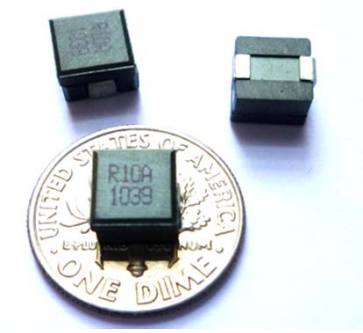
SL2820 Series

1. Features:

· Ferrite based SMD Inductor with lower core loss.
· Inductance Range:70nH to 180nH. Custom values are welcomed.
· High current output chokes, upto 66 Amp with about 20% roll off.
· Low Profile 4.95 mm Max. height .
· Foot Print 7.0 x 7.0 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 compliance ;
· T & R Qtys: 1000 pcs , 13" Reel ;

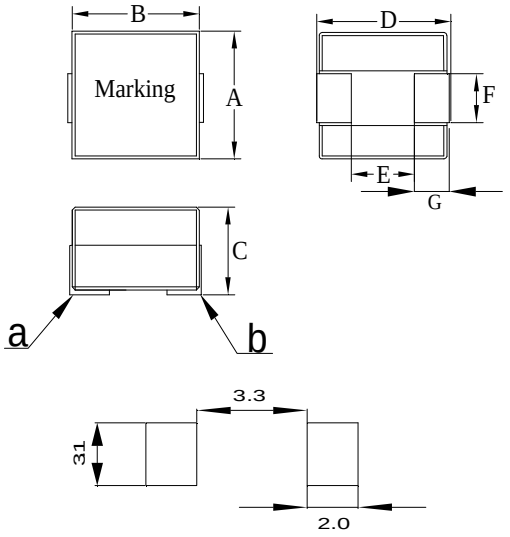


2. Electrical Characteristic of SL2820 Series:

Part Number	Inductance (nH) ± 15% or 20%	DCR (mΩ) ± 9%	Isat1 (A) @25℃	Isat2 (A) @45℃	Isat3 (A) @100℃	Isat4 (A) @125℃	Irms5 (A) @25℃
SL2820A-R07LHF	70 , 15%	0.25	66	65	55	54	43
SL2820B-R07LHF	70 , 15%	0.30	66	65	55	54	39
SL2820C-R07LHF	70 , 15%	0.32	66	65	55	54	38
SL2820A-R10LHF	105 , 15%	0.25	44	41	37	36	43
SL2820B-R10LHF	105 , 15%	0.30	44	41	37	36	39
SL2820C-R10LHF	105 , 15%	0.32	44	41	37	36	38
SL2820A-R12LHF	120 , 15%	0.25	43	40	36	35	43
SL2820B-R12LHF	120 , 15%	0.30	43	40	36	35	39
SL2820C-R12LHF	120 , 15%	0.32	43	40	36	35	38
SL2820A-R15MHF	150 , 20%	0.25	37	35	29	27	43
SL2820B-R15MHF	150 , 20%	0.30	37	35	29	27	39
SL2820C-R15MHF	150 , 20%	0.32	37	35	29	27	38
SL2820A-R18MHF	180 , 20%	0.25	27	26	22	21	43
SL2820B-R18MHF	180 , 20%	0.30	27	26	22	21	39
SL2820C-R18MHF	180 , 20%	0.32	27	26	22	21	38

3. Mechanical Dimension(Unit:mm):

A Max.	B Max.	C Max.	D Max.	E Nom.	F Nom.	G Nom.
7.0	6.8	4.95	7.0	3.5	2.5	1.52

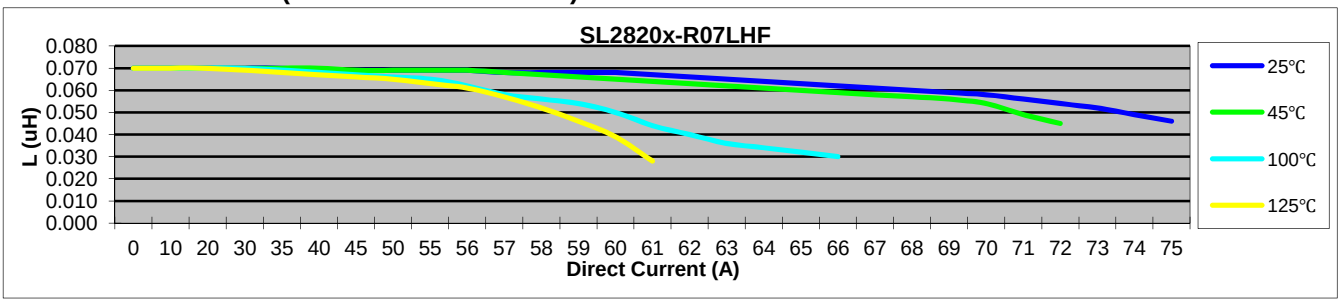


Suggested Pad Layout

Note:

