



AF2218A Series



1. Features of AF2218A Series:

- Ferrite based SMD inductor with lower core loss.
- Inductance range: 35.0 nH to 105.0 nH , custom values are welcomed
- High current output chokes , up to 90.0 Amp with approx. 20% roll off.
- Low Profile 4.60 to 4.80 mm max height .
- 5.50 x 5.70 mm Foot Print.
- 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: 550pcs, 13" Reel.

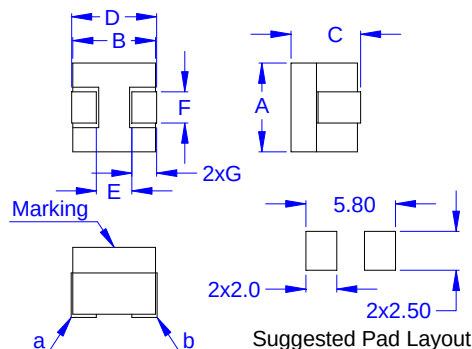


2. Electrical Characteristics of AF2218A Series:

ITG Part Number	OCL ¹ (nH) ± 10% or 15%	L @ Isat1 ² (nH) Min.	DCR ³ (mΩ) ± 10.0%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Irms ⁵ (A) @25°C	Dim. C (mm) Max.
AF2218A-35L	35.0	25.20	0.200	90.00	85.00	80.00	34.00	4.80
AF2218A-40L	40.0	28.80	0.200	80.00	75.00	70.00	34.00	4.70
AF2218A-45L	45.0	32.40	0.200	72.00	67.00	63.00	34.00	4.70
AF2218A-55L	55.0	39.60	0.200	60.00	55.00	52.00	34.00	4.60
AF2218A-65L	65.0	46.80	0.200	48.00	42.00	38.00	34.00	4.60
AF2218A-105K	105.0	75.60	0.200	32.00	28.00	26.00	34.00	4.60

3. Mechanical Dimension of AF2218A Series:

A	B	C	D	E	F	G
Max.	Max.	Max.	Max.	Nom.	± 0.20	± 0.20
5.70	5.35	See table above	5.50	2.30	2.00	1.50



Third Angle Projection:

Notes:

1. Open Circuit Inductance (OCL) test condition: 500KHz, 0.25Vrms, 0A DC at 25°C.
2. L @ Isat and L @ Irms Test condition: 500KHz, 0.25Vrm (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: 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. 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.

