Power Beads - PA2080NL, PA1894NL, PA2150NL, and PA2125NL Series







Desktop/Server Vcore Inductors

DCR Tolerance: ±4%

Current Rating: Over 80Apk

Inductance Range: 140μH to 470μH

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C ⁷									
Part Number	Inductance @ OA _{DC} (nH ±10%)	Inductance @ Irated (nH TYP)	Irated ¹ (A _{DC})	$\begin{array}{c} \textbf{DCR}^2\\ (\text{m}\Omega) \end{array}$	Saturation Current³ (A TYP)		Heating⁴ Current		
					25°C	100°C	(A TYP)		
PA2080NL Series - 10	.5mm x 7.5mm x 8.9mi	m MAX							
PA2080.141NL *	140	140	40	0.49 ±4.1%	85	>80	40		
PA2080.161NL	165	160	40		70	60			
PA2080.191NL *	185	182	40		65	55			
PA2080.221NL	215	207	40		55	50			
PA1894NL Series - 10.	0mm x 9.0mm x 10.0n	ım MAX							
PA1894.191NL	185	185	35	0.64 ±4.6%	69	55	35		
PA1894.221NL*	220	220	35		63	51			
PA1894.271NL	250	250	35		53	46			
PA1894.331NL*	335	268	35		40	35			
PA2150NL Series - 11.	8mm x 9.0mm x 9.2mn	n MAX							
PA2150.181NL *	180	180	37	0.50 ±4.0%	74	67	37		
PA2150.231NL	235	235	37		56	50			
PA2150.261NL *	270	270	37		52	44			
PA2150.371NL	370	296	36		36	32			
PA2150.471NL*	470	376	27		27	25			
PA2125NL Series - 15.	9mm x 9.0mm x 9.2mr	n MAX							
PA2125.251NL *	250	250	34		68	63	34		
PA2125.281NL *	285	285	34	0.62 ±6.5%	66	56			
PA2125.331NL *	335	335	34		56	50			
PA2125.361NL	360	360	34		52	46			
PA2125.441NL	440	440	34		42	38			

USA 858 674 8100 Germany 49 7032 7806 0 Singapore 65 6287 8998 Shanghai 86 21 62787060 China 86 755 33966678 Taiwan 886 3 4356768

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Notes:

- 1. The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- 2. The saturation current is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C and 100°C). This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effects) to the component.
- 3. The heating current is the DC current which causes the part temperature to increase by approximately 40°C.



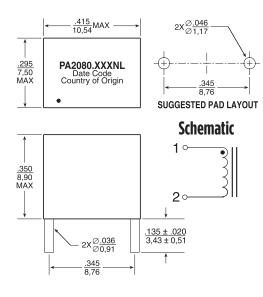
- 4. In high volt*time applications, additional heating in the component can occur due to core losses in the inductor which may necessitate derating the current in order to limit the temperature rise of the component. To determine the approximate total losses (or temperature rise) for a given application, the coreloss and temperature rise curves can be used.
- 5. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

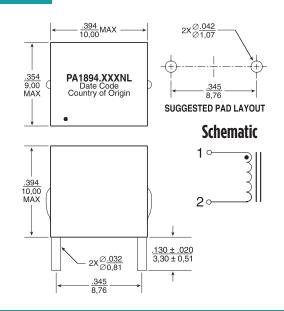
*Contact Pulse for availability

Mechanicals

PA2080.XXXNL

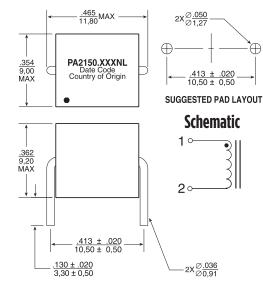
PA1894.XXXNL

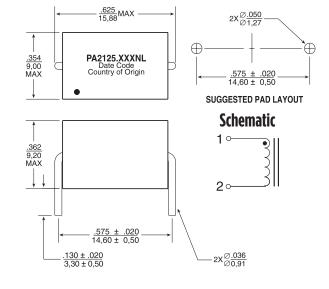




PA2150.XXXNL

PA2125.XXXNL

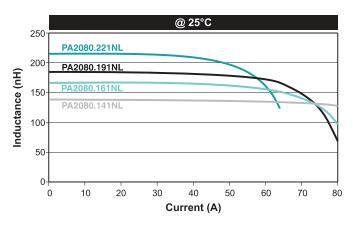


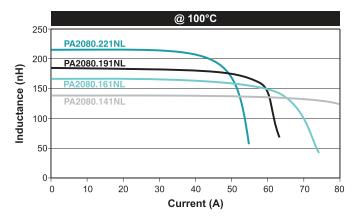


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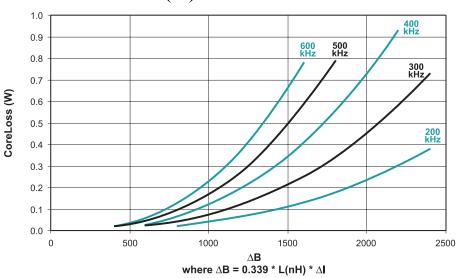


