

SLM705918A Series



1. Features of SLM705918A Series:

- Ferrite based SMD inductor with lower core loss.
- Inductance range: 0.5uH up to 2.5uH, custom values are welcomed.
- High current output chokes up to 160.0 Amp with approx. 20% roll off.
- Low profile 15.00mm max height.
- 18.00 x 18.00mm max. Foot Print.
- Perfect for high density designs with limited board space.
- Operating frequency of up to 5.0MHz.
- Operating temperature range of -55° C to + 130° C
- RoHS & HF compliant.
- T & R Qty's: 125pcs, 13" Reel.

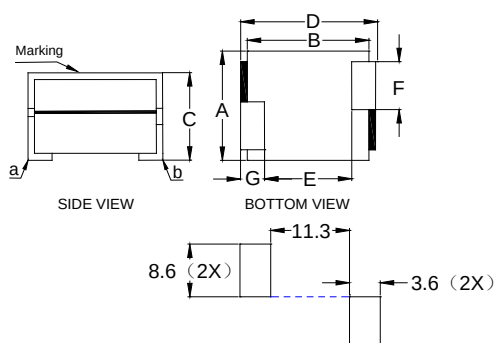


2. Electrical Characteristics of SLM705918A Series:

ITG Part Number	OCL ¹ (uH) ± 20%	L @ Isat ² (nH) Min.	DCR ³ (mΩ) ± 10%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Irms ⁵ (A) @25°C
SLM705918A-R50MHF	0.50	0.35	0.55	160.00	140.00	130.00	70.00
SLM705918A-R70MHF	0.70	0.49	0.55	116.00	102.00	96.00	70.00
SLM705918A-R90MHF	0.90	0.63	0.55	86.00	76.00	70.00	70.00
SLM705918A-1R0MHF	1.00	0.70	0.55	74.00	64.00	58.00	70.00
SLM705918A-1R4MHF	1.40	0.98	0.55	55.00	49.00	46.00	70.00
SLM705918A-1R6MHF	1.60	1.12	0.55	47.00	41.00	37.00	70.00
SLM705918A-2R0MHF	2.00	1.40	0.55	30.00	28.00	26.00	70.00
SLM705918A-2R2MHF	2.20	1.54	0.55	27.00	25.00	23.00	70.00
SLM705918A-2R5MHF	2.50	1.75	0.55	24.00	22.00	20.00	70.00

3. Mechanical Dimension of SLM705918A Series:

A	B	C	D	E	F	G
Max.	Max.	Max.	Max.	Nom	± 0.20	± 0.35
18.00	17.00	15.00	18.00	11.80	8.00	2.85



Notes:

