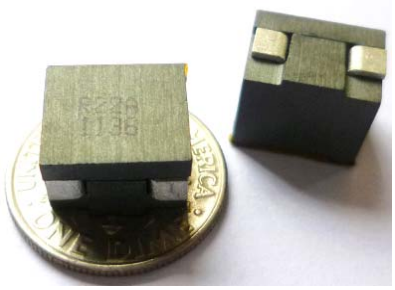
SLA4138 Series

1. Features:

· Ferrite based SMD Inductor with lower core loss.
· Inductance Range:150nH to 320nH. Custom values are welcomed.
· High current output chokes, upto 84.0 Amp with approx. 20% roll off.
· Low Profile 9.5mm Max. height .
· Foot Print 10.7 x 7.5 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 Qtys: 400 pcs , 13" Reel ;

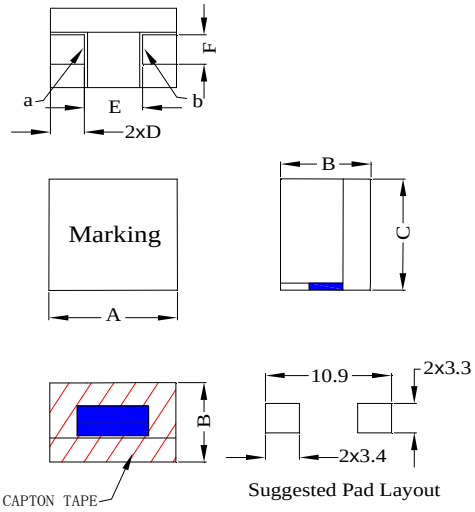


2. Electrical Characteristic of SLA4138 Series:

Part Number	Inductance (nH) ± 10%	DCR (mΩ) ± 7.0%	Isat[1] (A) @25℃	Isat[2] (A) @75℃	Isat[3] (A) @100℃	Isat[4] (A) @125℃	Irms (A) @25℃	B (mm) Max.
SLA4138A-R15KHF	150.0	0.22	84.00	82.00	74.00	67.00	45.00	7.60
SLA4138A-R18KHF	180.0	0.22	71.00	67.00	61.00	54.50	45.00	7.60
SLA4138A-R22KHF	220.0	0.22	60.00	54.50	51.00	44.00	45.00	7.50
SLA4138A-R32KHF	320.0	0.22	35.50	32.50	30.50	26.50	45.00	7.50

3. Mechanical Dimension (Unit:mm):

A (Max.)	B (Max.)	C (Max.)	D (Nom.)	E (Nom.)	F (Nom.)
10.70	See Table	9.50	2.80	4.50	2.80



Note:

1>.Open Circuit Inductance (OCL) test condition:100KHz,1.0Vrms ,0Adc.

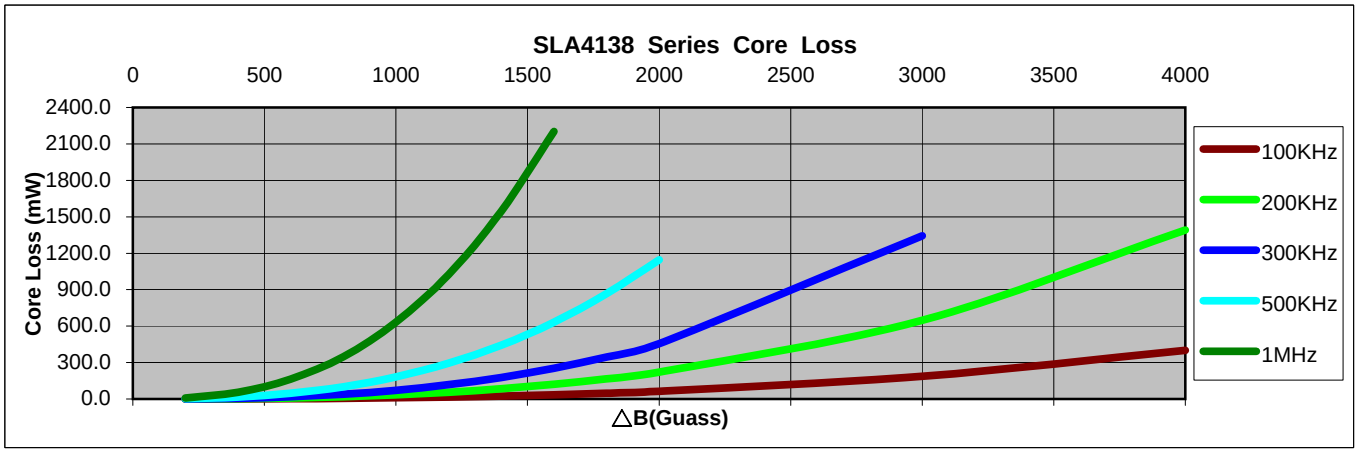
2>.Full Load Inductance (FLL) Test condition:100KHz,1.0Vrms ,Isat.