Typical Inductance vs DC Bias for PA2080.XXXNL Series

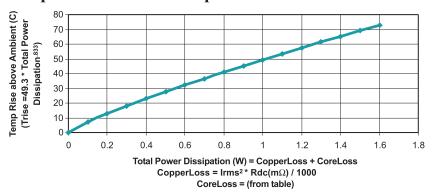




CoreLoss (W) for PA2080.XXXNL Series



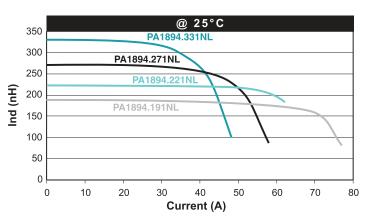
Temp Rise vs Power Dissipation for PA2080.XXXNL Series

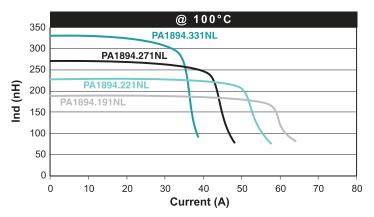


Power Beads - PA2080NL, PA1894NL, PA2150NL, and PA2125NL Series

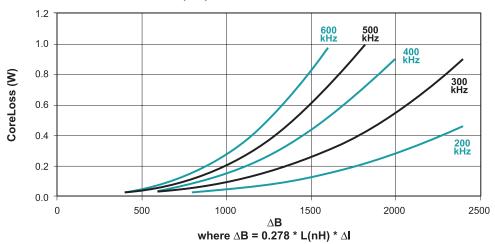


Lvsl for PA1894.XXXNL Series

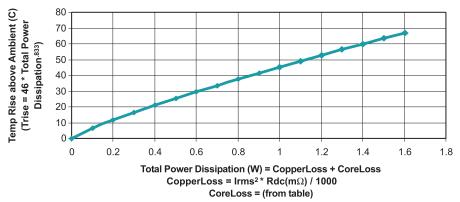




CoreLoss (W) for PA1894.XXXNL Series



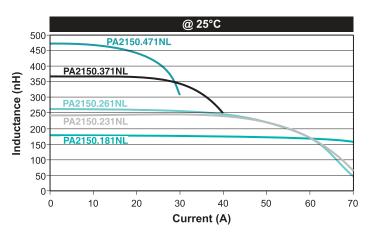
Temp Rise vs Power Dissipation for PA1894.XXXNL Series

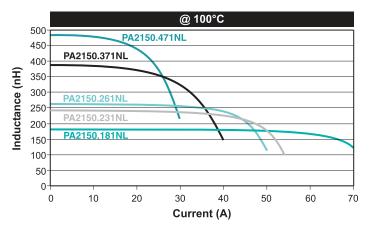


Power Beads - PA2080NL, PA1894NL, PA2150NL, and PA2125NL Series

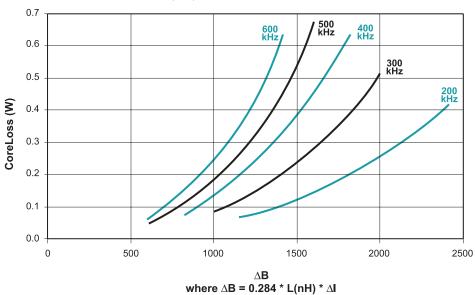


Typical Inductance vs DC Bias for PA2150.XXXNL Series

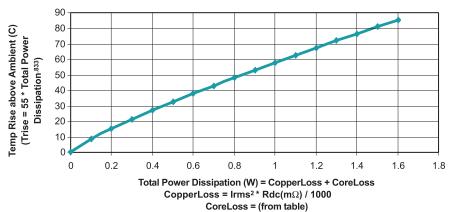




CoreLoss (W) for PA2150.XXXNL Series

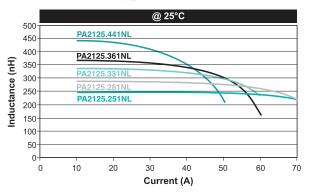


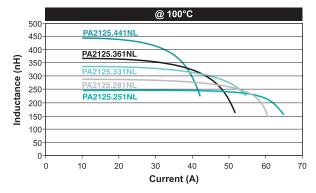
Temp Rise vs Power Dissipation for PA2150.XXXNL Series



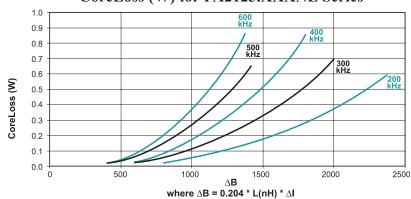
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Typical Inductance vs DC Bias for PA2125.XXXNL Series

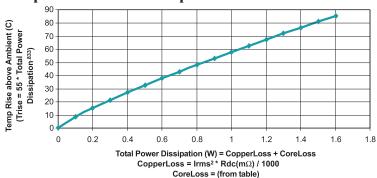




CoreLoss (W) for PA2125.XXXNL Series



Temp Rise vs Power Dissipation for PA2125.XXXNL Series



For More Information

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