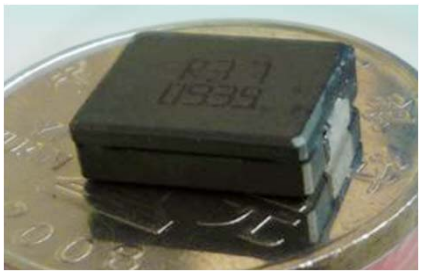
AH4715 Series

1. Features:



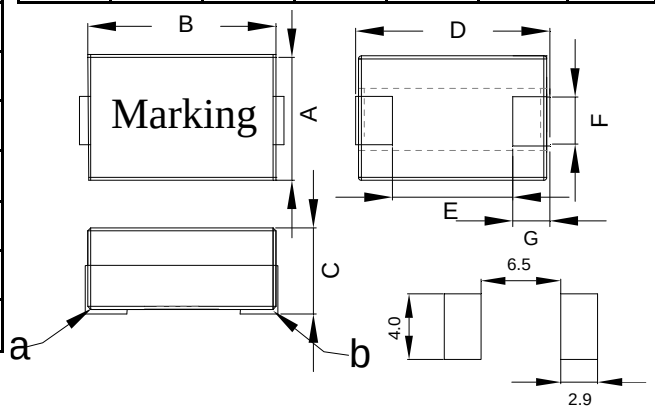
· Ferrite based SMD Inductor with lower core loss at high frequency application.
· Inductance Range:125nH to 610nH. Custom values are welcomed.
· High current output chokes, upto 53 Amp with max. 20% roll off.
· Low Profile 4.0 mm Max. height .
· Foot Print 12.1 x 10.0 mm Max.
· Ideal for Buck Converter, VRM & High Density Board Design.
· Operating up to 2 MHz application.
· Operating Temperature Range -55°C to + 130°C , RoHs compliance ;

2. Electrical Characteristic of AH4715 Series:

Part Number	Inductance (uH) 10% or 15%	DCR (mΩ) ± 7%	Isat[1] (A) @25℃	Isat[2] (A) @45℃	Isat[3] (A) @100℃	Irms (A) @25℃
AH4715-R13KHF	0.125 , 10%	0.40	53	52	46	31
AH4715-R18KHF	0.18 , 10%	0.40	34	33	29	31
AH4715-R21KHF	0.21 , 10%	0.40	31	28	25	31
AH4715-R28KHF	0.28 , 10%	0.40	20	19	18	31
AH4715-R37LHF	0.37 , 15%	0.40	13.5	13	12	31
AH4715-R45LHF	0.45 , 15%	0.40	9	8.5	7.5	31
AH4715-R61LHF	0.61 , 15%	0.40	7	6.5	6.0	31

3. Mechanical Dimension(Unit:mm):

A Max.	B Max.	C Max.	D Max.	E Nom.	F Nom.	G Nom.
10.0	11.7	4.0	12.1	6.7	3.8	2.7



Suggested Pad Layout

Note:

1>.Open Circuit Inductance (OCL) test condition:500KHz,0.25Vrms ,0Adc.

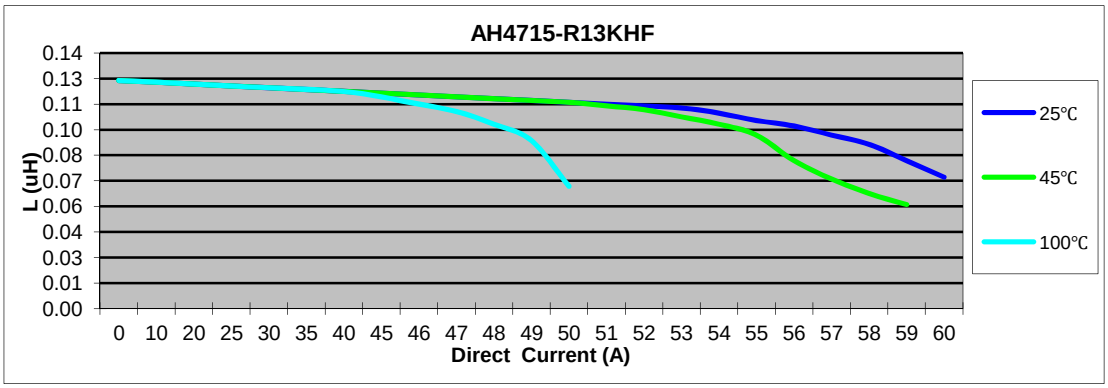
2>.Full Load Inductance (FLL) Test condition:500KHz,0.25Vrms ,Isat;(Ta=25℃).