3>.Isat[1],Isat[2],Isat[3] & Isat[4]: DC current that will cause inductance to drop approximately by 20%.

4>. Irms: DC current for an approximate temperature rise of 40℃ without core loss,.Derating is necessary for AC Current. 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. Core Loss data:



Where △B=0.52*L(nH)*△I

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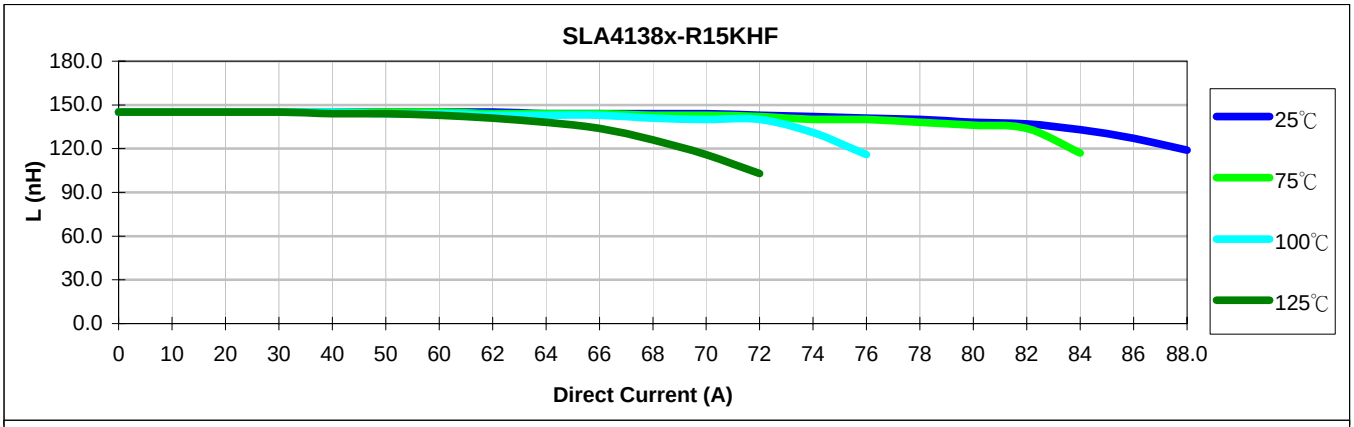
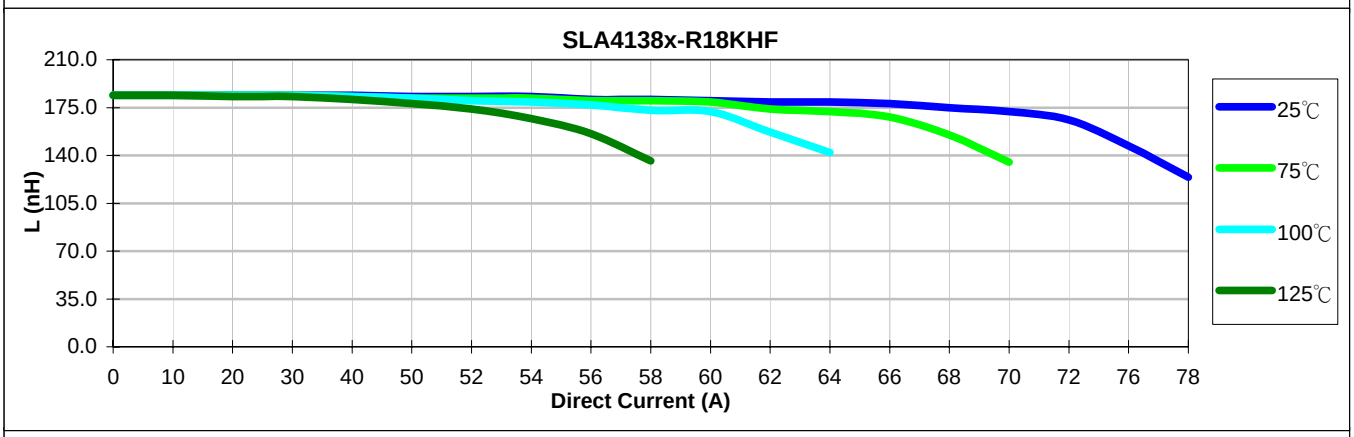
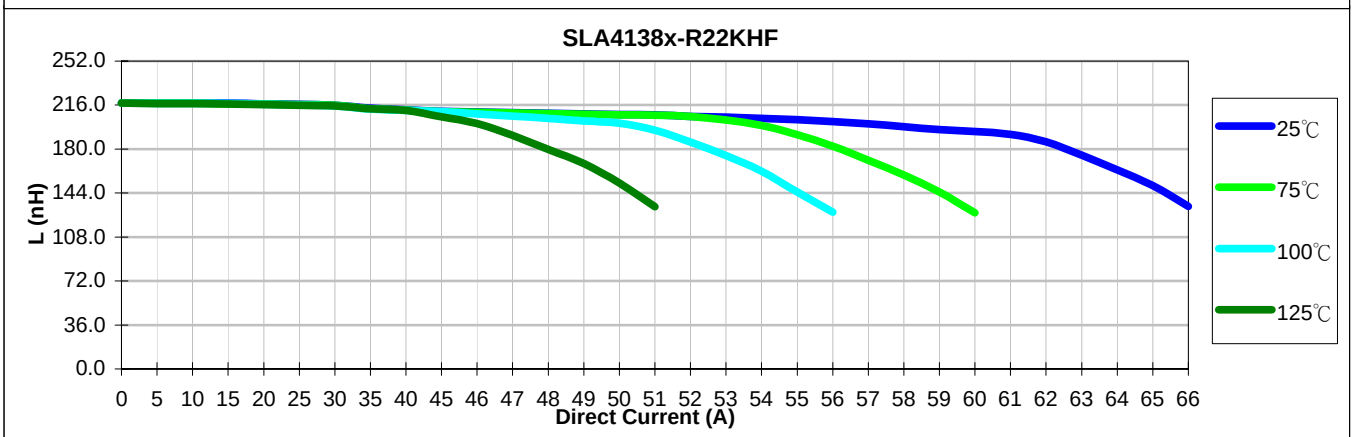
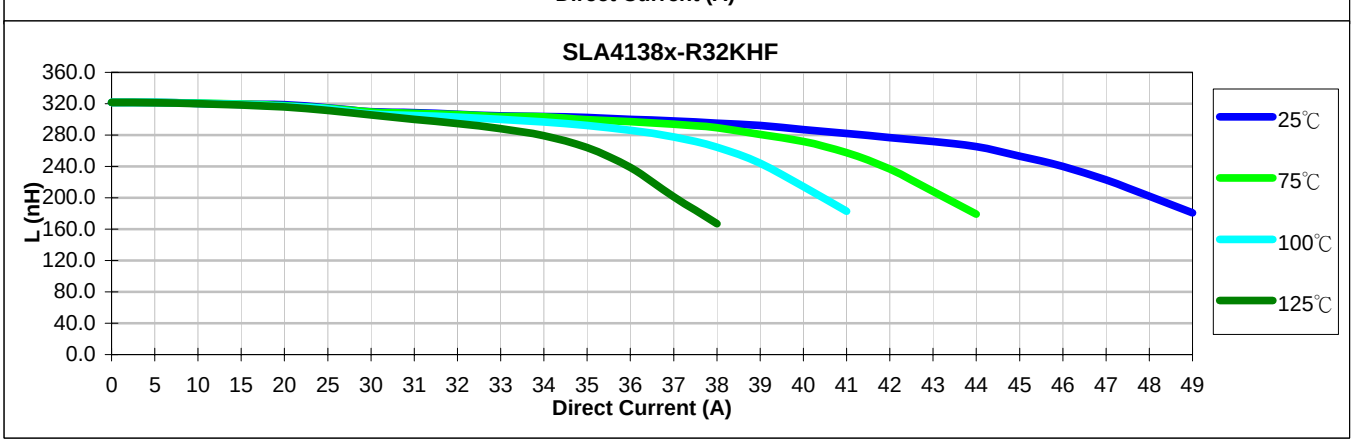
SLA4138 Series

Inductance vs. Current









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