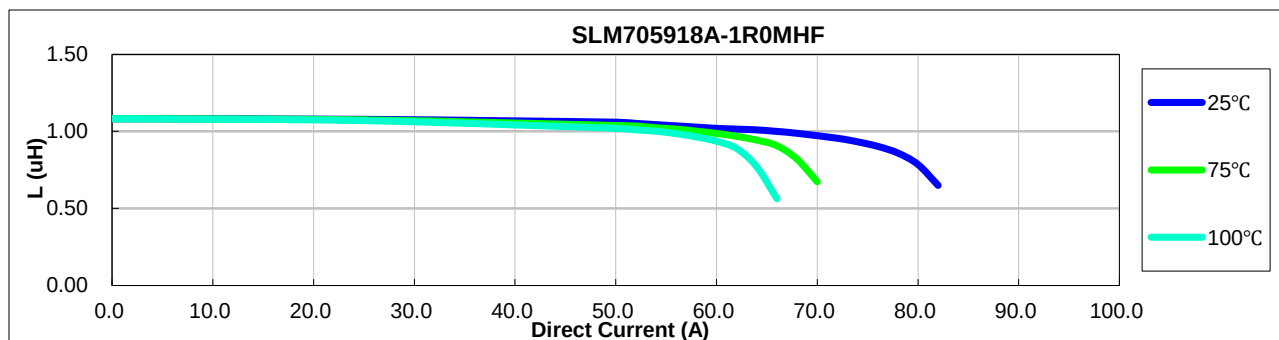
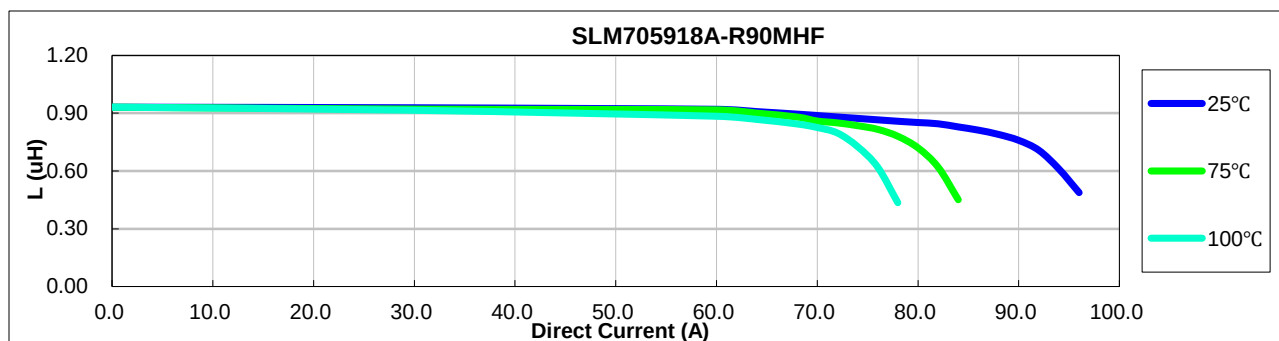
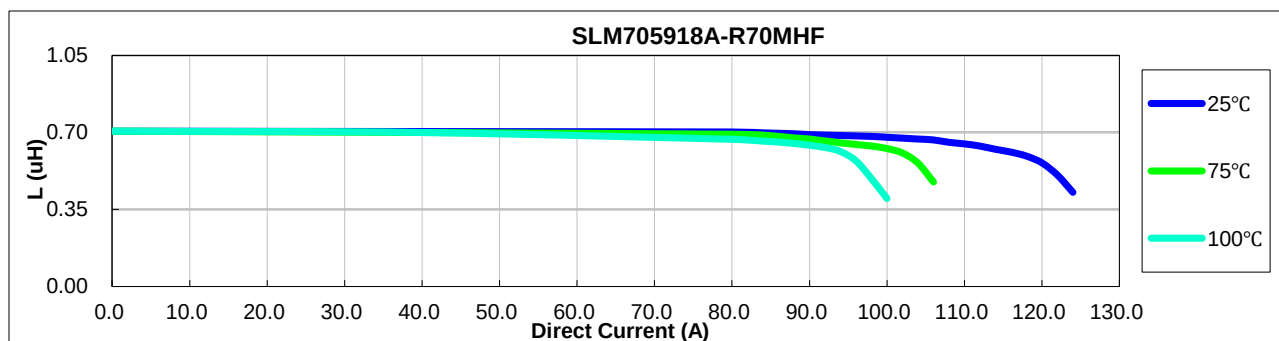
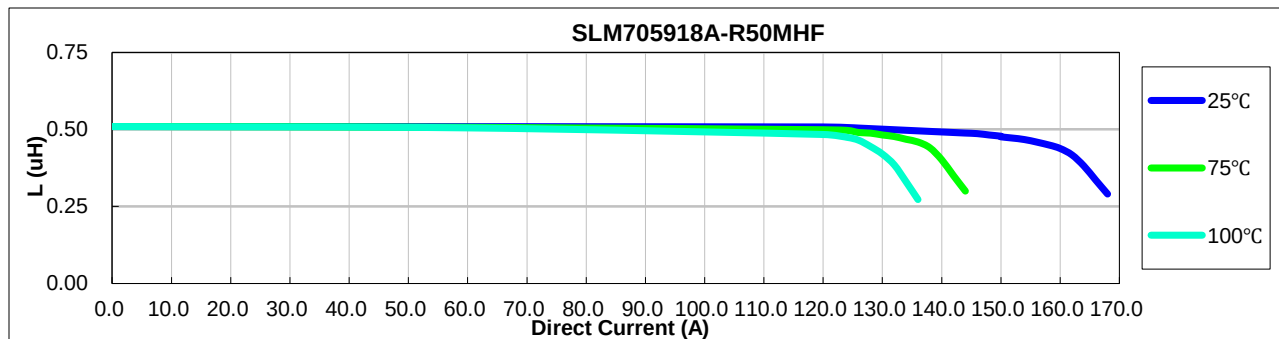
1. Open Circuit Inductance (OCL) test condition: 100KHz, 0.1Vrms, 0A dc at 25°C.
2. L @ Isat and L @ Irms Test condition: 100KHz, 0.1Vrms (Ta=25°C).
3. The nominal DCR is measured from point "a" to point "b", as shown above on the mechanical drawing (Ta=25°C).
4. Isat1, Isat2, Isat3 : DC current that will cause inductance to drop approximately by 20%.
5. Irms : DC current for an approximate temperature rise of 40°C without core loss. 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.
6. It is recommended the part temperature not exceed 130° C under worst case operating conditions as verified in the end application.

