.8 (1 SEC 12V@ 2A				
		(4-5)	980mΩ MAX	2 0 10				
		(6,10)	60mΩ MAX	AUX 27				
		(7,9)	480 mΩ MAX	12V@10 mA 2.3 ) 28V@ 0.25A 59				
	Hi-Pot	Pri-Sec	1650Vrms	] "				
	K1 Factor	22.3		FORWARD TRANSFORMER				

### 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.
- 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.
- 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 \* lpk (A)
- 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:

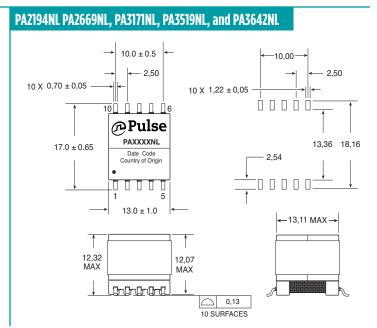
For Flyback Topology:  $\Delta B = K1_Factor * \Delta I(A)$ For Forward Topology:  $\Delta B = K1_Factor * Volt-usec$ 

- 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**

#### **Alternate Mechanical**

#### 10.0 ± 0.5 10.00 2 50 2 50 10 X 0,70 ± 0,05 10 X 1,22 ± 0,05 **₯Pulse** PAXXXXNL $17.0 \pm 0.65$ 13.36 18.16 Date Code Country of Origin 2,54 $13.0 \pm 1.0$ 13.11 MAX 12,32 MAX 12.07



#### For More Information

**PAXXXXNL** 

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Pulse Worldwide	Pulse Europe	Pulse China Headquarters	<b>Pulse North China</b>	<b>Pulse South Asia</b>	<b>Pulse North Asia</b>
Headquarters	Pulse Electronics GmbH	Pulse Electronics (ShenZhen) CO., LTD	Room 2704/2705	3 Fraser Street	1F., No.111 Xiyuan Rd
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		Nanshan District, Shenzhen,	China		
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Tel: 858 674 8100	Tel: 49 2354 777 100	Tel: 86 755 33966678	Tel: 86 21 62787060	Tel: 65 6287 8998	Tel: 886 3 4356768
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