

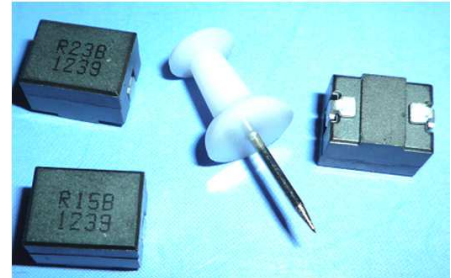


L30921 Series



1. Features:

- Ferrite based SMD Inductor with lower core loss.
- Inductance Range:120nH to 300nH. Custom values are welcomed.
- High current output chokes, upto 95 Amp with approx. 20% roll off.
- Low Profile 7.5mm Max. height(120nH is 7.6mm max) .
- Foot Print 10.41 x 8.10 mm Max.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency up to 1 MHz application.
- Operating Temperature Range -55°C to + 130°C , RoHs & HF compliance .
- T & R Qty: 750 pcs , 13" Reel ;

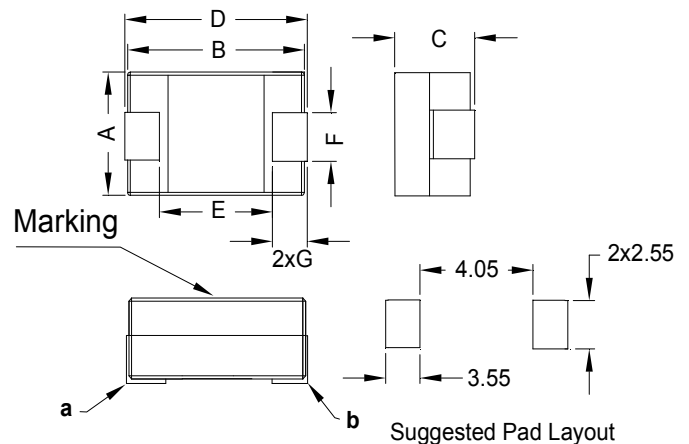


2. Electrical Characteristic of L30921 Series:

Part Number	Inductance (uH) ± 10%	DCR (mΩ) ± 5.0%	Isat ¹ (A) @25°C	Isat ² (A) @75°C	Isat ³ (A) @100°C	Isat ⁴ (A) @125°C	Irms (A) @25°C	C (mm) Max.
L30921-1	0.120 , 10%	0.290	95.0	91.0	87.0	86.0	63.0	7.60
L30921-2	0.150 , 10%	0.290	81.0	78.0	72.0	70.0	63.0	7.50
L30921-3	0.170 , 10%	0.290	73.0	67.0	61.0	60.0	63.0	7.50
L30921-4	0.215 , 10%	0.290	56.0	52.0	50.0	43.0	63.0	7.50
L30921-5	0.230 , 10%	0.290	54.5	49.0	42.0	40.0	63.0	7.50
L30921-6	0.270 , 10%	0.290	43.0	38.0	35.0	34.0	63.0	7.50
L30921-7	0.300 , 10%	0.290	40.0	37.0	32.0	30.0	63.0	7.50

3. Mechanical Dimension(Unit:mm):

A	B	C	D	E	F	G
Max.	Max.	Max.	Max.	Nom.	Nom.	Nom.
8.10	10.30	see table	10.41	5.10	2.25	2.50



Note:

