

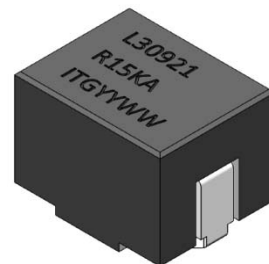


L30921 Series



1. Features of L30921 Series:

- Ferrite based SMD inductor with lower core loss.
- Inductance Range: 120.0nH to 300.0nH. Custom values are welcomed.
- High current output chokes of up to 95.0 Amp with approx. 20% roll off.
- Low profile 7.50 mm max height (120nH is 7.60mm max).
- Foot print 10.41 x 8.10mm max.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency of up to 5.0MHz.
- Operating temperature range of -55° C to + 130° C
- RoHS & HF compliant.
- T & R Qty's: 750pcs, 13" Reel.

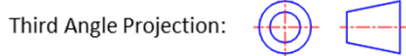
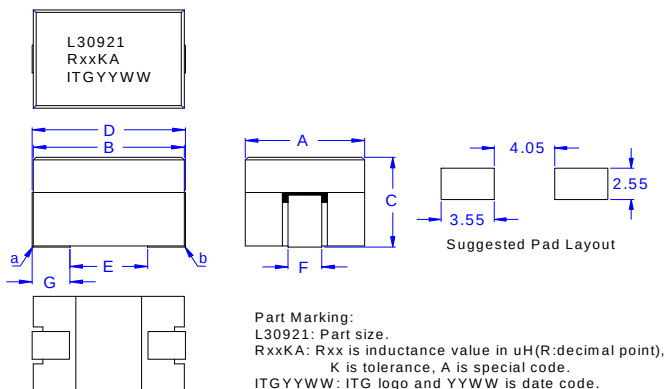


2. Electrical Characteristics of L30921 Series:

ITG Part Number	OCL ¹ (nH) ± 10%	DCR ³ (mΩ) ± 5.0%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Isat4 ⁴ (A) @125°C	Irms ⁵ (A) @25°C	Dim. C (mm) Max.
L30921-1	120.00	0.29	95.00	91.00	87.00	86.00	63.00	7.60
L30921-2	150.00	0.29	81.00	78.00	72.00	70.00	63.00	7.50
L30921-3	170.00	0.29	73.00	67.00	61.00	60.00	63.00	7.50
L30921-4	215.00	0.29	56.00	52.00	50.00	43.00	63.00	7.50
L30921-5	230.00	0.29	54.50	49.00	42.00	40.00	63.00	7.50
L30921-6	270.00	0.29	43.00	38.00	35.00	34.00	63.00	7.50
L30921-7	300.00	0.29	40.00	37.00	32.00	30.00	63.00	7.50

3. Mechanical Dimension of L30921 Series:

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



Notes:

1. Open Circuit Inductance (OCL) test condition: 100KHz, 0.1 Vrms, 0A DC at 25°C.
2. L @ Isat and L @ Irms Test condition: 100KHz, 0.1 Vrm (Ta=25°C).
3. The nominal DCR is measured from point "a" to point "b" as shown above in the mechanical drawing (Ta=25°C).
4. Isat1, Isat2, Isat3 & Isat4 : DC current that will cause inductance to drop approximately by 20%.
5. Irms: DC current for an approximate temperature rise of 40°C without core loss.
6. Derating is necessary for AC currents.
7. Verify and check PCB pad layout, trace thickness, width, air-flow and proximity of other heat generating components as it will have an effect on the temperature rise.
8. It is recommended that the part temperature should not exceed 130° C under worst operating conditions.