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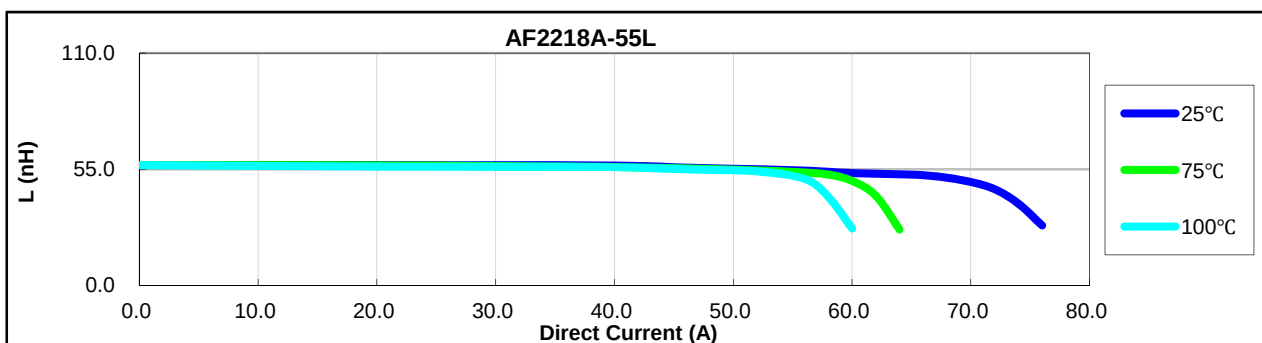
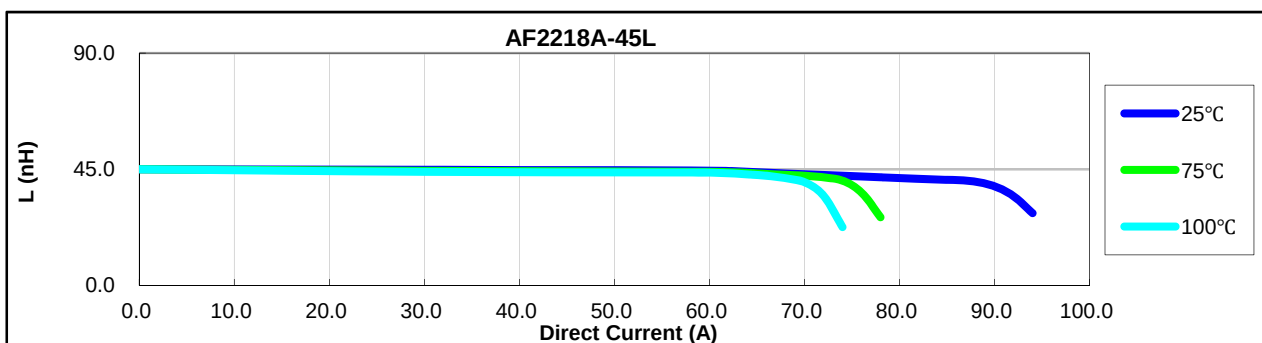
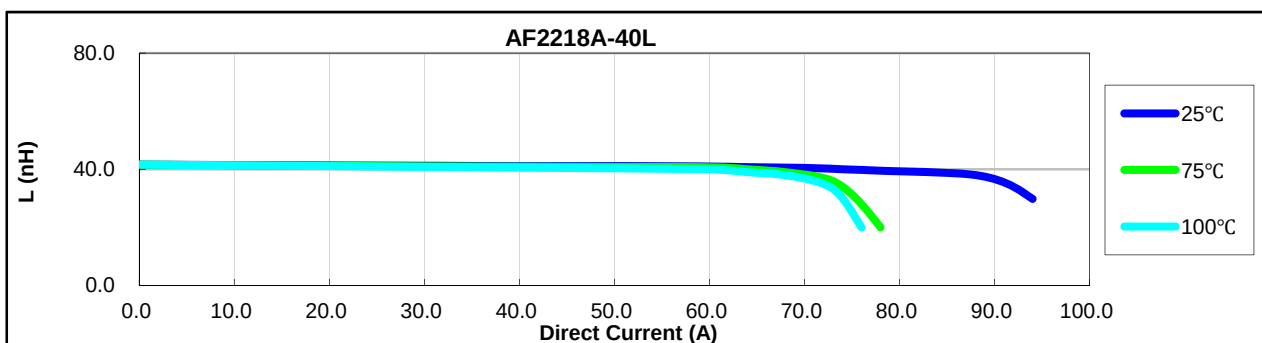
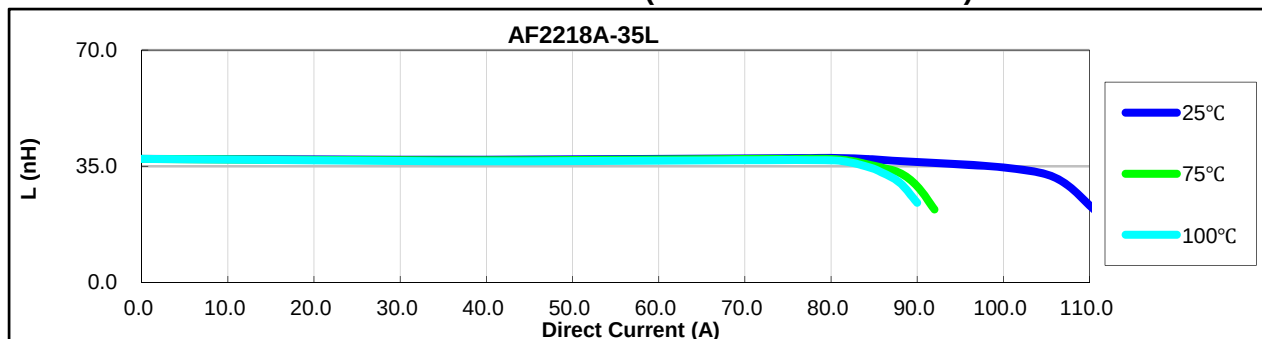
**Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.*