1>.Open Circuit Inductance (OCL) test condition:100KHz,0.1Vrms,0Adc ,at 25℃.
2>.Full Load Inductance (FLL) Test condition:100KHz,0.1Vrms ,Isat;(Ta=25℃).
3>.$Isat^1$,$Isat^2$,$Isat^3$ & $Isat^4$: DC current that will cause inductance to drop approximately by 20% ;(Ta=25℃).
4>. Irms: DC current for an approximate temperature rise of 40℃ 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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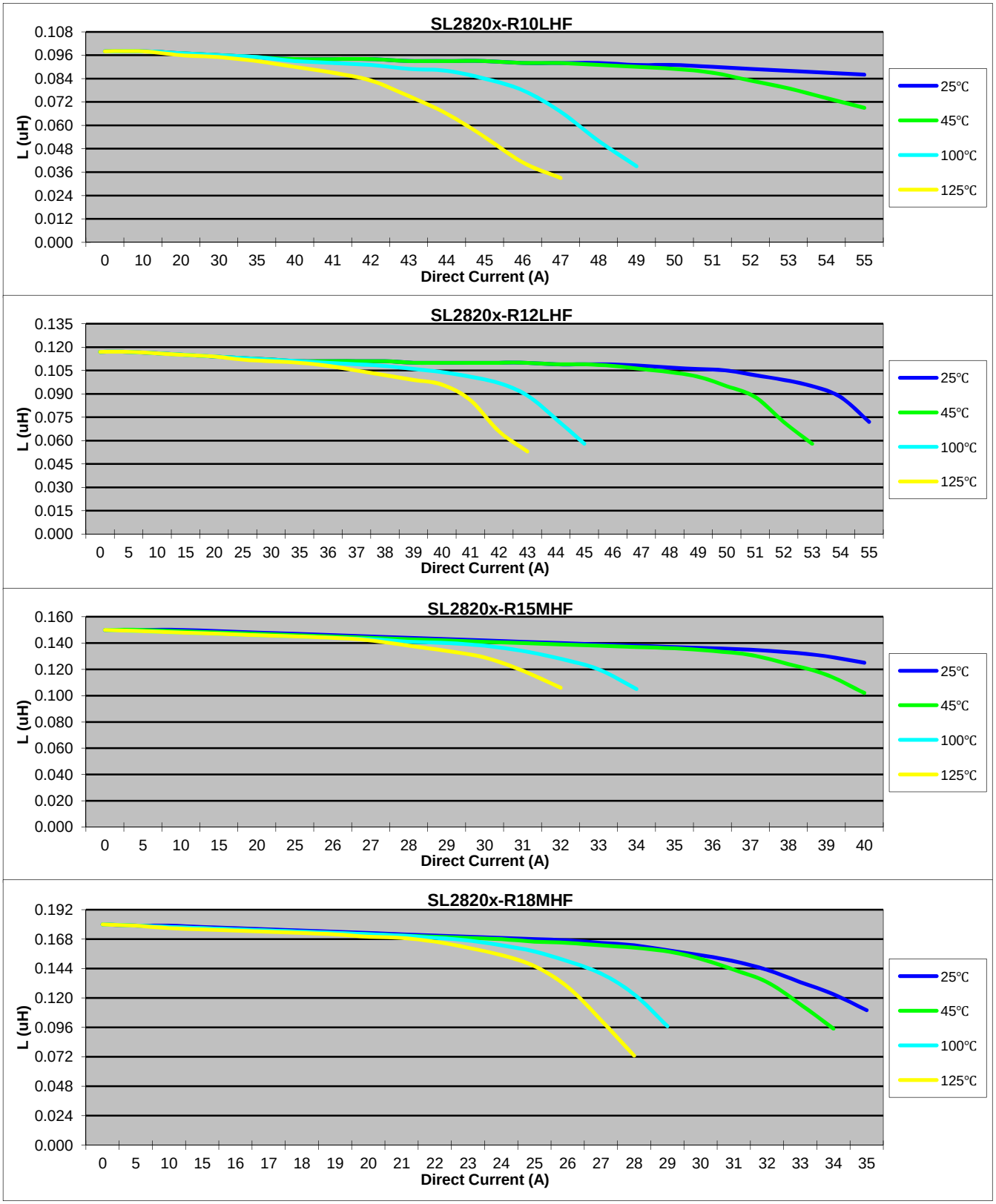
Inductance vs. Current



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