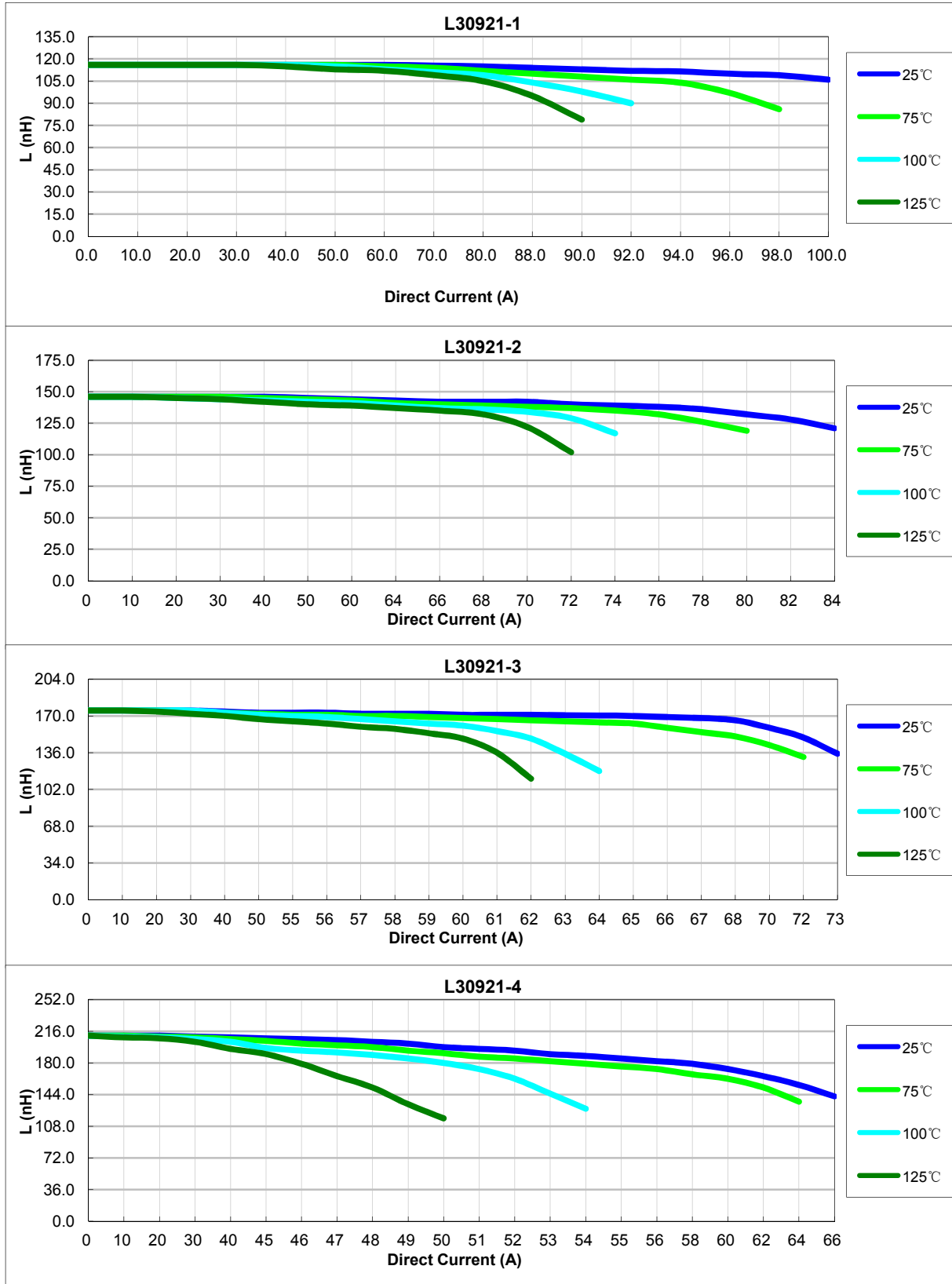
- 1>.Open Circuit Inductance (OCL) test condition:100KHz,0.1Vrms,0Adc ,at 25°C.
- 2>.Full Load Inductance (FLL) Test condition:100KHz,0.1Vrms ,Isat ;(Ta=25°C).
- 3>.Isat¹,Isat²,Isat³ & Isat⁴ : DC current that will cause inductance to drops approximately by 20% ;
- 4>. I rms: DC current for an approximate temperature rise of 40°C without core loss,..Derating is necessary for AC currents. PCB pad layout,trace thickness and width,air-flow and proximity of other heat generating components will affect the temperature rise. It is recommended the part temperature not exceed 130°C under worst case operating conditions verified in the end application.
- 5>.The nominal DCR is measured from point "a" to point"b",as shown above on the mechanical drawing.