● New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275
 ● Japan 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767
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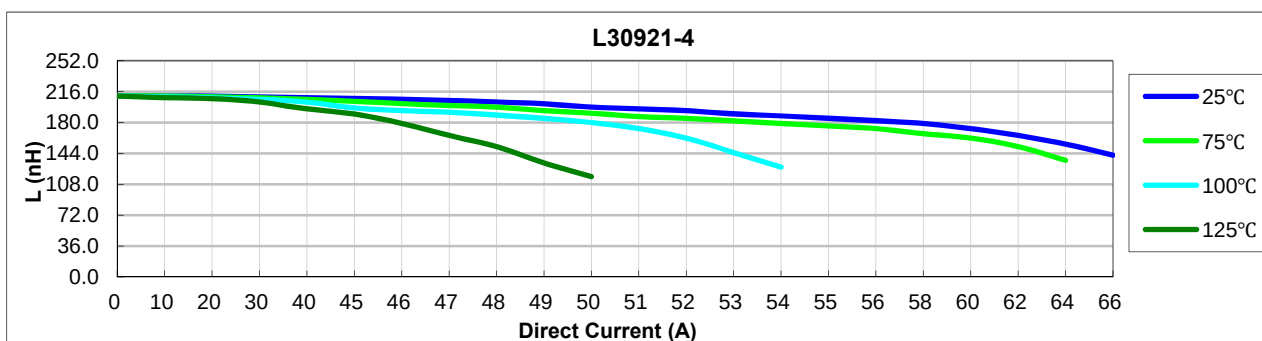
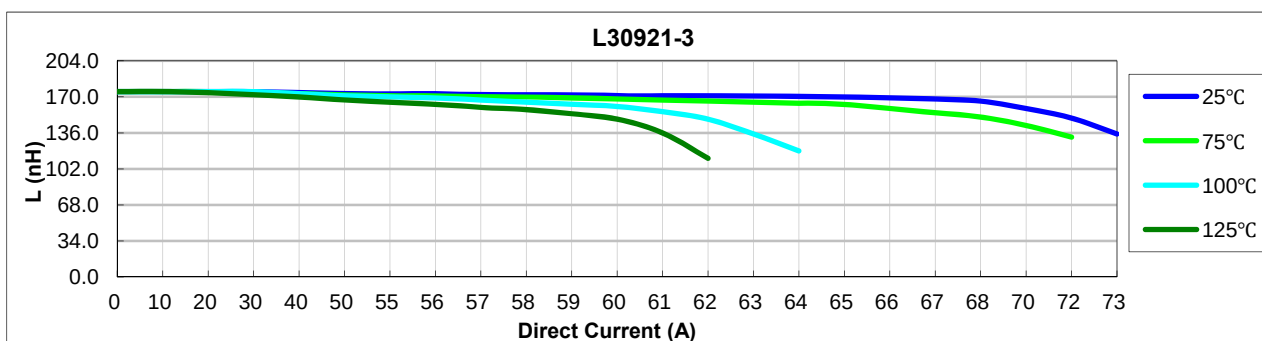
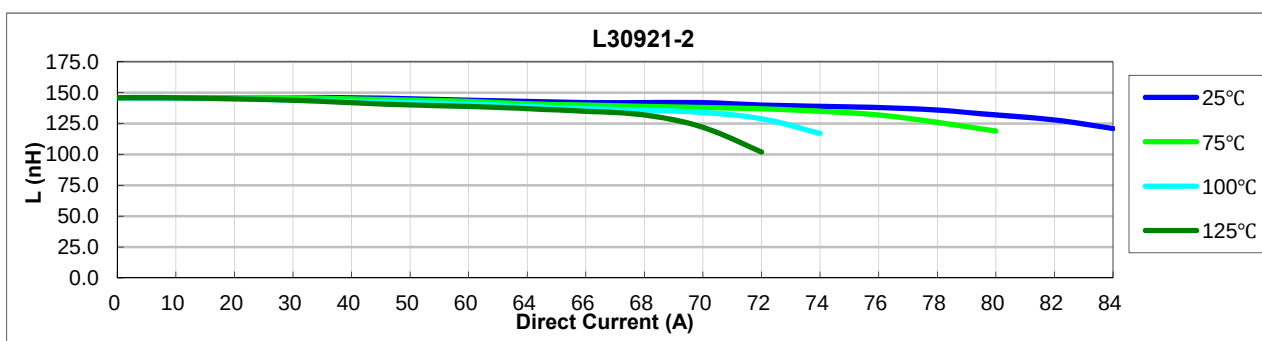
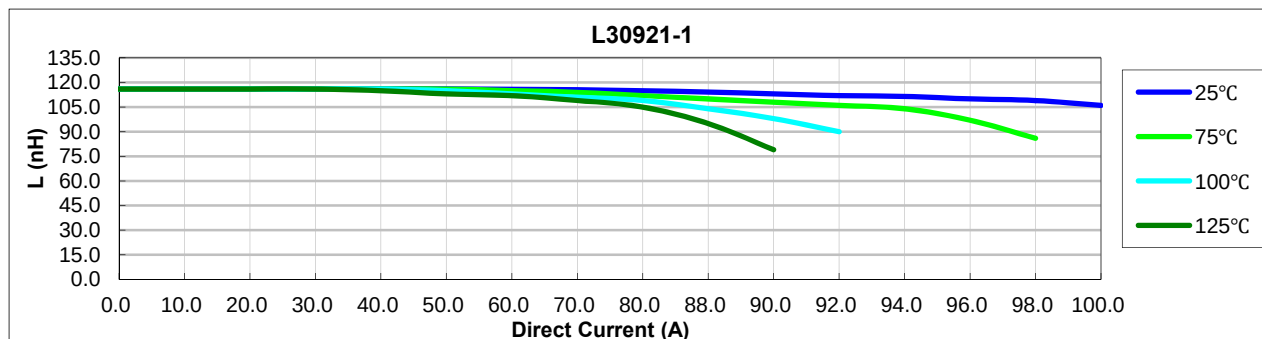
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4. Inductance Characteristics of L30921 Series (Inductance vs Current):



