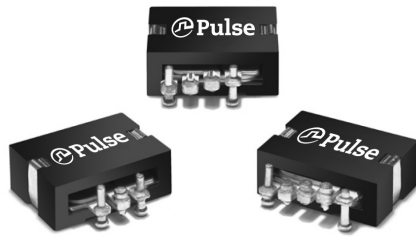


# SMT Power Inductors

Planar - PA1X9XNL Series



-  **Height:** 7.4mm
-  **Footprint:** 19.8mm x 19.6mm Max
-  **Current Rating:** up to 73A
-  **Inductance Range:** .405 $\mu$ H to 6.2 $\mu$ H

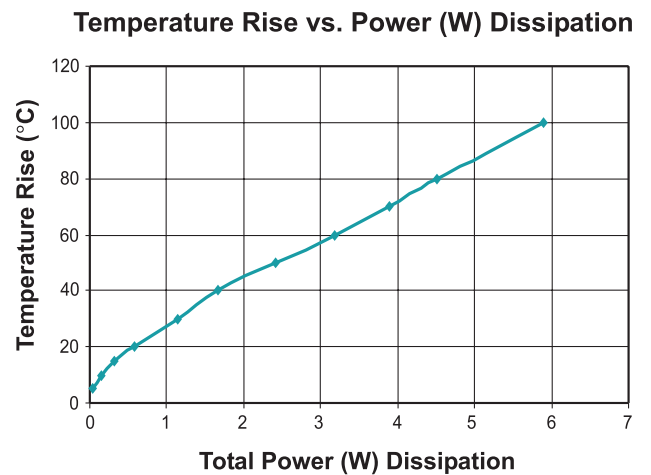
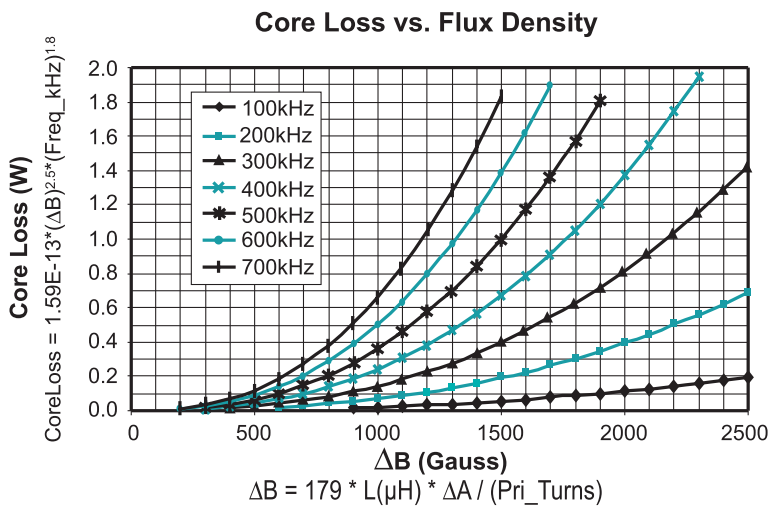
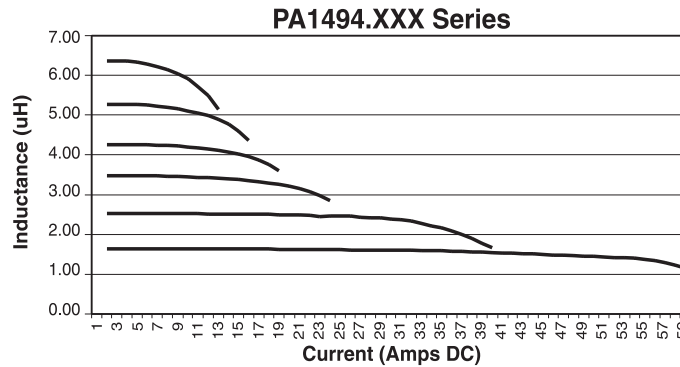
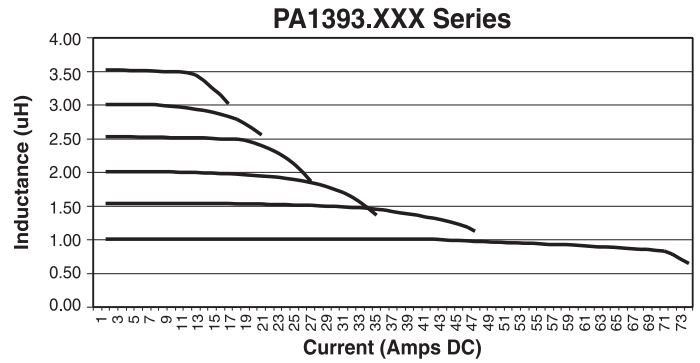
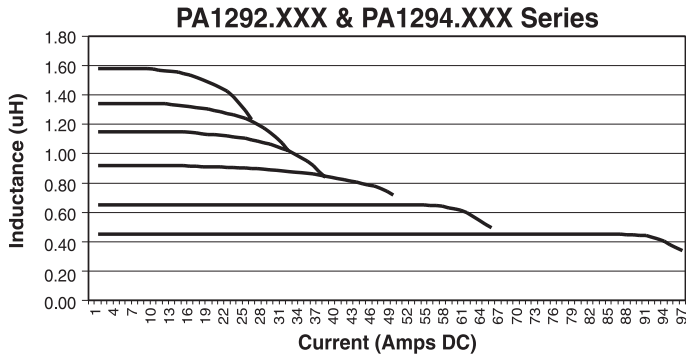
Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C<sup>8</sup>