4. Inductance Characteristics (Inductance vs. Current):



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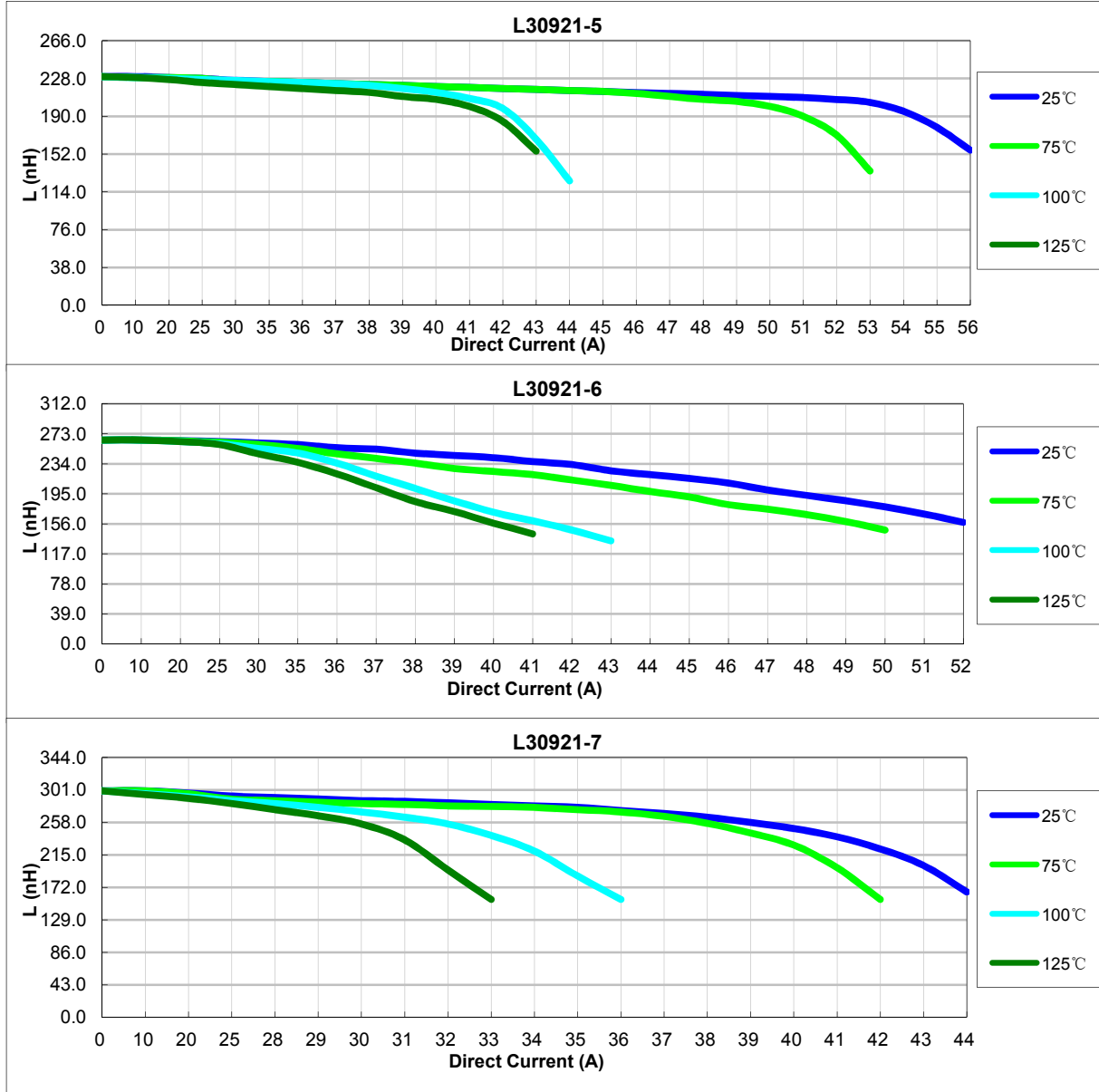
Inductance vs. Current