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4. Inductance Characteristics of AF2218A Series (Inductance vs Current):

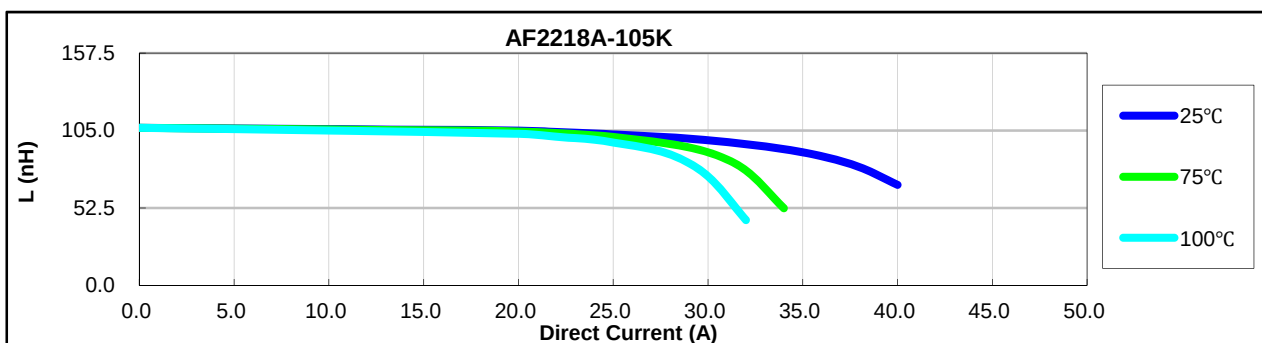
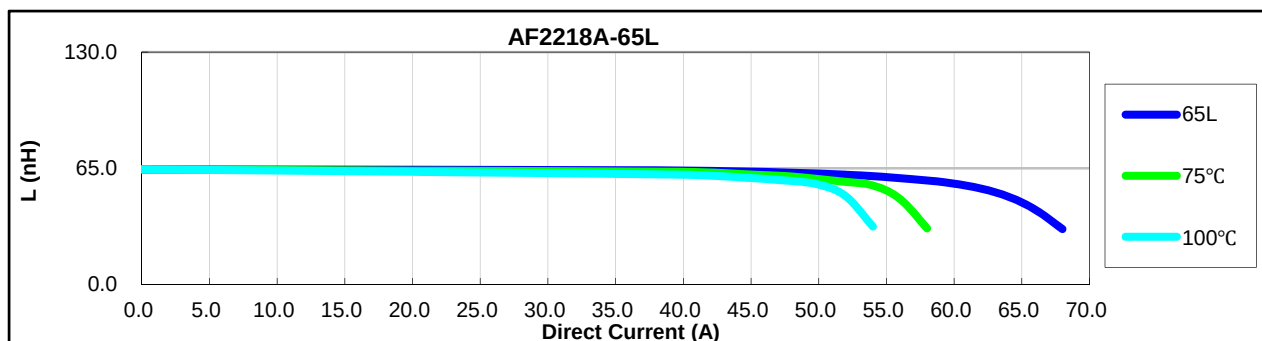