Part <sup>5,7</sup> Number	Inductance @ Irated ( $\mu$ H $\pm$ 15%)	Irated <sup>1</sup> (A <sub>DC</sub> )	DCR (m $\Omega$ )		Inductance @ 0 A <sub>DC</sub> ( $\mu$ H $\pm$ 15%)	Saturation Current <sup>2</sup>		Heating Current <sup>3</sup> (A)
			TYP	MAX		25°C	100°C	
<b>2-Turn (Low-Loss) Series</b>								
PA1294.450NL	0.45	73	.38	.48	0.45	95	80	73
PA1294.650NL	0.63	54	.38	.48	0.65	63	53	73
PA1294.910NL	0.85	39	.38	.48	0.91	46	37	73
PA1294.112NL	1.05	30	.38	.48	1.10	35	30	73
PA1294.132NL	1.25	25	.38	.48	1.30	29	26	73
PA1294.152NL	1.45	21	.38	.48	1.50	24	22	73
<b>2-Turn Series</b>								
PA1292.450NL *	0.45	52	.78	.98	0.45	95	80	52
PA1292.650NL	0.63	52	.78	.98	0.65	63	53	52
PA1292.910NL *	0.85	39	.78	.98	0.91	46	37	52
PA1292.112NL	1.05	30	.78	.98	1.10	35	30	52
PA1292.132NL	1.25	25	.78	.98	1.30	29	26	52
PA1292.152NL *	1.45	21	.78	.98	1.50	24	22	52
<b>3-Turn Series</b>								
PA1393.102NL	0.95	42	1.15	1.43	1.0	68	54	42
PA1393.152NL	1.40	36	1.15	1.43	1.5	43	35	42
PA1393.202NL	1.90	25	1.15	1.43	2.0	29	25	42
PA1393.252NL	2.40	20	1.15	1.43	2.5	23	21	42
PA1393.302NL	2.80	15	1.15	1.43	3.0	18	16	42
PA1393.352NL	3.40	12	1.15	1.43	3.5	15	13	42
<b>4-Turn Series</b>								
PA1494.162NL	1.60	37	1.44	1.80	1.60	55	43	37
PA1494.242NL	2.40	30	1.44	1.80	2.42	35	27	37
PA1494.362NL	3.30	17	1.44	1.80	3.60	20	18	37
PA1494.442NL	4.00	14	1.44	1.80	4.40	16	15	37
PA1494.532NL	4.90	11	1.44	1.80	5.34	13	12	37
PA1494.622NL	5.80	9	1.44	1.80	6.20	11	10	37



## Inductance vs. Current Characteristics (25°C)

### PA1X9XNL



Total Power Dissipation = Copper Loss (W) + Core Loss (W)

Copper Loss (W) =  $\text{Current (rms)}^2 * \text{DCR (m}\Omega) / 1000$   
 Core Loss (W) = per table

# SMT Power Inductors

Planar - PA1X9XNL Series



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