L30921 Series

Inductance vs. Current

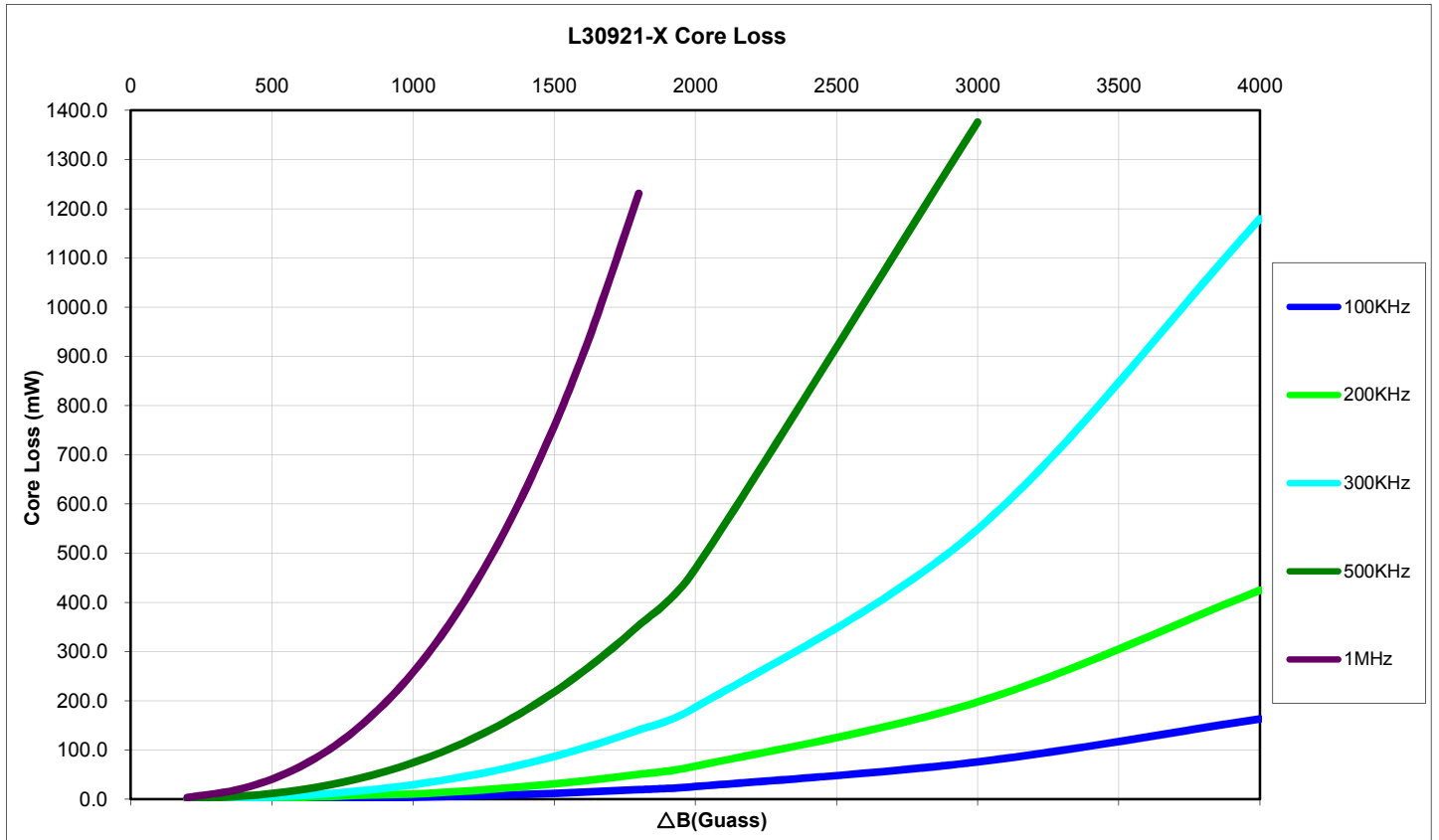




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5. Core Loss:



Where $\Delta B = 0.34 * L(nH) * \Delta I$