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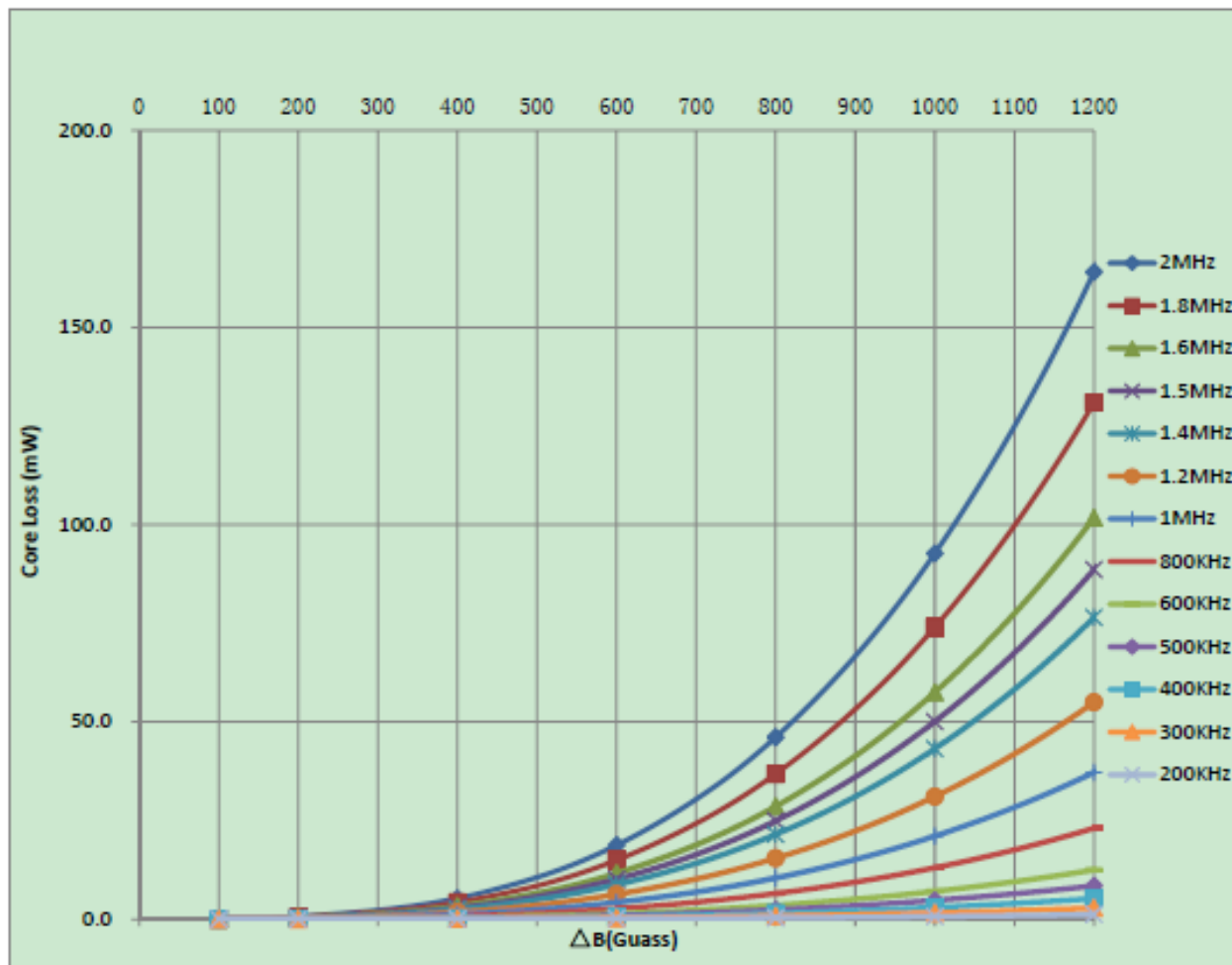
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5. AF2218A Series core loss:



Where $\Delta B = 1.15 \cdot L(nH) \cdot \Delta I$

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