Suggested Pad Layout

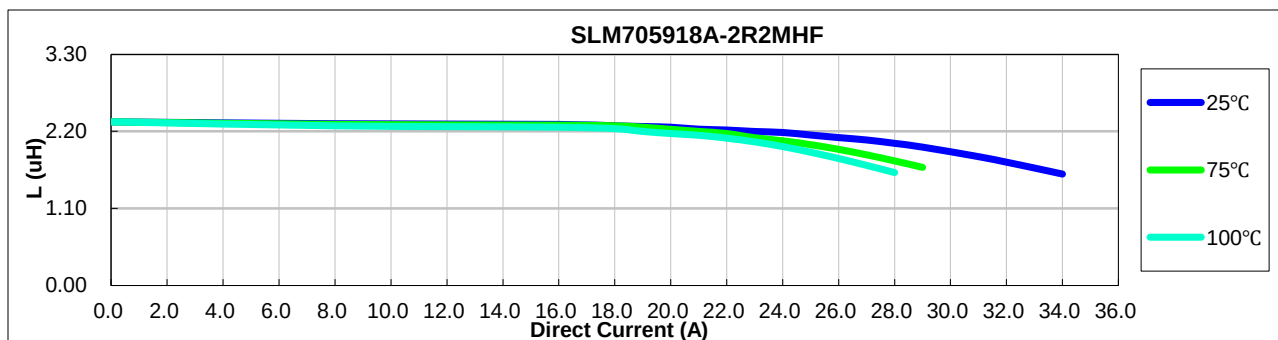
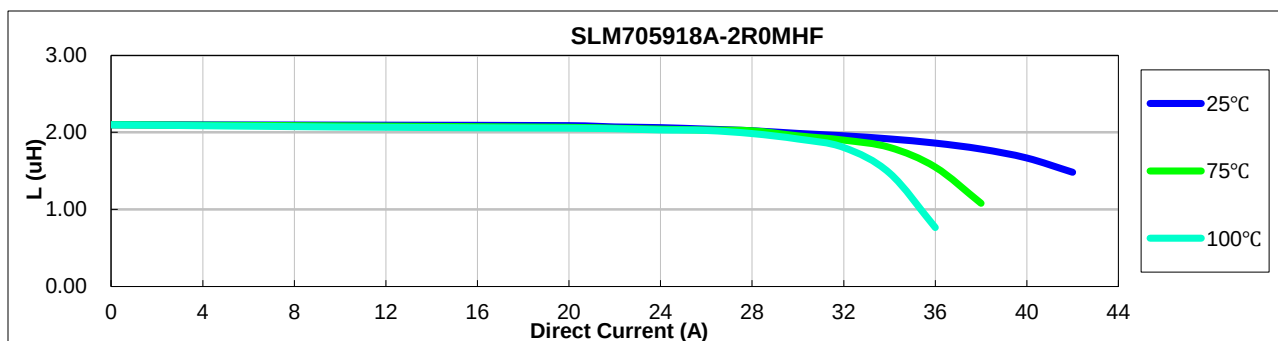
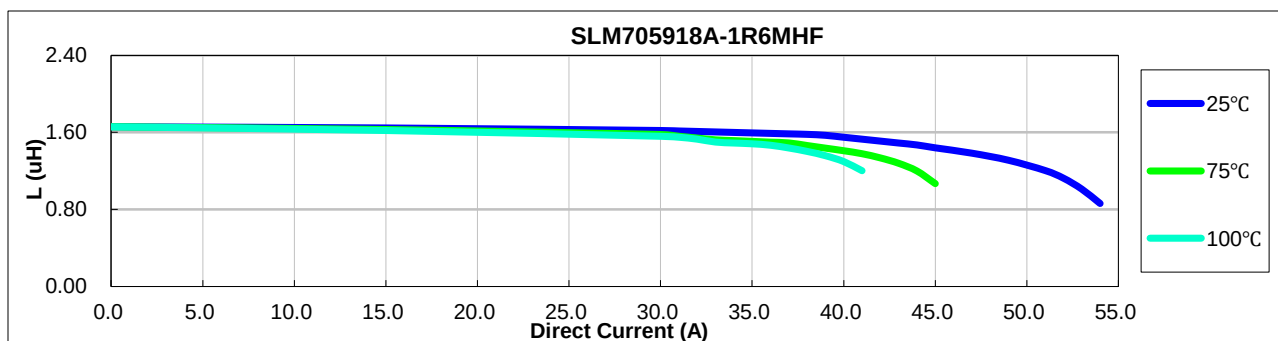
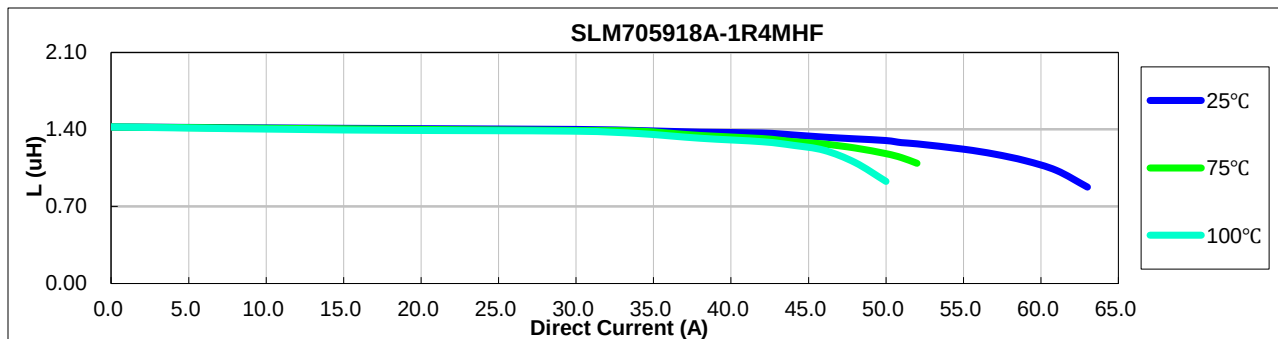
Third Angle Projection:



4. Inductance Characteristics of SLM705918A Series (Inductance vs Current):



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