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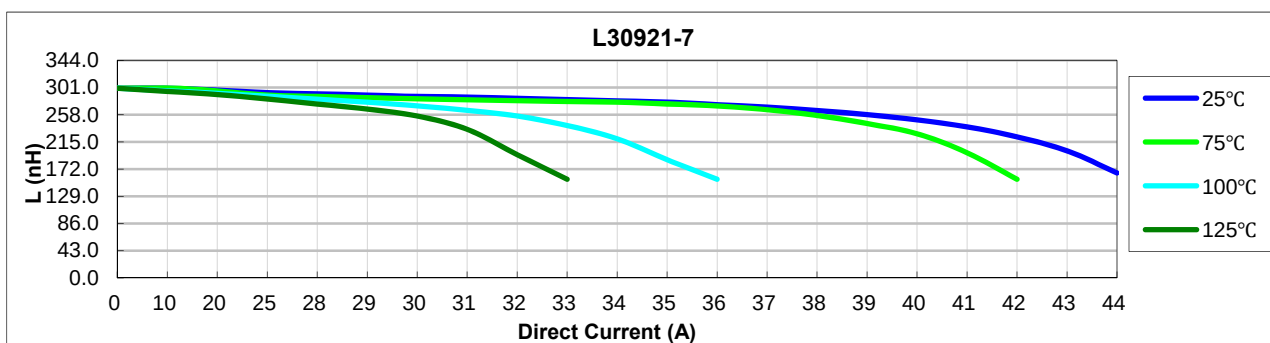
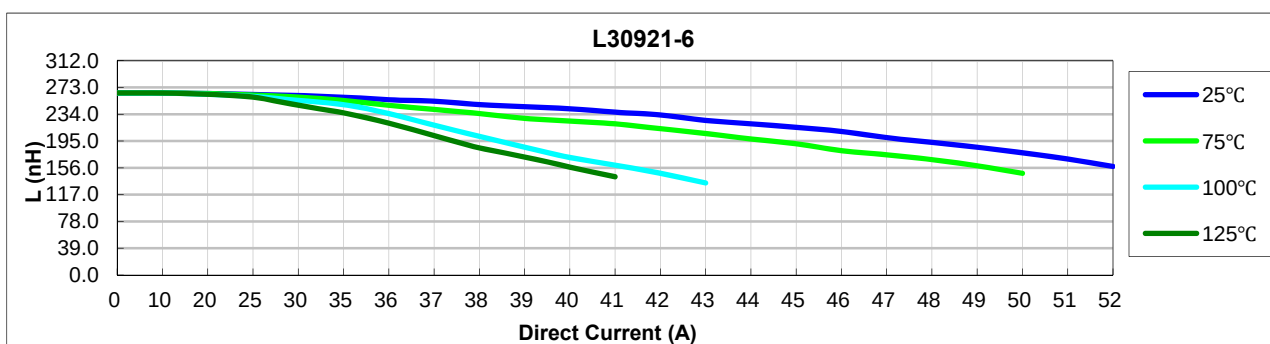
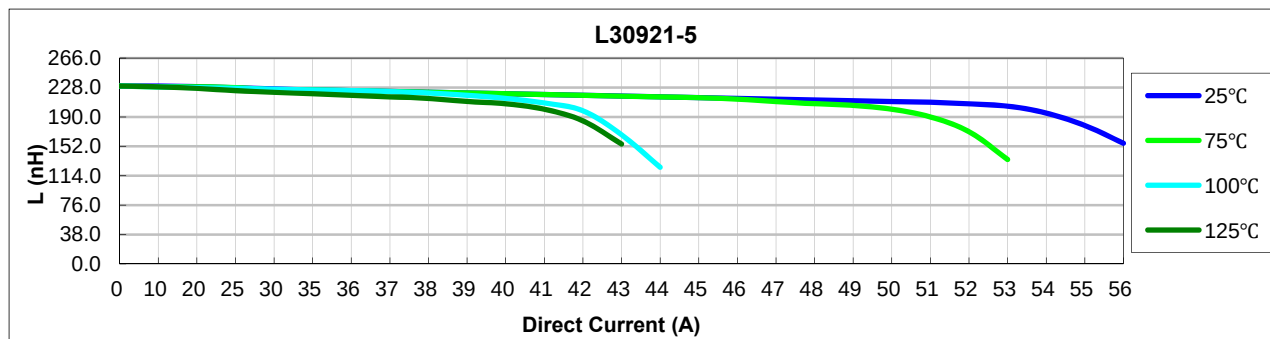
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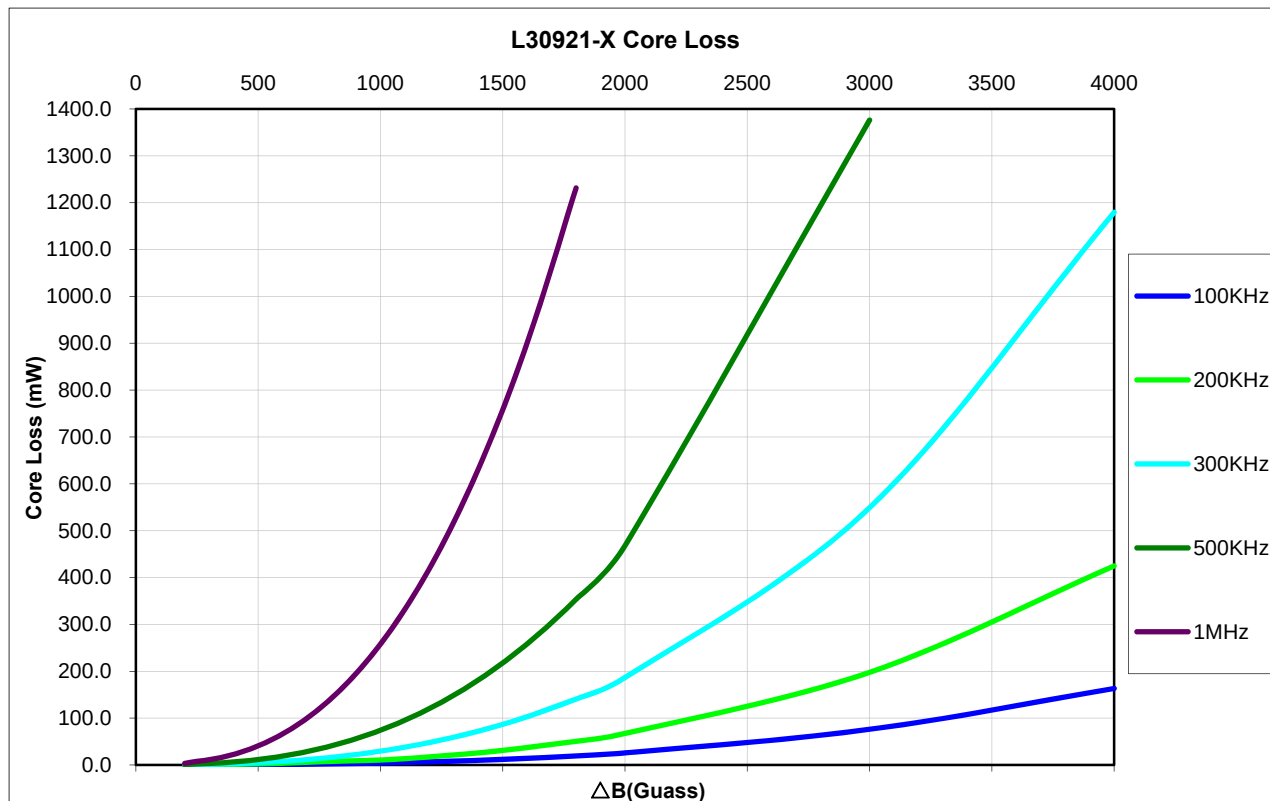
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5. Core loss Characteristics of L30921 Series:



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

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