3.Isat[1],Isat[2] & Isat[3]: 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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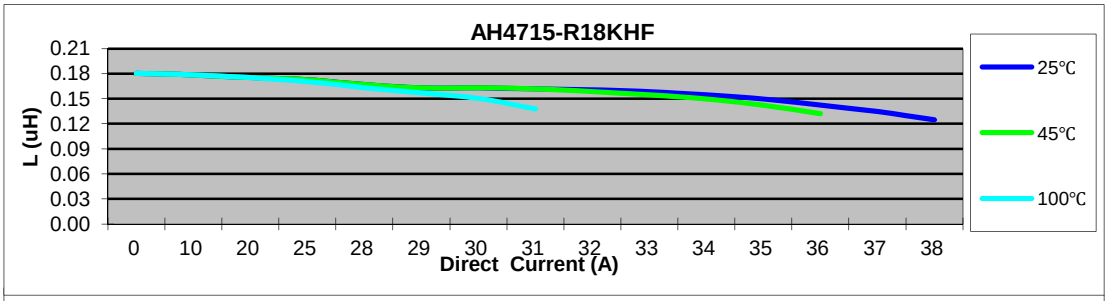
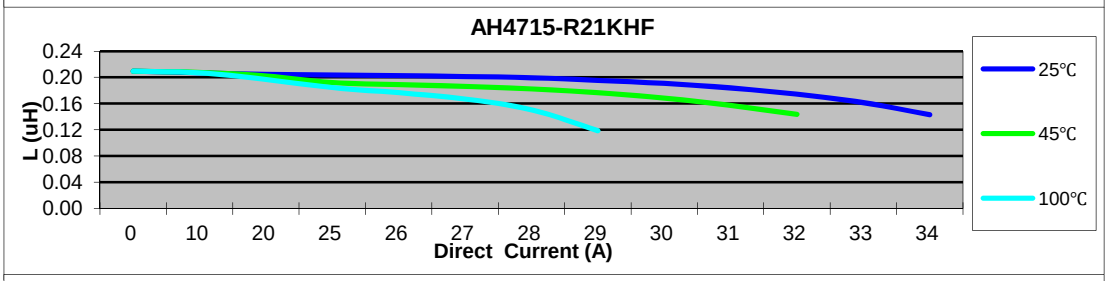
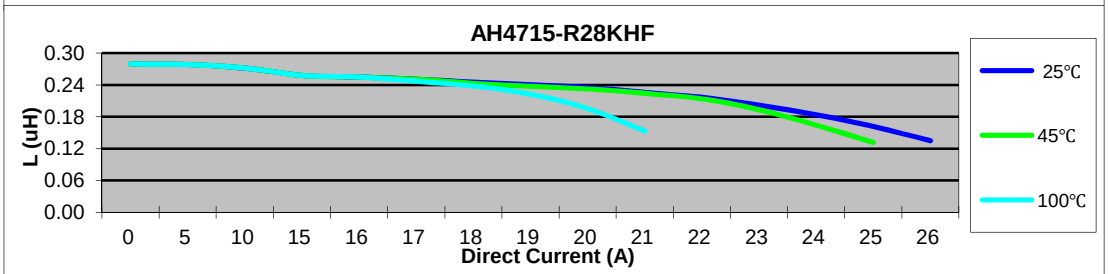
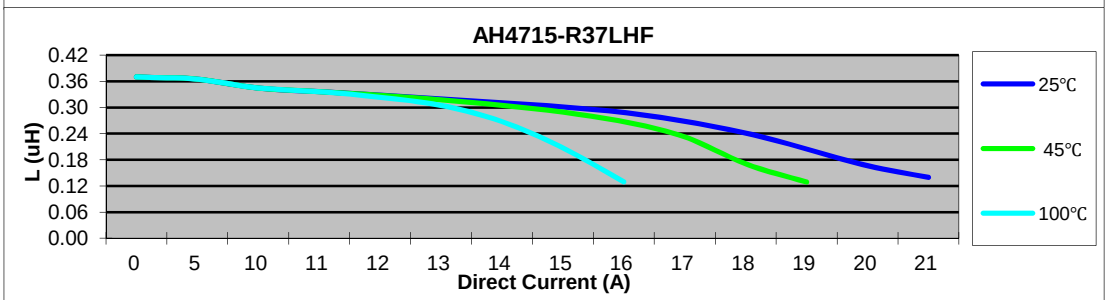
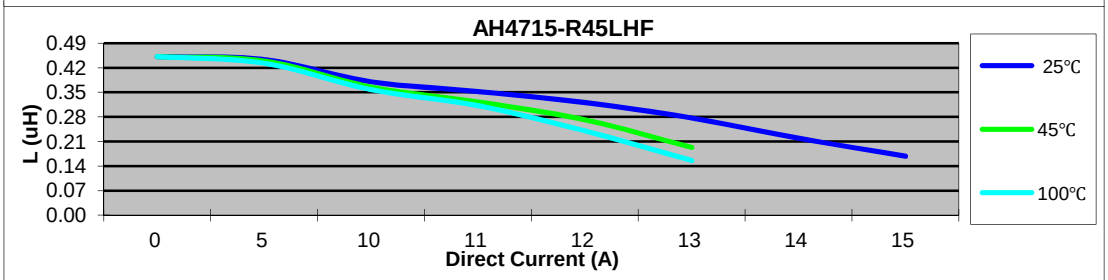
Inductance vs. Current

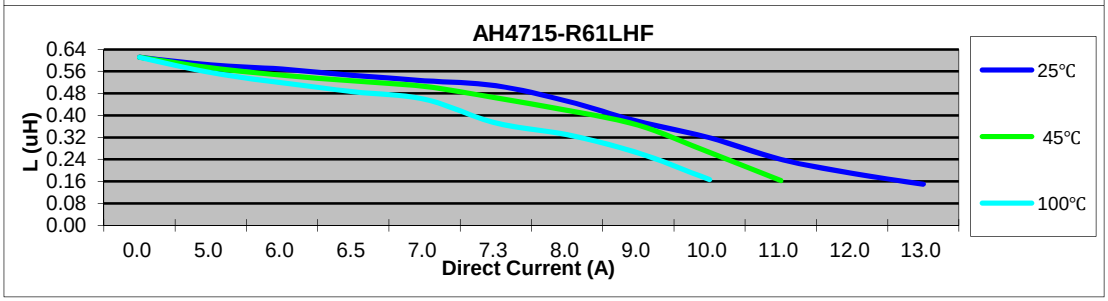












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