

SMT POWER INDUCTORS

Power Beads - PA4060.XXXHL



- ⊕ **Current Rating:** Over 90Apk
- ⊕ **Inductance Range:** 115nH to 300nH
- ⊕ **Height:** 7.5mm Max
- ⊕ **Footprint:** 10.4mm x 8.0mm Max
- ⊕ **Halogen Free**

Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C⁷

Part Number	Inductance ¹ @ 0A _{DC} (nH +/- 15%)	Inductance @I _{rated} (nH TYP)	I _{rated} ² (A _{DC})	DCR ³ (mΩ nominal)	Saturation Current ⁴ (A TYP)			Heating Current (A TYP)
					25°C	100°C	125°C	
PA4060.121HL	115	115	41	0.29 +/- 5%	94	91	79	41
PA4060.151HL	150	150	41		76	63	59.5	
PA4060.171HL	175	175	41		67	53	48.5	
PA4060.231HL	238	220	38.5		48	38.5	36	
PA4060.271HL	270	250	32.5		41	32.5	30.5	
PA4060.301HL	305	290	27		35	27	26	

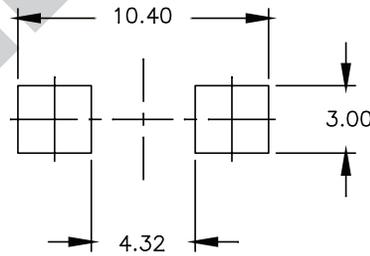
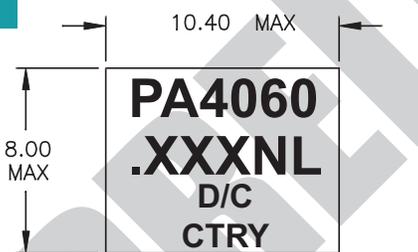
NOTES:

- Inductance measured at 100kHz, 100mVrms.
- The rated current as listed is either the saturation current at 100°C or the heating current depending on which value is lower.
- The nominal DCR is measured from point (a) to point (b), as shown below on the mechanical drawing.
- The saturation current is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C, 100°C and 125°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.
- The heating current is the DC current which causes the part temperature to increase by approximately 40°C.
- 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.
- Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PA4060.151HL becomes PA4060.151HLT). Pulse complies to industry standard tape and reel specification EIA481. The tape and reel for this product has a width (W=24mm), pitch (Po=12.0mm) and depth (Ko=8.4mm).
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

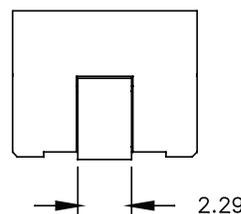
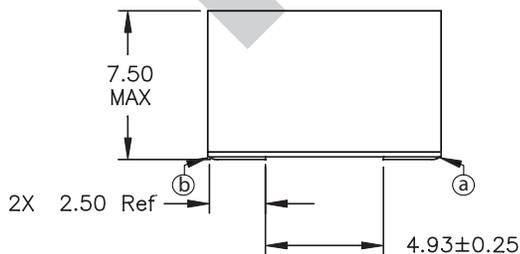
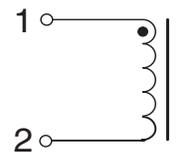
Mechanical

Schematic

PA4060.XXXHL



SUGGESTED LAND PATTERN



Weight 2.4 grams
Tape & Reel 450/reel

Dimensions: mm

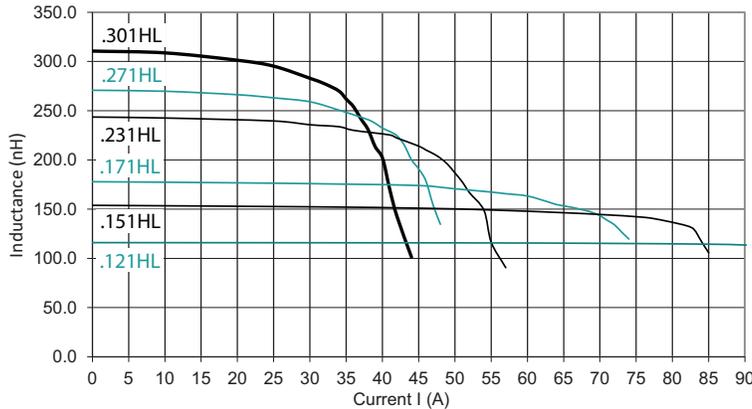
Unless otherwise specified,
all tolerances are ± 0,25

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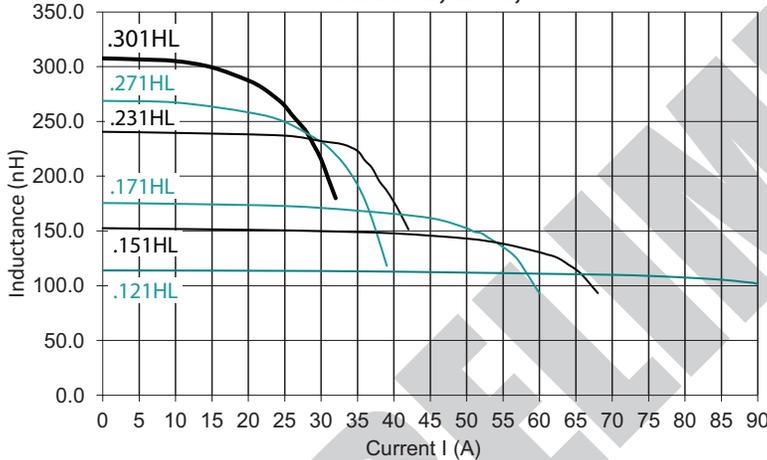
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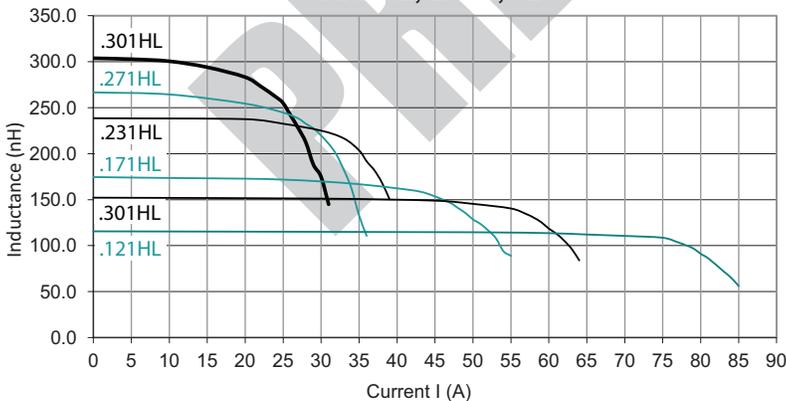
PA4060.XXXHL L vs I curve 25°C



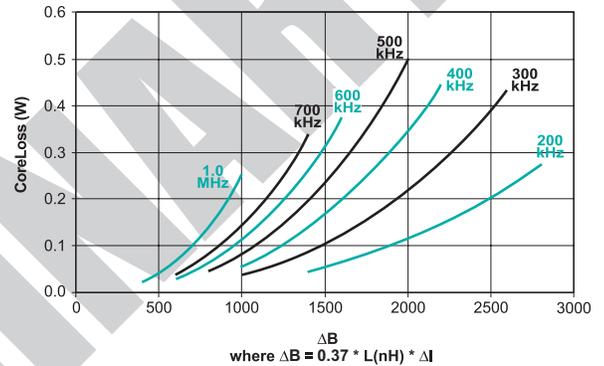
PA4060.XXXHL, LvsI, 100°C



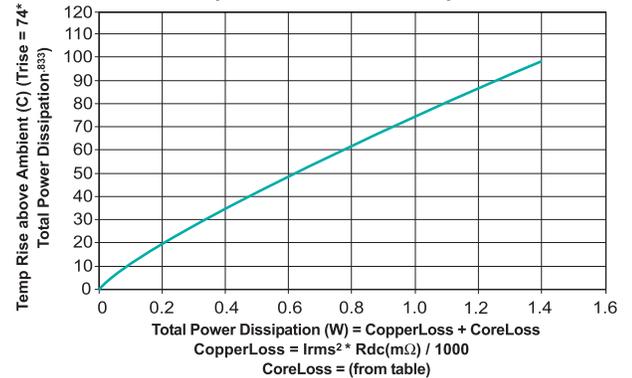
PA4060.XXXHL, L vs I, 125°C



CoreLoss (W)



Temp Rise vs Power Dissipation



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